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THE EFFICACY OF USING A FEEDBACK TYPOLOGY AS A HEURISTIC DEVICE TO DECONSTRUCT TEACHERS' FEEDBACK PRACTICE

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Abstract   *Increasingly complex and multifaceted explanations of learning and assessment, that involve a partnership between learners and teachers, have changed the purpose and focus of feedback. New conceptions of feedback centre on enabling learners to make connections and explore understandings with the emphasis on future and current performance. These conceptions move feedback from a simple, uncomplicated notion to one that is complex and problematic. This article reports on the findings of a pilot study that utilised a feedback typology (Tunstall & Gipps, 1996) to describe and analyse teachers' feedback practice in the area of written language. The typology is examined with regard to its potential as a heuristic tool to assist teachers initially in the deconstruction of their feedback practice.*

KEYWORDS:

Formative assessment, Feedback, Professional development, Written language

INTRODUCTION

Following their seminal review of literature related to formative assessment, including feedback, Black and Wiliam (1998) exhorted researchers to engage in research that not only interrogates existing practice but is also linked to a programme of intervention. Since this call, other researchers (Harlen & Deakin Crick, 2003; Shepard, 2000) have advocated for programmes of research that involve researchers and practitioners working together to address and solve problems and dilemmas of practice. To date, while studies on teachers' feedback practice have depicted current practice and highlighted aspects of best practice, far less attention has been paid to how improvements in feedback practices can be made. While there is common agreement among researchers that there need to be significant long-term professional development opportunities if teachers are to begin to make changes to feedback practices (Black & Wiliam, 1998, 2003; Harlen & Deakin Crick, 2003), *how* this might occur is less clear.

One possibility is to foster a reflective approach to teacher self-understanding and change (Argyris & Schon, 1978; Schon, 1983; Smyth, 1989) whereby, in the first instance, teachers undertake a close examination of their feedback practice as a means of gaining entry into the knowledge, beliefs and principles that characterise

this practice. In this way assumptions can be challenged through an examination of the data collected (Timperley & Robinson, 2001), and by making visible and drawing attention to what has previously been hidden (Wikeley, 2000).

However, as a number of writers have indicated (Black & Wiliam, 2003; Timperley & Robinson, 2001; Torrance & Pryor, 2001), inspection of one's practice alone is insufficient. It must also be supported by alternative ways of working so that practitioners are provided with insight into what needs to be changed and how improvement can be made. Thus, teachers can begin an iterative process of engagement with theory and the practical application of theory to modify existing understandings and to acquire new learning that will eventually lead to changes to practice. As Torrance and Pryor (2001) have argued, teachers' deconstruction of their practice together with an in-depth examination and application of theory is "an important transformational act in moving from theory to practice….[one] where theoretical knowledge is not so much transmitted to teachers as mediated and transformed through practical arguments" (p. 626). Typologies, taxonomies, frameworks and models have been used extensively in education as heuristic devices (see e.g., Biggs & Collis, 1989; Bloom, 1956; Faigley & Witte, 1981; Torrance & Pryor, 1998).

REVIEW OF LITERATURE

Feedback is an essential component of formative assessment (Black, 2000; Black & Wiliam, 1998, 2003; Sadler, 1989, 1998) and is one element of a teacher's repertoire of connected strategies that, if used appropriately, will lead to the establishment of a learning culture within the classroom (Askew & Lodge, 2000; Sadler, 1998). Increasingly complex and multifaceted explanations of learning and assessment, that involve a partnership between learners and teachers, have changed the purpose and focus of feedback. Moving away from notions of feedback that concentrate attention on its corrective aspects, Sadler (1989; 1998) has attended to feedback's formative function. His work has been instrumental in constructing new conceptions of feedback that focus on enabling learners to make connections and explore understandings with an emphasis on current and future performance. Building on the work of Ramaprasad (1983, cited in Sadler, 1989), Sadler (1989) has argued that feedback can only fulfil its formative function when learners themselves work to alter the gap between current and desired performance. His acknowledgement that the effectiveness of feedback is dependent on the quality of the teacher's and the learner's responses moves feedback from a simple, uncomplicated notion to a complex, problematic notion affected by the learner's cognitive awareness and the social, emotional and motivational dimensions of learning (Askew & Lodge, 2000).

Although meta-analyses undertaken by Hattie have demonstrated that feedback is the most powerful single moderator in the enhancement of achievement (Hattie & Jaeger, 1998), there is also compelling evidence to illustrate the unintended negative consequences of feedback on achievement and attitudes toward learning (Kluger & DeNisi, 1996). Such diversity in findings can be explained by the fact that it is the nature and quality of feedback that is crucial to successful learning, as

is the learner's interpretation and reaction to the feedback given (Hattie & Jaeger, 1998; Sadler, 1989, 1998).

As Kluger and DeNisi (1996) established in their review, the negative effects on performance can be linked to the types of feedback interventions made. Feedback interventions that cue individuals' attention to the self (ego-related) rather than to the task appear to have a negative effect on performance whereas those that direct attention to the task are more successful. In relation to written language, evidence gathered from teachers' practice would suggest that feedback has been general not specific to the task, positive rather than constructive, and focused on the affective aspects of performance (Ward & Dix, 2001, 2004). Furthermore, there has been undue attention paid to the quantity of work produced rather than its quality (Bennett, Wragg, Carre & Carter, 1992) and an inordinate amount of consideration given to the surface features of written work, especially in regard to revision expectations (Hargreaves & McCallum, 1998). Informed by contemporary research findings, there is now the expectation that teachers will share with learners the learning goal (Clarke, 2000), and provide learners with specific feedback that is goal-related (Zellermayer, 1989) and focused on providing students with information and strategies that will help them to make improvements (Clarke, 2000). Helping writers revise and improve their work during its actual production is now seen as a crucial part of the writing process (Faigley & Witte, 1981; Sadler, 1989). There is the belief that appraisal of one's own work and that of others will afford writers with the opportunity to develop evaluative (making judgments about performance) and productive (making changes to performance) expertise (Sadler, 1989). Such findings underscore the importance of teachers gaining insights into their feedback practices and the effects these may well have on pupils' learning orientations and subsequent performance.

A number of taxonomies, typologies and frameworks have been developed to classify and explain various aspects of educational practice. While there are a number that categorise the salient aspects of teachers' assessment practice into particular frameworks (e.g., Bell & Cowie, 2001; Torrance & Pryor, 1998, 2001) only two were located related to teachers' feedback practice (Askew & Lodge, 2000; Tunstall & Gipps, 1996).

Based on observations of teachers' classroom feedback practice, Tunstall and Gipps (1996) created a feedback typology to describe the types of feedback given within classroom settings. Subsequently, four types of assessment feedback have been identified, with each type (A, B, C, D) sub-divided to create a dualistic structure (see Table 1). As the authors have noted, the typology is representative of a continuum of evaluative-descriptive feedback approaches that are qualitatively different in style, purpose, meaning and process. At the evaluative end of the continuum (Types A & B), teachers' feedback can be characterised as judgemental and normative, concerned with the affective and conative aspects of learning and leading to a performance orientation in learners. At the descriptive end of the continuum (Types C & D), feedback is not framed in positive or negative terms but is learning focused as achievement and/or improvement is specified and/or constructed. Tunstall & Gipps (1996) have argued that the typology is a useful analytical tool for teachers to both describe and analyse their practice. They have

contended that it provides a language through which feedback practices can be discussed and affords teachers with insights into other ways of working.

The framework developed by Askew and Lodge (2000) outlines three different models of learning and feedback: the receptive-transmission model; the constructivist model and the co-constructivist model. In the first model the provision of feedback is seen as a one-way process, from teacher to learner. In the second model, although feedback is described as a two-way process, control resides with the teacher who decides the nature and focus of the feedback. The third model constructs feedback as dialogue, jointly constructed by teachers and learners. There is minimal reference to these models in the feedback literature.

Since its publication in 1996, both researchers and policy makers have given significant attention to the typology developed by Tunstall and Gipps. Seminal writers in the assessment field make reference to it (Black & Wiliam, 1998, 2003; Clarke, 2000; Shepard, 2000; Torrance & Pryor, 1998) and researchers have utilised it to advance knowledge about the field (Knight, 2003). In New Zealand the Ministry of Education has promoted the use of descriptive rather than evaluative types of feedback and teachers have been encouraged to use the typology as tool to investigate their personal feedback practices (Ministry of Education, 2001). In some schools, as part of teachers' involvement in assessment-related professional development, observational data about teachers' use of the four feedback types has been collected and fed back to the teachers concerned.

RESEARCH DESIGN

Rationale and Aims of the Study

The current pilot study was developed as part of a larger project aimed at evaluating the quality of a professional development programme focused on investigating and improving teachers' feedback practice. Critical to the major study is the utility of a feedback typology as a framework by which teachers can investigate and reflect upon their classroom feedback practices with a view to improvement. Given the attention already paid to one such typology (Tunstall & Gipps, 1996), its selection as the preferred framework to trial seemed warranted. Thus, the focus of the current study was to test out the feasibility of using the typology. Specifically, it aimed to test out its usefulness as a tool to describe and analyse teacher feedback practice.

For teachers to employ descriptive feedback types they must have what Shulman (1987) has termed subject matter knowledge and general and specific pedagogical content knowledge. The importance of teachers having sufficient content knowledge to elicit, notice, respond and react to students' responses has been highlighted by Bell and Cowie (2001). Their findings support contentions made by others (Ball & Bass, 2000; Shepard, 2000) who have argued that unless teachers have sufficient content knowledge they will have difficulty in noticing gaps and contradictions in children's learning and will be unable to utilise children's existing knowledge to promote new learning. Without subject matter knowledge and pedagogical content knowledge teachers are not able to ask the right

questions, anticipate conceptual pitfalls or develop a repertoire of tasks that will assist learners to take the next learning steps (Shepard, 2000).

Table 1.   **A Typology of Feedback Practice (Tunstall & Gipps, 1996, p. 394)**

TYPE A	TYPE B	TYPE C	TYPE D
Rewarding (A1)	**Approving (B1)**	**Specifying attainment (C1)**	**Constructing achievement (D1)**
Rewards	Positive personal expression	Specifying specific knowledge of attainment	Mutual articulation of achievement
	Warm expression of feeling	Use of criteria in relation to work; behaviour; teacher models	Additional use of criteria; child role in presentation
	General praise	More specific praise	Praise integral to description
	Positive non-verbal feedback		
Punishing (A2)	**Disapproving (B2)**	**Specifying improvement (C2)**	**Constructing the way forward (D2)**
Punishments	Negative personal expression	Correction of errors	Mutual critical appraisal
	Reprimands; negative generalisations	More practice given; training in self checking	Provision of strategies
	Negative non-verbal feedback		
Classroom individual management	Performance orientation	Mastery orientation	Learning orientation
EVALUATIVE		**DESCRIPTIVE**	

With these thoughts in mind, the decision was made to collect data about teachers' feedback practice in the area of written language, a curriculum area that teachers generally feel more competent and confident in teaching (Dixon, 1999; Gipps, Brown, McCallum & McAlister, 1995). Previous research in New Zealand

has shown that teachers of young children can ably articulate their pedagogical understanding and practice in literacy. Furthermore, within the New Zealand context, the teaching of written language has been characterised by a particular pedagogical approach whereby learners engage in small group or one to one conversations with teachers in what is commonly known as a writing conference. It was thus expected that the teaching of written language by skilled teachers of literacy in the junior school would provide an appropriate setting to generate meaningful dialogue with opportunities for the collection of rich data.

The Participants

The four teachers involved in the pilot study were from the junior school as were the teachers in the original Tunstall and Gipps (1996) study. As part of the selection process a school principal was approached and asked to nominate four teachers who represented a range of experience with regard to length of service and the perceived quality of the written language programme offered to children. One teacher was in the early stages of her teaching career, two others had taught for more than 15 years and one had in excess of 25 years teaching experience. All were considered to be competent and confident teachers of written language with two of the four regarded as outstanding teachers of literacy. Two teachers were perceived to be particularly open to professional development opportunities and, in the principal's opinion, ran innovative written language programmes. All of the participants were female. To protect teachers' anonymity each was assigned a pseudonym (Brenda, Olivia, Jean and Louise).

Data Collection

Research techniques used for the collection and creation of data must be sensitive to the nature of the phenomena under scrutiny (Ackroyd & Hughes, 1992). To ensure that construct-related evidence was strong, the data collection methods chosen were able to tap into the construct under examination. To describe and analyse teacher feedback practice as it naturally occurs necessitated capturing the verbal interactions between teachers and learners during episodes of teaching and learning. Given that field notes cannot capture the complexity of verbal interactions or the speed at which they occur, a decision was made to audiotape these episodes. Subsequently, each teacher was taped for two thirty-minute sessions. Important to note was that it was not the intention to generate enough data to make claims about the typicality of each teacher's practice. The goal in fact was to gather enough data to make some judgements about the efficacy of the typology as an analytical tool. Cognisant of the fact that teacher feedback may change throughout the duration of a written language lesson (which in most junior school classrooms will last for about an hour) with regard to style, purpose, meaning and process (Tunstall & Gipps, 1996), the audio-taping was broken down into three 10 minute segments: at the beginning of the lesson; when teachers were engaged in group work; and finally when they were working with individual children in a conference situation.

During this pilot phase, no observational data was collected to supplement the audio-taping of the lessons. While the absence of such data can be seen as a

shortcoming, particularly in regard to the collection of evidence of about teachers' use of non-verbal feedback strategies often associated with feedback types A and B, there was a valid reason for why observations were not undertaken. A common, although not universal, outcome of observation can be that the presence of the observer leads to a reaction on the part of those being observed, resulting in atypical rather than typical behaviour being displayed. While levels of reactivity can be reduced if positive relationships are established between the researcher and her participants and the observation is prolonged (Lincoln & Guba, 1985), this was not possible in the current study given that it was a pilot to a larger study. Thus, the decision was made not to observe. It is acknowledged that the addition of observational data would have provided a richer description of teachers' practice by capturing the visual cues and strategies used within a lesson. It is intended that observations in the form of field notes be an essential component of the larger study.

Data Analysis

Tapes were transcribed and the teachers' verbal episodes were examined for instances of feedback. These instances were then coded and indexed according to the feedback types: A1 Rewarding; A2 Punishing; B1 Approving; B2 Disapproving; C1 Specifying attainment; C2 Specifying improvement; D1 Constructing achievement; and D2 Constructing the way forward. Listening to tapes on numerous occasions, along with multiple readings of the transcripts, assisted in the identification of attributes within any given category. Once this was completed, frequency counts were undertaken for each of the eight sub categories.

In completing the initial analysis, several critical issues were taken into consideration. Firstly, the categories represented a continuum of feedback types and, secondly, there was possibility of overlap or use of two types together (Tunstall & Gipps, 1996). Finally, it was recognised that evaluative feedback types would be more obvious in the teachers' text as represented by relatively discrete comments and phrases. By contrast, teachers' use of descriptive types of feedback would be embedded in longer narratives as teachers sought to specify and construct learning and improvement during extended periods of instruction. Therefore the unit of analysis for the categorisation of evaluative and descriptive types was not the same.

Aware of the need to be reflexive in the analysis of the data, a colleague who was thoroughly conversant with the typology was asked to undertake an independent analysis of one of the transcripts. Following this analysis each instance of feedback categorisation was discussed and differences in categorisations identified. The majority of classifications related to evaluative types of feedback were identical. More problematic was the classification of descriptive feedback types where in some instances teachers moved backwards and forwards between categories during very short periods of time (e.g., C1 and C2). After further discussion it was decided in these occurrences both feedback types would be accredited to the teacher. In light of this newly agreed upon understanding a second transcript was analysed independently by both parties. This resulted in a much

closer agreement. The analyses to follow are based on the author's reclassification of all eight transcripts.

FINDINGS

The evidence gathered from the four teachers in the pilot study showed differences between teachers in the way feedback was framed during the course of their written language lessons (see Table 2). While all of the teachers employed evaluative feedback types, albeit to different extents, this was not so with regard to the use of descriptive types of feedback. Only two of the four teachers provided learners with descriptive types of feedback during the written language time. Furthermore, while these two teachers employed descriptive feedback types, only one provided learners with opportunities to develop evaluative expertise (Sadler, 1989).

Table 2.   Percentage of Teacher Feedback Comments by Category[a]

CATEGORY	BRENDA % of total comments (n=45)	OLIVIA % of total comments (n=41)	LOUISE % of total comments (n=47)	JEAN % of total comments (n=42)
EVALUATIVE				
A1 Rewarding			17.0	16.7
A2 Punishing			2.1	
B1 Approving	11.1	53.7	80.9	83.3
B2 Disapproving				
DESCRIPTIVE				
C1 Specifying Attainment	22.3	29.2		
C2 Specifying Improvement	33.3	14.7		
D1 Constructing Achievement	18.5			
D2 Constructing the Way Forward	14.8	2.4		
TOTAL	100	100	100	100

[a] Based on the Tunstall and Gipps (1996) Typology

Evaluative Types of Feedback

Evaluative types of feedback have been categorised as A1 Rewarding; A2 Punishing; B1 Approving and B2 Disapproving. Within the A categories, teacher feedback conveys either a sense of rightness or wrongness, often with regard to the explicit and implicit norms of the classroom. Furthermore, the feedback given is related frequently to the affective and conative aspects of learning (because effort is considered to be an important component of successful learning) and is often associated with extrinsic rewards (or punishments). To maximise its effect, the A types of feedback are shared with a wide audience in the hope that public recognition will engender in all children the types of outcomes that are seen as desirable by the teacher (Tunstall & Gipps, 1996).

In the data gathered for this project there were limited examples of teachers utilising category A feedback types. In the case of Olivia and Brenda, no examples were identified. For the others, the incidence of this feedback type represented less than 20 percent of the total feedback given (Louise 19.1% and Jean 16.7%). Examples were, however, illustrative of how feedback was used to both reward children's behaviour and their learning:

> I like these people who aren't calling out, that's fabulous. (Louise)

> What a lot of hands up, that's really, really good. (Jean)

This occurred at both a group and an individual level, through the provision of some extrinsic reward that would be appealing:

> … so we're going to write about that in our story writing today and what we're going to do is maybe if we do a really good story I might get us to publish it onto a place mat with a bowl and spoon and we can write it onto that maybe tomorrow if we have time and we can colour it in. (Louise)

> And this boy here [child's name] has outshone everybody in the room and he had his head down and he worked really hard and he's going to go along to the principal with his story, with his poem. (Jean)

There was only one instance of a teacher using a negative comment to reinforce behavioural norms:

> [child's name] I have a funny feeling you're not working as well as you could be. (Louise)

B1 Approving and B2 Disapproving types of feedback have many similarities with A1 and A2 types in that they are normative, judgemental and used to promote attitudes and behaviours that teachers considered to be necessary for learning to occur. The normative aspect, however, is more closely related to educational and social values and is used when children are judged to be performing above expectation (B1) or where there is a lack of effort or concentration on the part of the learner(s) (B2). There is a clear comparative element in B1 and B2 feedback types

that can, at times, lead to a reward (A1) or punishment (A2). Praise as an indication of the teacher's personal pleasure and approval is a key feature of B1 feedback which is used as a form of positive reinforcement (Tunstall & Gipps, 1996).

While all teachers used B1 feedback there were marked differences between teachers in its frequency of use. Brenda used it very sparingly (in 11.1% of all instances) whereas the use of B1 feedback dominated the practice of Jean and Louise. Of the feedback Jean utilised, 83.3 percent was classified as B1, and in Louise's case it was 80.9 percent. While Olivia used this type of feedback in 53.7 percent of instances, it should be noted that it was tempered by the use of other feedback types. When teachers used B1 feedback it was to convey primarily an overall sense of the teacher's pleasure and satisfaction with regard to children's efforts. Sometimes this pleasure was directed at an individual child and was kept private while more frequently it was directed at the whole class and led to a public acknowledgement that appeared to be considered by the teacher as a reward:

> Okay, correct that word and you're going to read that out to the class in a minute. How do you feel about it [to the child]? Proud [child]. I do too, I feel really proud. First of all correct that one for me. Right people stop because we've got some people who've done it really, really well. Who else did I say could share one up here?...Give them a clap. (Jean)

There was only one instance of feedback being used to make comparisons between a child's present and past performance:

> Well done [child]. Well super effort today. Go and put that on my table [the piece of work]. You have improved so much if I go back through your book. You should be very proud of it. (Louise)

None of the teachers used B2 feedback.

Descriptive Types of Feedback

Specifying attainment (C1); Specifying improvement (C2); Constructing attainment (D1) and Constructing the way forward (D2) have been classified as descriptive types of feedback in that they centre on the learner's cognitive achievements, are related to specific criteria for successful performance and are improvement focused. The key difference between these two types appears to be in the roles assigned to teachers and learners. In Type C the feedback between teacher and learner is uni-directional; that is, from teacher *to* pupil. The teacher plays the significant role in specifying attainment and improvement and maintains control over the feedback process. In D1 and D2 feedback the learner has a critical role to play, as attainment and improvement are constructed in collaboration with the teacher (Tunstall & Gipps, 1996).

Brenda and Olivia were the only two teachers who used C1 feedback. The consistent use of C1 feedback was clearly evident (Brenda 22.3% and Olivia 29.2% of all instances) as both teachers constructed with the class, models of writing that illustrated specific aspects of successful attainment and, in doing so, identified and reinforced the standard expected and cued children into the types of responses

required. The following extract demonstrates how the children were reminded of the learning involved in the activity at the beginning of the lesson so that their attention was focused on the learning inherent in the task; that is, on the skill and strategy they were supposed to acquire and "the kind of student responses that the activity requires" (Brophy, 2001, p.11):

> **Brenda:** Today we're carrying on with our story about going out visiting someone and having a nice meal. Let's have a look at our big learning intention. What is it that we're really working towards doing?
>
> **Child A:** Using interesting words.
>
> **Brenda**: Interesting words, yes. What special kinds of words are interesting when we are writing about these things?… It's telling you more, what is it telling you?
>
> **Child B**: It's telling you something.
>
> **Brenda:** So I've written a little story that I think we'll work on and see if we can put some describing words into this story. Let's read it all together…

Feedback that specifies improvement (C2) is focused on identifying where mistakes lie and how work can be improved. As in C1 feedback, teachers use models in such a way to illustrate what needs improvement and to encourage children to develop self checking strategies. C2 feedback is often used in conjunction with C1 as teachers move backwards and forwards specifying attainment and making suggestions for improvement. Providing children with practice (and feedback) in getting something right is an important element of C2 feedback (Tunstall & Gipps, 1996). In the present study Brenda provided extensive evidence of feedback of this type (33.3%), Olivia some (14.7%), and Louise and Jean none. Brenda and Olivia reinforced the points discussed and highlighted in the shared writing time by encouraging individuals to engage in self-checking activities during their individual writing time. These activities then became the focus of the individual conference with the child. Importantly at the beginning of the conference, children were asked to specify what they were working on. This was to ensure that children were clear about the learning inherent in the task:

> **Child:** I am learning to put full stops at the end of my sentence.
>
> **Olivia**: And that's what you haven't done today. So could you go away and look at what you've done and see if you can work out where the full stops go and then come back and show me and I'll see whether you're right.

A critical difference between C1 and C2 and D1 and D2 feedback is the role that the learner plays in the construction and improvement of achievement. D1 and D2 feedback gives learners more control over, and responsibility for, the assessment of their learning through discussion and dialogue that encourages self-assessment and self-regulation. The expectation that children will explain and

demonstrate their achievements to the teacher and to others is an important factor in D1 feedback. This expectation is extended to D2 feedback where, through skilful questioning and feedback, learners themselves are encouraged to make suggestions about future performance (Tunstall & Gipps, 1996). At no time did either Louise or Jean utilise these types of feedback and Olivia used D2 feedback on only one occasion. Brenda was the only teacher to employ D1 (18.5%) and D2 (14.8%) types of feedback consistently. She provided compelling evidence of both D1 and D2 feedback types as she used questioning and feedback to elicit from the child(ren) aspects of successful attainment or ways in which work could be improved. There were also a number of examples where she worked collaboratively with an individual or a group of children. In doing so the responsibility for assessing the quality of a piece of work (or an aspect of the work) was handed over to the child or the group. At times she used the wider classroom audience as a vehicle through which a particular child could demonstrate and explain what he or she had achieved:

> Now we've been doing some proof reading, but now we're sitting together sharing our stories I'd like someone to find the best sentence in their story, that they've used good describing words that they can share with the rest of us. (Brenda)

In summary, unlike the findings from the Tunstall and Gipps (1996) study, evaluative and descriptive feedback types were not present in the practice of all of the teachers. In fact teachers' feedback practice could be plotted along an evaluative/descriptive continuum. Brenda's practice was dominated by the use of descriptive types; Olivia used a combination of both evaluative and descriptive types and Louise and Jean were solely dependent on evaluative types of feedback

DISCUSSION

Tunstall and Gipps (1996) have argued that the typology is a useful tool by which teachers' feedback practices can be described and analysed. Findings from this study would support this contention. Whilst a number of examples can be drawn from the data to illustrate how the initial categorisation of types of feedback used can lead to a further interrogation of practice, it is beyond the scope of this article to discuss them all. Three have been selected to exemplify the typology's usefulness in gaining entry into teachers' implicit beliefs about the role that feedback plays in learning, and to illustrate its power in making visible and drawing attention to what may have previously been hidden about teachers' feedback. The first example is related to teachers' use of evaluative types of feedback, and in particular their use of praise, the second highlights the necessity for Sadler's (1989) three feedback conditions to be met if teachers are to use descriptive types of feedback, and the third underscores the limited role learners seem to be given in the assessment of their learning.

Teachers' Use of Praise

Praise and positive reinforcement, as an indication of the teacher's personal pleasure and approval, are key features of B1 feedback (Tunstall & Gipps, 1996). In the case of two of the teachers in this study the use of B1 feedback predominated, with more than 80 percent of the feedback instances falling into this category. The absence of punishing and disapproving feedback types (only one instance noted overall) seemed to further highlight the significance these two teachers placed on being positive. Shepard (2000) has argued that people's tacit beliefs about learning continue to be informed (or partially informed) by outmoded theoretical positions that "operate as the default framework affecting and driving current practice" (p. 1). Classifying teachers' feedback into types makes visible aspects of practice that may have become so routinised that teachers are unaware of their existence. Using these findings as a starting point for discussion not only makes visible teachers' use of praise but, more importantly, could lead them into reflecting on why this was so. Was praise used to motivate learners? Was it used to protect and enhance children's self esteem? Will the use of praise have the desired effect on attitudes and performance? Discussion of these questions could lead teachers to investigate research that provides alternative explanations for how learners are motivated and self-esteem is enhanced. Given what is known about the effect of feedback interventions that cue the individual's attention to self (and are therefore ego-involving) – they are more likely to have a negative effect on performance (Butler, 1988), lead to performance orientations (Ames, 1992; Butler, 1988), decrease pupils' interest in school (Dweck, 1992) and encourage the use of passive rather than active learning strategies (Benmansour, 1999) – it is critical that teachers have opportunities to access this information as a first step to understanding how practice, however well intentioned, may not have the desired effects on learning and achievement.

The Conditions Necessary to Provide Descriptive Forms of Feedback

Sadler (1989) has contended that feedback must have a catalytic and coaching value that will assist in the closing of the gap between current and desired performance. Central to Sadler's argument of learners closing the gap is the concept of a standard that needs to be achieved. He has argued that feedback is a necessary but insufficient condition to improve learning. Improvement can only be made if the learner has a clear idea of the goal(s) of learning and the criteria by which performance will be judged. As a result the setting and sharing of goals and the identification of the standards that students are working towards are now considered to be integral to the feedback process. In Sadler's opinion, if these conditions are met, feedback can fulfil its formative function as it is used as a bridge to assist learners to identify the gap between current and desired performance and to take some action that will close that gap.

In two classrooms there was evidence that teachers were sharing learning goals with learners through the setting of learning intentions, the establishment of explicit criteria for success and the provision and creation of models that illustrated

successful attainment. There was reinforcement of what constituted high quality work through the use of task-related, descriptive forms of feedback. Thus, these two teachers were fostering the conditions that Sadler (1989) regards as necessary if learners are to bridge the gap between current and desired performance. This practice was not evident in the other two classrooms. In these classrooms it was never explained to the children what knowledge, behaviour, skill or strategy they were supposed to acquire, the purpose of the given activity, the kind of responses that were expected of them or the criteria for success. These two quite distinct sets of practices seem to illustrate quite different understandings about the nature and role of feedback in the learning process. Examining and discussing the data collected could help teachers to unpack their understandings about the purpose of feedback and what constitutes quality feedback.

Learning and Assessment as Collaboration

Notions of partnership and collaboration underpin contemporary theories of formative assessment and feedback (Black & Wiliam, 2003; Shepard, 2000) as learners are seen as active participants in their learning and in the assessment of that learning. These ideas are evident in the work of Sadler (1989) who has maintained that students must not rely on the evaluative judgements of the teacher because such an approach leads to dependency in learning. As an alternative, he has advocated "for students to develop skills in evaluating the quality of their own work, especially during the process of production" since "providing direct and authentic evaluative experience is a necessary condition for the development of evaluative expertise and therefore for intelligent self-monitoring" (Sadler, 1989, pp. 142-143).

Within the typology, D1 and D2 feedback types are illustrative of notions of partnership and collaboration (Tunstall & Gipps, 1996). Through skilful questioning and feedback learners are empowered to take more responsibility for and have more control over the assessment of their learning. Providing learners with opportunities to explain and demonstrate to others critical elements of their achievements and ways to make improvements to their own and others' work ensures they are engaged in a dialogue about the substantive features of the work. Such occasions provide learners with authentic evaluative experience as they make judgements about their work and that of others, against a specified standard and criteria. This in turn will assist in the development of productive expertise, thus helping learners take action to close the gap between current and desired performance.

In the current study, the notions of partnership and collaboration as indicated by use of D1 and D2 feedback types were absent from the majority of teachers' practice. Only one teacher worked *with* learners to construct achievement and afford them the opportunities to engage in evaluative judgements about their work. Presenting the evidence gained from the initial categorisation of teachers' practice against the typology would provide a suitable starting point to begin discussing with teachers such questions as: What do you see as your role in learning and assessment process? What is the learner's role? Who is, and who should be, in control of the learning, assessment, feedback process? How is evaluative and productive expertise

developed? Who is ultimately responsible for closing the gap between current and desired performance?

CONCLUSION

Little is known about how to assist teachers to make changes to their feedback practices. Within the context of teacher professional development, the typology has the potential to be used with and by teachers as a lens through which their feedback practices can be investigated and reflected upon. However, for this to occur, analysis must go beyond the classification of feedback into the four types. The heuristic value of the typology lies in its potential to provide teachers with insight into aspects of their practice through an unpacking of their beliefs about, and practices related to, teaching and learning. Substantive discussion of data, beyond initial categorisations, could help teachers to confront some of the assumptions implicit in their feedback practice, accentuate teachers' awareness of some of their routinised practices (and their implications and consequences for learners), illustrate differences between espoused and actual practice, and pinpoint areas where teachers themselves are dissatisfied with their practice. A synthesis of this information could lead teachers to a reconstruction of practice. The specific examples taken from the teachers involved in the pilot study have been used to illustrate the typology's potential to be used to assist teachers in the first step of such a process; that is, deconstruction.

REFERENCES

Ackroyd, S., & Hughes, J. (1992). *Data collection in context*. Harlow: Longman House.

Ames, C. (1992). Classrooms: Goals, structures and student motivation. *Journal of Educational Psychology, 84*, 261-271.

Argyris, C., & Schon, D. (1978). *Organizational learning: A theory of action perspective*. Reading MA: Addison-Wesley.

Askew, S., & Lodge, C. (2000). Gifts, ping-pong and loops - linking feedback and learning. In S. Askew (Ed.), *Feedback for learning* (pp. 1-17). London: RoutledgeFalmer.

Ball, D., & Bass, H. (2000). Interweaving content and pedagogy in teaching and learning to teach: Knowing and using mathematics. In J. Boaler (Ed.), *Multiple perspectives on mathematics teaching and learning* (pp. 83-104). London: Ablex Publishing.

Bell, B., & Cowie, B. (2001). *Formative assessment and science education*. AH Dordrecht, The Netherlands: Kluwer Academic Publishers.

Benmansour, N. (1999). Motivational orientations, self-efficacy, anxiety and strategy use in learning high school mathematics in Morocco. *Mediterranean Journal of Educational Studies, 4*, 1-15.

Bennett, S., Wragg, E., Carre, C., & Carter, D. (1992). A longitudinal study of primary teachers' perceived competence in, and concerns about, national curriculum implementation. *Research Papers in Education, 7*(1), 53-78.

Biggs, J., & Collis, K. (1989). Toward a model of school based curriculum development and assessment using the SOLO taxonomy. *Australian Journal of Education, 33*, 151-163.

Black, P. (2000). Research and the development of educational assessment. *Oxford Review of Education, 26*(3&4), 407-419.

Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy and Practice, 5*(1), 7-74.

Black, P., & Wiliam, D. (2003). 'In praise of educational research': Formative assessment. *British Educational Research Journal, 29*(5), 623-637.

Bloom, B. (1956). *Taxonomy of educational objectives: Handbook 1: Cognitive domain*. New York: McKay Publishing

Brophy, J. (2001). *Subject-specific instructional methods and activities. Advances in teaching* (Vol. 8). New York: Elsevier.

Butler, R. (1988). Enhancing and undermining intrinsic motivation: The effects of task-involving and ego-involving evaluation on interest and performance. *British Journal of Educational Psychology, 58*, 1-14.

Clarke, S. (2000). Getting it right – distance marking as accessible and effective feedback in the primary classroom. In S. Askew (Ed.), *Feedback for learning* (pp. 32-45). London: RoutledgeFalmer.

Dixon, H. (1999). *The effect of policy on practice: An analysis of teachers' perceptions of school based assessment practice*. Unpublished Master of Educational Administration Thesis, Massey University, Palmerston North.

Dweck, C. (1992). The study of goals in psychology. *Psychological Science, 3*, 165-167.

Faigley, L., & Witte, S. (1981). Analyzing revisions. *College Composition and Communication, 32*(4), 400-414.

Gipps, C., Brown, M., McCallum, B., & McAlister, S. (1995). *Intuition or evidence*. Buckingham: Open University Press.

Hargreaves, E., & McCallum, B. (1998). *Written feedback to children from teachers,* ERSC Project 'Teaching, learning and feedback strategies'. Project Paper No. 7, London: University of London Institute of Education.

Harlen, W., & Deakin Crick, R. (2003). Testing and motivation for learning. *Assessment in Education: Principles, Policy and Practice, 10*(2), 167-207.

Hattie, J., & Jaeger, R. (1998). Assessment and classroom learning: A deductive approach. *Assessment in Education: Principles, Policy and Practice, 5*(1), 111-122.

Kluger, A., & DeNisi, A. (1996). The effects of feedback interventions on performance: A historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychological Bulletin, 119*(2), 254-284.

Knight, N. (2003). Teacher feedback to students in numeracy lessons: Are students getting good value? *Set: Research Information for Teachers, 3*, 40-45.

Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. Newbury Park: Sage Publications.

Ministry of Education (2001). *Curriculum update 47: Assessment – Te Aro Matawai*. Wellington: Learning Media.

Sadler, D. R. (1998). Formative assessment: revisiting the territory. *Assessment in Education: Principles, Policy and Practice, 5*(1), 77-84.

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

Shulman, L. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review, 57*, 1-22.

Schon, D. (1983). *The reflective practitioner*. New York: Basic Books.

Shepard, L. (2000). The role of assessment in a learning culture. *Educational Researcher, 29*(7), 4-14.

Smyth, J. (1989). Developing and sustaining critical reflection in teacher education. *Journal of Teacher Education, March-April*, 2-9.

Timperley, H., & Robinson, V. M. J. (2001). Achieving school improvement through challenging and changing teachers' schema. *Journal of Educational Change, 2*, 281-300.

Torrance, H., & Pryor, J. (1998). *Investigating formative assessment: Teaching, learning and assessment*. Buckingham: Open University Press.

Torrance, H., & Pryor, J. (2001). Developing formative assessment in the classroom: Using action research to explore and modify theory. *British Educational Research Journal, 27*(5), 615-631.

Tunstall, P., & Gipps, C. (1996). Teacher feedback to young children in formative assessment: A typology. *British Educational Research Journal, 22*(4), 389-404.

Ward, R., & Dix, S. (2001). Support for the reluctant writer. *Teachers and Curriculum, 5*, 68-71.

Ward, R., & Dix, S. (2004). Highlighting children's awareness of their texts through talk. *Set: Research Information for Teachers, 1*, 7-11.

Wikeley, F. (2000). *Learning from research*. London: RoutledgeFalmer.

Zellermayer, M. (1989). The study of teachers' written feedback to students' writing: Changes in theoretical considerations and the expansion of research contexts. *Instructional Science, 18*, 145-165.