This study involved case studies of six secondary social science associate teachers and their allotted student teachers (enrolled at the University of Canberra, New South Wales, Australia) to examine aspects of the post-observation annual meeting or feedback phase of the practicum supervisory cycle. The content of the feedback was found to focus on six areas, with the following percentage frequency of occurrences across cases: lesson presentation (30 percent), classroom management (22 percent), knowledge of classroom context (17 percent), lesson planning (13 percent), knowledge of content (10 percent), and teacher self-image (7 percent). Associate teachers' main concern in relation to classroom management was to identify and remediate perceived classroom control deficiencies. Associate teachers attempted to equip student teachers with a comprehensive knowledge base relating to the class as a whole and the groups and individuals within it. They also attempted to develop and maintain the student teachers' self-image. (Contains 10 references.) (JDD)
Title: An Exploratory Analysis of the Substantive Aspects of the Feedback Phase of the Supervisory Cycle.

Presenter: Dr. Jim Mitchell, University of Canberra, P.O. Box 1, Belconnen, ACT, 2616, Australia.

Introduction.
Supervision during the practicum has the potential to colour beginning teachers' perspectives on the profession, yet it is widely acknowledged as a weak link in teacher development. Related research has principally considered inherent problems and the evaluation of alternative supervision models, with little effort being put into the study of substantive or content aspects of the process. It is this area that provided the focus for the research. The need to consider what was taking place in the feedback phase was further reinforced by a recent review of the practicum conducted within the Education Faculty at the University of Canberra, which drew our attention to the fact that of 346 primary and secondary students surveyed, 53% expressed concern about the "quality" of the feedback provided.

Aims of the Research:
It was the aim of the research being reported to examine through case study of six secondary social science associate teachers and their allotted student teachers, the substantive aspects of the post-observation conference or feedback phase of the supervisory cycle.

An "associate" is the term applied to teachers employed by the University of Canberra to describe teachers who are contracted to act as mentors to University teacher education students during their practicum. For the purpose of this research the "post-observation conference" and "feedback phase" of the supervisory cycle are used interchangeably, and represent that time following an observed lesson when the associate and student teacher exchange information about what was intended and what actually happened.

Theoretical Background.
A large body of psychological literature supports the generalisation that "knowledge of results" or "feedback", facilitates learning. The benefits of feedback are argued, depending on the theoretical orientation taken, on the grounds of reinforcement, motivation or its cognitive effects on learning. Behaviouristically oriented theorists attribute feedback effects to reinforcement or "to the direct strengthening effect of drive reduction on the responses that are instrumental in obtaining a reward or gratifying a drive (Ausubel, 1969, pp.315-16). From a motivational point of view it is claimed...
that feedback on correct responses gratified cognitive, affiliative and ego-enhancing drives, motivating the response and increasing the possibility of its recurrence. Knowledge of results is also thought to have cognitive effects on learning in that it confirms appropriate meanings and indicates the relative inadequacy with which different points of the learning task have been mastered.

Festinger's (1958) theory of cognitive dissonance extends to theoretical aspects of feedback by suggesting that behavioural change is related to the level of dissonance or discrepancy between the learner's self-perception and observed behaviour, the greater the discrepancy, the greater the likelihood of change.

Feedback in the post-observation stage of the supervisory cycle should assist student teacher learning; what forms the basis for this learning is the focus of the study being reported.

Review of Related Literature.
The ERIC database lists 157 titles under the "practicum" and "feedback" descriptors though few of these take a comprehensive look at what is discussed during feedback sessions. One study by Griffen et al. (1983), and a review paper by Patricia Holland (1989) relate marginally to the area.

Griffen et al. (1983) in a comprehensive study of the practicum noted, in relation to the feedback conference, that the supervisory comments and discussions were based on situationally specific phenomena related to individual classrooms rather than overriding principles, theories, or broad conceptions of teaching, and the associate teacher's influence was characterised by "craft knowledge" and "common sense". They also reported that the supervisory interactions focussed on "classroom management" which emphasised a "let's see if it works" stance rather than research-derived management strategies.

In her review Holland (1989) considers a number of "assumptions" that underly the supervisory conference as they relate to the conference components, its purpose, supervisor-teacher relationships, and the use of data. Implicit in her findings is the idea that the supervisor will discuss evidence from the observation, to teach the teacher alternative and assumedly more effective pedagogical strategies, to place the teacher on a continuum from unsatisfactory to outstanding, or to train the teacher to analyse their own teaching. In each case it could be assumed that instructional strategies would provide the major content focus of the supervisory conference.
A synthesis of Griffen et al's and Holland's work would point to discussion centred around instructional aspects of the lesson, with a bias towards management strategies, the level of discussion being at a common sense rather than a theoretical level.

Research Plan and Methodology.
The methodology employed in this research represents an extension to the work done in the area of teachers' craft knowledge by Brown and McIntyre (1988) and McIntyre and Cooper (1992), and teachers' pedagogical knowledge by Shulman (1986), and Wilson, Shulman and Rickett (1987). Their research considered the knowledge and thinking used by teachers to achieve specific success in their teaching, one facet of common concern being the means by which subject knowledge was made accessible to pupils. The data base for these projects was the interactions between the teachers and pupils in their classes. The study being reported employed a similar research paradigm to focus on the interactions between associate teachers and their student teacher during the feedback phase of the supervisory cycle.

The Sample.
A sample of six secondary social science associate teachers together with their assigned student teachers were the subjects for case study. The teachers constituted a convenience sample. They were all known to the researcher and respected for their professionalism; they had cooperated as associate teachers of the University over an extended period, and on being contacted personally prior to the study, agreed to be involved. The student teachers who took part were six members of a Graduate Diploma in Education (secondary social science) class who had expressed interest in the project and were able to participate. Their graduate studies had centred on geography, economics, law, accounting, and sociology.

The Research Context.
The research was set in six secondary schools within the Australian Capital Territory (ACT). Classes on which the feedback was based ranged from Year 7 to Year 11, two being at Year 7, one each at years 8, 9 and 10, and one class at Year 11; all classes were of mixed ability and the lesson lengths were approximately 55 minutes at each site. The social science curriculum being taught in the various classes was, in keeping with the local system policy, school-based. Generally the schools used in the study could be assumed to be relatively similar in terms of qualifications of teaching staff, student-teacher ratios, student population and availability of resources for teaching.
The teachers involved were "experienced", having worked in the ACT system for an average of 11 years, and throughout that time acted as associates of the University of Canberra. Although several of these teachers had promotional eligibility, they did not hold executive positions; four of the teachers held the status of Advanced Skills Teachers. During their period as associates each teacher had occasionally attended workshops conducted by the Faculty of Education in which they were introduced to an approach to supervision loosely based on a clinical supervision model, involving pre-observation discussion, observation, and post-observation supervisory conference (or feedback) phases. As a further aspect of the supervision process, collegiality is stressed by the Faculty as essential to the student teacher-associate relationship, and a "collaborative" rather than a "directive" conference context is recommended both by the workshops and in the literature issued to support the practice teaching sessions. Furthermore, associate teachers are asked to use written feedback to give structure to the feedback sessions and make this available to student teachers at the conclusion of the session.

The participating student teachers were enrolled in the Graduate Diploma in Education (Secondary Social Science) course at the University of Canberra. Their average age was around 32 as most had had previous work experience; the group was relatively selective in that the 15 students enrolled had been selected from 65 applicants. At the time of this research the student teachers had each completed four weeks of a five-week Semester I block practice.

**Data Base.**

In each case the feedback session relating to one lesson taught by the student teacher and observed by the associate were audiotaped and transcribed. Observational field notes were written on each lesson and post-lesson conference by the non-participating researcher. The transcripts formed the data base to analyse, in terms of the study's aims, the substantive aspects of the feedback phase of the supervisory cycle as generated by a sample of ACT secondary social science associates and their student teachers.

**Data Analysis.**

Content or substantive categories of the feedback sessions were isolated using methods of discourse analysis consistent with those put forward by Miles & Huberman (1984) and Spradley (1978). Six categories were evidenced in the data including "Lesson Presentation", "Classroom Management", "Knowledge of Classroom Context", "Lesson Planning", "Knowledge of Content", and "Teacher Self-image". The transcripts were subsequently coded, the unit of analysis being a "topic comment unit". Topic comment units were represented in the data as discrete...
statements centred on an aspect of the lesson observed or associated with it, and were found to vary in form from lengthy interactive episodes involving both associate and student teacher to short statements by either associate or student teacher. The following excerpts exemplify two extremes of the analysis unit.

T1: What do you see as the strengths of this particular lesson?
ST1: I think, hopefully they did gain an understanding of the Canberra region and about the aborigines in the Canberra region and where the name came from and who the first settlers were here, so, hopefully, through that introduction to the whole unit on the Canberra region they would have gained an understanding (p.1 topic comment unit coded "lesson presentation").

and T5 begins his post-lesson discussion with ST5:

T5. Cost curve analysis is probably the most difficult area of economics to teach...like we have spent three lessons on it (p.1.topic comment unit coded "knowledge of content").

Findings.
As previously noted initial analyses of the transcripts relating to the feedback sessions generated six broad categories represented by the focus given by either the student teacher or the associate to topic comment units identified within the transcript. As indicated in Table 1 these categories, which are detailed below, included in order of percentage frequency of occurrence across cases, Lesson Presentation (30%), Classroom Management (22%), Knowledge of Classroom Context (17%), Lesson Planning (13%), Knowledge of Content (10%), Teacher Self-image (7%).

An analysis of individual cases showed that while Lesson Presentation assumes most importance in lessons for T1 (37% of units), T2 (36%), T4 (30%) & T5 (25%), T3's session has a primary focus on Knowledge of Context (33%), and with T6 the discourse centres mainly on management (46%). As shown on Table 1, second and third level individual tallies show no consistency across cases.

There was no evidence in the transcripts of social discourse or other discussion which could be considered to be outside the feedback conference's parameters.
Detail of Content Foci.

Category 1. Lesson Presentation.
Topic comments related to the Lesson Presentation category were found to be the most common focus of the feedback conferences, accounting for 30% of total codings. Comment related to this category centred on the general area of the student teacher's effectiveness in introducing, developing and concluding lessons, together with the specifics of explaining concepts, describing, questioning, the timing of phases within the lesson, interaction patterns, use of voice, and the use of teaching materials and hardware in the lesson. Discussion during the conferences involved both reinforcement of observed practice and/or recommendations for change. ST1 having been asked by T1 what she liked about her lesson on the history of the Canberra region, provides an example from this category:

What I liked about it (the lesson) was that it had a lot of variety in terms of what they were doing, they read out the passage and then answered questions from that and that's to recap the understanding of the article, then I had an exercise filling in names, so it was a sort of a game...
T1: I must agree, they did enjoy that game (p.1).

Following the observation of a lesson to Year 10 in which the topic was writing job applications, T2 takes a negative stance:

T2: The other one (point) that jarred me (about the lesson) was the letters on the overhead (projector) I thought you might have been better off having them (pro formas for writing job applications) on a sheet of paper for the kids and then saying OK kids here are three letters of job application which one do you think is better.and...
ST2: Yeah do it on the board (p.1).

Category 2 Classroom Management.
Discussion coded in the Classroom Management category represented 22% of total codings. The primary focus of this category's topic comments was on classroom discipline and control rather than general aspects of management, centring on the student teacher's awareness of what was going on in the classroom, giving directions, controlling individual, group and whole class behaviour, and evaluating the effectiveness of control measures. Some discussion also focussed on the teacher's movement around the classroom as a basis for monitoring the work of individual
students or groups. T6 in relation to a lesson to Year 7 focussed on "weather" typifies comments in this category:

T6: You said "now we are going to do the second part", but if they missed it it was too bad...raise your voice, OK, so it dictates and then drop down again....make them behave and the other thing when you were cross (annoyed with the class), students had pens, papers, rubbers...you know you really have to get them stopped, otherwise they are not listening. I mean to say these pens were driving me nuts!

No response from ST6, T6 continues for 29 lines without interruption to include a further six topic comments related to T6's teaching (pp.2,3).

The Knowledge of Classroom Context category accounted for 17% of coded units across cases. Although this category included reference to a range of foci such as location of resources such as teaching materials, overhead projectors etc., optimal placement for video or projector screens, the topic comments were primarily concerned with the pupils. This knowledge related to such matters as pupils' relative propensity to stay on task, their willingness to participate in groupwork, give oral presentations such as reading aloud, their academic strengths, and socio-economic backgrounds. In addition some topic comment related to the general need to develop empathy and to show them respect. T2 and ST2 provide an example of comment this category:

T2: You need to think which ones (pupils) are better for what task.
ST2: Yeah think you're right, having them there particularly Ivan, looking blank at me...
T2: I've had Ivan for several things (courses) and I have yet to give him anything higher than an E, Ivan does very little work for anything or anyone (p.1).

Similarly T5 comments in relation to the ability of Year 11 class to stay on task:

Whereas Year 9's they're more accepting of the fact (that they have to pay attention) and OK we'll do this in silence and we can't talk, 90% of the time it's going to be about their social lives or something; these guys (Year 11) tend to work in a more positive sort of environment. (p.4).

Category 4. Lesson Planning.
The Lesson Planning category made up 13% of the codings. Topic comments in this category were mainly concerned with the congruence between what had been planned and the reality as observed. Discussion specifically focused on such aspects of prelesson planning as the sequencing and integration of content and activities, choice of materials, lesson structure and timing, the associate providing reinforcing comments or drawing attention to problems that could be traced to initial planning. It was this category that gave an indication of the degree of reflection developed through teacher-student teacher interaction during the feedback conference. Discussion between T4 and ST4 over ST4's concern about the inclusion of a particular accounting problem in the Year 8 Commerce lesson exemplifies topic comments in this category:

ST4: I originally wrote it out (in my plan) to get it in (the lesson) to get them to do it; I didn't realise at that time (during planning) that it was this example I was going to follow through (in the lesson) either, which was a problem...I would have made sure that I didn't have Sales as the main thing...
T4: But this analysis is good because the next time you do this sort of thing you won't fall into the same trap again...I thought your lesson organisation was good, you prepared, you knew what you wanted to do; it was logical and sequential. (p.3)

In another context T6 in discussion in relation to ST6's lesson on mapping comments:

T6: OK what did you like? Did you like anything?
ST6: I didn't like much really.
T6: Mmm. So what was wrong?
ST6: Over the whole lesson there was not enough content planned to keep them going. I did prepare something else, I've usually got something else prepared, just in case but I didn't think there was time to start on it. So I chose not to (p.1).

Category 5 Knowledge of Content.
The Knowledge of Content category received 10% of total topic comments. The focus here was what the student teacher actually taught in the lesson, its scope, conceptual difficulty to the student teacher and/or the pupils, and its relevance to pupils. T3's discussion with ST3 typifies this type of topic comment:
T3: At this part of the course where they've gone through the theory of it (the Law of Torts) before and applying it and getting the kids to draw out for themselves the elements of torts and the defences offered.

ST3: I must admit I felt that done well too. I felt they were interested.

T3: That's right, they're all raising bits of theory they've done before. (p.1).

In a further example T5 discusses cost curve analysis with ST5 following a lesson to Year 11 Economics:

T5: Well it's a tremendously difficult area (graphing cost curves), it really is...

ST5: I mean I guess I overestimated their plotting skills I mean because the two vertical axes are reasonably complicated.

T5: We discussed this the other day and the fact that if you plot the total cost and average cost curves on the same graph you get tiny differentials at the bottom of the averages (p.3).

Category 6 Teacher Self Image.

As indicated in Table 1, codings of topic comments in the Teacher Self-image category accounted for 7% of the total. Discussion was geared to help develop the student teacher's self-confidence by giving support, reassuring, alerting them to the wider context of teaching such as relations with peers and professional behaviour. In the related comments the associate typically assists the student to cope with lesson-based problems by providing a rationalisation for the event, or pointing to an alternative, more appropriate way of interpreting it. T2 for example reassures ST2 on his concern over the pupils lack of understanding of a concept.

T2: No, it's not you...don't blame yourself, I mean it's part of a thing with any of those kids no matter how thoroughly you explain it. (p.1)

In a further example T5 discusses a problem that ST5 had faced with lesson continuity in his Economics class.

ST5: Maybe I should have done it (put the notes up on the blackboard) before the lesson.

T5: That was another problem, not yours. I had to race from the other class, I had to race off to something important... and I'd said I'd bring the overhead projector down and I forgot...it was a schmozzle that was to do with me (p.1).

Discussion.
The content of the feedback generated by the sample of six associates and their student teachers in one post-lesson conference was found to centre around six areas, matters relating to lesson presentation, classroom management, knowledge of lesson content, knowledge of context, lesson planning, and the maintenance of the student teacher's self image. The topic comments in general highlighted the breadth and depth of practical knowledge that can be generated in feedback sessions to provide a basis for the beginning teacher and the associate's professional development. Griffen et al's (1983) dismissal of the feedback discourse as without theoretical base and at a common sense level overlooks the importance of teachers' practical knowledge or implicit theories in assisting the student teacher in their own theory building.

A number of points relating to individual categories are worthy of comment. Firstly, in relation to classroom management it appeared from the data that although other more general management issues were discussed, the associate's main concern was to identify and remediate perceived classroom control deficiencies. A further point of interest related to the classroom context category, the discussion here seemingly designed in each case to equip the student teachers with a comprehensive knowledge base relating to the class as a whole, groups and individuals within it. As previously noted this knowledge related to such matters as pupils'(s) relative propensity to stay on task, their willingness to participate in groupwork, give oral presentations such as reading aloud, their academic strengths, and socio-economic backgrounds; other contextual aspects though present in the discussions, appeared to be of less concern. A third area of interest centres on the isolation of a category focussed on discussion that was seen to be aimed at the development and maintenance of the student teacher's self image; if the findings from this exploratory study are indicative of more general concerns, the associate teacher plays an important role in the development of a self confident teacher-peer.

The finding that places lesson presentation ahead of classroom management related comments is inconsistent with that of Griffith et al (1983). Because of the open nature of both projects this difference may be attributable to a number of factors such as differences in methodology, the type of sample, and importantly context, a factor that will be discussed later in this paper. The case study approach used in this study did however, in contrast to the larger multi-faceted project of Griffith et al., provide a means to highlight differences among cases in the foci of the feedback. Figures for the research being reported indicated for example, that while cross-case tallies and four cases showed a concentration on lesson presentation matters, there were differences among cases in terms of primary and secondary foci. Classroom management in T6/ST6's case emphasizes the point as their primary focus accounts for 46% of topic comments while lesson presentation
comments received 28% of the total. In the case of T3/ST3 the main focus was Knowledge of Context, which received 33% of codings. (Refer Table 1).

Throughout the analysis it became apparent that contextual factors had a noticeable influence on the content of the feedback sessions. Factors most in evidence included the differences in the classroom context, the teacher, the pupils, their level, motivation etc., the associate's beliefs about their role, timetable constraints, and the limitations imposed by the research context in which the lessons and feedback sessions were conducted.

The general classroom context in which lessons are set will obviously influence the content of the feedback session. Feedback related to ST6's poorly prepared lesson on "weather" to an uncooperative mixed ability Year 7 Class for example, should generate a greater emphasis on classroom management than ST5's economics lesson to a motivated Year 11.

The influence of the associate teacher's beliefs about the associate role on the feedback session became apparent in informal post study discussions. During these discussions it was confirmed by the associates that, despite University guidelines on the nature of supervision their chosen approaches were idiosyncratic, a point further evidenced in the transcripts. T1 for example favoured a "non-directive stance", the topic comments generated arising mainly from student teacher reflection. Compare for example T1's approach (interaction ratio 40:60 % based on line counts):

T1: Again, I suppose a similar sort of question, what are the weaknesses you saw in the lesson?
ST1: O.K. In terms of behaviour, there's a lot of students that didn't listen and there's one boy that comes in that's never prepared and he just said to me that I don't have a piece of paper or pen.
T1: This is Declin. If you had Declin in your class, and I mean if this was your class, what would you do, knowing he's always without pens, paper, whatever? (p.3).

with the directive teacher-centred approach taken by T3, the associate providing the bulk of the substantive input. T3 initiates the interaction; the interaction ratio favours the associate 80:20%:

Perhaps there's just several things at the beginning I... with those people coming in late. I know that's a bit of a habit for them sometimes to do that but I... I would try and give them a
bit of encouragement to come, to be punctual...the role play I really liked the role play, I thought it was very good...liked your expression and the good relationships with the pupils...

ST3: Sometimes I was found in, you know a bit of a cloud and some people are just...(p.1).

(T3 not concerned with ST3's apparently meaningless comment and his monologue continues for a further 21 lines).

Interaction figures for the other cases were T2/ST2 70:30; T4/ST4 40:60; T5/ST5 90:10; T6/ST6 80:20.

It could also be inferred from the data that the content of the feedback session at some sites was affected by the school timetable, this factor determining the time available for the post observation discussion, and when it could be held. The number of topic comments listed for each case on Table 1 give one indication of the impact of time constraint, comments generated varying between 35 in T1's case to 18 in the case of T3; discussion times were T1/ST1, T4/ST4, T5/ST5: 25 minutes; T6/ST6: 20 minutes, T2/ST2, T3/ST3: 15 minutes.

One further contextual limitation deserves comment. As previously noted there was no evidence of social or other discussion unrelated to the observed lesson in the transcripts, a feature that could be an artifact of the data collection method, the research context possibly leading some associates to adopt a more formal approach to their post lesson conferences than may otherwise have been the case.

Other factors which would arguably have a bearing on the outcomes include the associates and student teacher's practical theories (Refer Johnson, 1991), associate/student-teacher relationships, the relative motivation of the student teacher to receive feedback, and the sex of associate and student teacher. These factors however were not evidenced in the transcripts and will be followed up in a future phase of this study.

Conclusion.
This study forms part of a larger continuing project which is employing case study methodology to give insight into the influence of the post observation conference on student teacher development. If the findings from this part of the study into the substantive aspects of the conference can be taken as a guide, this part of the supervisory cycle provides a the beginning teacher with a valuable insight into what is generally seen to be a private domain, teachers' practical knowledge.
References.


Jim Mitchell

### Feedback Phase: Content Components

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<th>T2/ST2</th>
<th>T3/ST3</th>
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