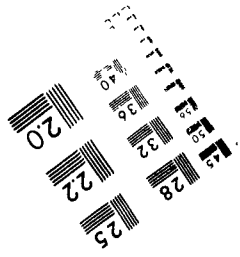
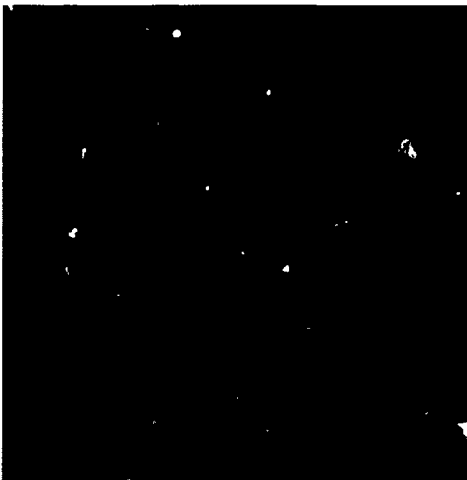
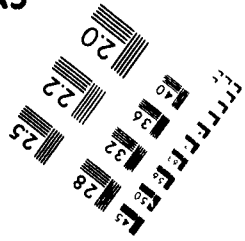


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ABSTRACT

This paper reports on one aspect of a larger study that investigated the effects of supervisors' intervention on teachers' classroom management practices. The paper examines the interactive responses of high- and low-conceptual-level teachers in four different supervisory dyads as they conference with their principals in an attempt to ascertain whether their dyadic interaction is associated in any way with the outcomes of the conference. The first dyad is composed of a high-conceptual-level (CL) teacher interacting with a low-CL principal; the second, of a high-CL teacher interacting with a moderate-CL principal; the third, of a low-CL teacher interacting with a high-CL principal; and the fourth, of a low-CL teacher interacting with a low-CL principal. The larger study ascertained whether effective clinical supervision requires high-conceptual-level principals who practice particular process strategies as they conference with teachers, or whether the mere acquisition of researched-based content knowledge is sufficient to effect improvement in teachers' classroom management performance. Case study observational techniques comprised the research methodology. Findings suggest that the conditions necessary to produce a successful classroom management outcome require principals and teachers to find a common language through which to communicate based upon an appropriate match between high- and low-conceptual-level principals and teachers. (JAM)

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# TEACHERS' PERSPECTIVES ON DYADIC SUPERVISORY INTERACTION

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This paper reports on one aspect of a larger study (Grimmett & Crehan, 1988b) which investigated the effects of supervisors' intervention on teachers' classroom management practices. The purpose of this paper is to examine the interactive responses of high and low conceptual level teachers in four different supervisory dyads as they conference with their principals in an attempt to ascertain whether or not the dyadic interaction is associated in any way with the outcomes of the conference.

The paper is divided into five main sections, the first of which is a brief overview of the larger study. Following a comparison of the general responses of all the high and low conceptual level teachers in the study, the second section addresses the interactive responses within and between the four dyads. The third section presents a discussion of the interactive responses. In the fourth section, the implications for instructional supervision are explored. A final concluding note ends the paper.

### OVERVIEW OF LARGER STUDY

Instructional supervision is typically conducted by school principals who believe that their interventions bring about improvement in teachers' classroom performance. There is, however, a contrasting view that teachers develop more through collegial rather than hierarchical intervention. Collegial intervention may involve either principals and teachers working together or teachers only working with one another. In addition to the type of intervention, there is evidence which suggests that its success may be positively related to the conceptual level of the supervisor. Accordingly, the present study sought to examine the effects of principals' supervision on teachers' classroom management behaviour. More specifically, the

study attempted to ascertain whether effective clinical supervision requires high conceptual level principals who practice particular process strategies as they conference with teachers, or whether the mere acquisition of research-based content knowledge by principals and/or teachers is sufficient to effect improvement in teachers' classroom management performance.

### **Method**

This was a preliminary study conducted in the naturalistic setting of elementary schools and classrooms in a large urban district. Data were collected from a volunteer sample of 15 supervisory dyads prior to and following a series of workshop interventions. For purposes of both research design, and quantitative and qualitative analyses, the dyads were divided into study groups.

### **Study Groups**

All subjects completed a Paragraph Completion Test to measure conceptual level (CL). The CL scores were trichotomized using the same cut-off points for both principals and teachers. The principals' scores were used to establish four randomly stratified groups of supervisory dyads. The principals, but not the teachers, in the "Experimental" group (n = 4 dyads) attended both the classroom management (content) and the supervision strategies (process) workshops. Both the principals and the teachers in the "Treatment #1" group (n = 4 dyads) attended only the classroom management workshops. Only the teachers in the "Treatment #2" group (n = 3 dyads) attended the classroom management workshops. The "Control" groups (n = 4 dyads) principals and teachers did not attend either set of workshops.

### **Workshop Treatments**

Between the first and second rounds of classroom observations and supervisory conferences, two sets of workshops were held. Each of the three classroom management workshops focussed on a different management dimension, namely room arrangement, pupil behaviour, and instruction. The two supervision workshop topics were interpersonal skills and conferencing strategies. The materials and activities in both sets of workshops were intended to expose participants to research-verified content and process knowledge and to enhance their skills as classroom managers or instructional supervisors.

### **Limitations**

There are three main limitations to this study. The first two arise from sample size; the third from the design of the study. Because the sample size was small, the findings may not be generalizable to a larger population and should be regarded as tentative in nature. The pre-post test research design makes it impossible to assess the stability of treatment effects found in this study.

### **Data Collection**

Two sets of data were collected, one set before the workshops and one set after the workshops. Each data set contained two subsets, namely classroom observation data and supervisory conference data.

### **Classroom Observation Data**

The first subset, collected by two independent project recorders, consisted of observation data about each teacher's classroom management behaviour. From extensive field notes written during the observation, a "Classroom Observation Record" was completed in an attempt to ensure some categorical commonality across all the teachers. Based on the information in both the field notes and the Observation Record, the coders independently completed a "Component Rating Scale" containing 49 items divided into nine management categories. Each of the items was rated on a five point scale (1-5). This procedure yielded one score for each category and an overall score across all categories. These data subsets were used in three ways: (1) to establish inter-rater reliability between the two project observers, (2) to assess change from the pre- to the post-workshop observations, and (3) to write a case study for each teacher.

### **Supervisory Conference Data**

The second subset consisted of supervisory conference observation data collected, first, by videotaping the principal-teacher interaction, and second, by audiotaping a stimulated recall interview conducted separately with each principal and teacher following their videotaped conference. It should be noted that each principal had observed the same lesson as had the project recorders and that each had been asked, as part of his or her observation, to comment on the teacher's classroom management performance. Written transcripts were made of all videotape and audiotape dialogues. These data subsets were used in three ways: (1) to establish validity of the data by comparing the principal's classroom management observations with those of the project recorders, (2) to identify the

process strategies used by the principals in their post-observation conferences, and (3) to write a case study for each principal for each of the two conferences.

To summarize, each of the pre- and post-workshop data sets contained 30 Classroom Observation Records, 30 Component Rating Scales, 15 videotaped post-conferences and 30 audiotaped stimulated recall interviews. In addition to these data, each subject completed a demographic questionnaire concerning factors such as years of experience, length of time in present school, and number of years with present principal.

### **Data Analysis**

The data analysis was conducted in four phases. The first phase addressed the reliability of the data collected by the project observers. The second and third phases analyzed, respectively, the classroom observation data and the supervisory conference data. The fourth phase integrated the results of the classroom observation and conference data analyses.

#### **Phase One: Reliability Analysis**

Three procedures were used to establish the reliability of the classroom observation data. First, independent t-tests were conducted both within and across categories. No significant differences were found in the ratings assigned by the two project observers. Second, Pearson r correlations between both the category and the overall scores given by each observer were computed and yielded acceptable results. Third, a triangulation procedure also produced satisfactory coefficients. Taken together, the results of the statistical tests and the



triangulation not only confirmed the reliability of the classroom observation data, but also that the independently assigned scores could be combined legitimately for the second phase of the analysis.

### **Phase Two: Classroom Observation Analysis**

The analysis of the classroom observation data was conducted in two parts. The first part was a quantitative analysis of the Component Rating Scale; the second, a qualitative analysis of the Classroom Observation Record. The main purpose of the quantitative analysis was to ascertain the amount of change in each teacher's classroom management scores from the pre-workshop to the post-workshop observation. These change scores subsequently constituted the focus of four further analyses which attempted to determine the extent to which the changes were associated with study groups, workshop topic-related items, conceptual level, and demographic variables.

The Classroom Observation Records for the pre-workshop and post-workshop observations were subjected to content analysis. Although the main purpose of this analysis was to ascertain qualitatively the extent of change in teachers' classroom management behaviours, it also served three additional purposes. First, the content analysis identified the management foci common to both the project observers and the principal. Second, this comparison helped to establish the validity of the qualitative classroom data. Third, by comparing the results of the content analysis with those from the quantitative analysis, it was possible to establish some measure of the internal validity of the two data collection instruments. Fourth, the results of the content analysis--together with those management aspects in the field notes not included in the Classroom Observation Record categories--were used

to write the case studies of each teacher.

### **Phase Three: Supervisory Conference Analysis**

The pre-workshop and post-workshop videotapes and their accompanying transcripts, together with the stimulated recall audiotape transcripts, were analyzed concurrently to identify the process strategies used by the principals as they conducted their supervisory conferences. More specifically, the videotapes were used to look for the non-verbal behaviours and para-language which accompanied the dialogue discussing or the teacher's classroom management. The stimulated recall transcripts contributed to an understanding of why the principal used a particular strategy at a particular point during the dyadic interaction. The recall transcripts also helped to account for the teacher's responses to the identified process strategies. These identified process strategies, in accordance with the original design of the study, were then analyzed in terms of the principal's conceptual level (PCL) and the study groups. The purpose of these analyses was to compare and contrast the conference strategies used by moderate/high CL principals with those used by low CL principals, and to ascertain whether or not the similarities and differences were in any way related to the treatment interventions.

### **Phase Four: Integration of Observation and Supervisory Analyses**

Because the earlier quantitative analysis had suggested that the teacher's conceptual level (TCL) and the PCL-TCL pairing might be more critical to effecting change in the teacher's classroom management performance than PCL alone, the two sets of transcript data were re-analyzed to focus specifically on these two variables. Although the supervisory conference data were compared with the

project recorders' observation data to identify management focus common to both data sets, that commonality was given less attention in the integrative analysis once the potential importance of the TCL and PCL-TCL pairing variables became apparent. Indeed, these two analyses--neither of which had been planned in the original design--produced some of the most interesting findings in the study.

### **HIGH AND LOW CONCEPTUAL LEVEL TEACHER RESPONSES**

Among the fifteen teachers who were involved in the study, clear differences emerged in the responses of high and low conceptual level teachers (TCL) as they interacted with their principals in the supervisory conferences. The high and low TCL responses will be compared in two ways. The first comparison, which is based on the whole sample, describes the TCL differences in general terms. The second addresses the interactive responses within and between four specific dyads.

#### **General Responses**

High and low conceptual level (CL) teachers seem to respond quite differently during the supervisory conference. Even though the first and second conferences took place three months apart, these response differences were consistent in both of them. That is to say, there was little variation in the response patterns of the teachers. Whether this consistency is more attributable to the teachers themselves, or to the fact that the supervising principals tended to conduct both conferences using essentially the same approach, cannot be ascertained from the present data.

### High TCL Responses

High conceptual level teachers were much more able than were their low CL counterparts to use the principal's observations in ways which had the potential to improve their classroom management skills.<sup>1</sup> Typically, high CL teachers defended their actions, as distinct from being defensive about them. They were not only able to explicate the rationale underlying a particular management behaviour about which the principal had raised a concern, but were also willing to give reasons for their disagreement with the interpretation that the principal attached to the concern. They viewed the principal's remarks as being directed toward their behaviour, rather than toward themselves as persons. Generally speaking, they were open to the principal's feedback and suggestions as a source of information to be analyzed. When they had difficulty grasping the point the principal was trying to make, they listened quietly and calmly, and were ultimately able to identify what it was that the principal was trying to say. They showed willingness to re-assess their own management behaviour in light of the principal's interpretation and, if they considered it to be congruent with their own philosophy, actually began to think about how to implement the new or revised behaviour in future lessons. By using philosophical differences to understand the principal's interpretation of a particular classroom event, the high CL teachers intellectually neutralized the emotional impact, but not the content, of the critical feedback.

As a group, the high CL teachers seemed to be very confident in their ability as teachers. Whether because of, or in spite of, this confidence in their

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<sup>1</sup> The quantitative findings of the study revealed that high TCL was associated with only positive change scores.

own competence,<sup>2</sup> they did not appear to feel threatened by either the presence of observers in their classrooms or the conference itself. For them, the supervision experience was both challenging and rewarding. This was not always the case for the low CL teachers.

### Low TCL Responses

It would be erroneous to suggest that, as a group, the low CL teachers were the very antithesis of their high CL counterparts. Indeed, some of the differences were more in emphasis than in kind. For example, not all the low CL teachers felt upset or threatened by the observation and conference, but typically they did report that they found the experience to be stressful in the sense that it created some anxiety for them. Interestingly, none of the high CL teachers used those descriptors in their recall interviews.

But despite the variation in emphasis between the two groups, there were some clear differences in the responses of the low CL teachers. Perhaps the most obvious difference was their tendency to deflect the principal's intended focus. Rather than dealing directly with the particular concern being explained more or less well by the principal, the low CL teachers attempted to shift the focus to a marginally relevant or tangential aspect of that focus. When they wanted to explain why they had done what they did, or when they disagreed with the

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<sup>2</sup> No data were collected which would provide empirical evidence regarding the relationship between conceptual level and either confidence or teaching competence. However, the quantitative data did reveal that, when the fifteen teachers were ranked according to their Component Rating Scale scores, the eight M/H CL teachers and the seven low CL teachers fell, respectively, into the top and bottom halves of the ranking on both the pre- and post-workshop observations. Thus, in terms of competence as classroom managers, the M/H CL teachers were more effective than the low CL teachers.

principal's observation, they would interrupt or interject as the principal was speaking. Unlike their high CL counterparts, they did not listen actively and then ask for clarification when the principal's point was not clear to them. At least in part, the principals' lack of clarity and specificity seemed not only to create the opportunity for low CL teachers to sidestep a particular issue, but also to reinforce the typical low CL tendency to block out alternative sources of information. When they did pick up on the principal's feedback and suggestions for alternative courses of action, the low CL teachers often focussed on those ideas which would be the easiest to implement but which would have the least impact on improving their classroom management performance.

These teachers also reflected the low CL characteristic of refusing to accept responsibility for their own actions, instead projecting onto others the blame for what happened. The low CL teachers tended to shift the responsibility for inappropriate pupil behaviour to the pupils themselves. By blaming the pupils in this way, the low CL teachers rationalized their lack of circulation and scanning to monitor the class, stating that the pupils knew how they were supposed to behave during seatwork while the teacher was working with a small group; if they didn't get their work done, then it was they who would suffer in the long run. Moreover, the low CL teachers seemed to have considerable difficulty in grasping the connections between their own management behaviour and pupil behaviour; for example, they failed to see the link between use of instructional time and off-task pupil behaviour or between prop distribution and lesson pacing.

There was also a tendency, though less marked than the ones above, for the low CL teachers to deny the reality of the principal's observations on the grounds that the lesson was not typical of what they usually do. By so doing, they were

able both to question the validity of the principal's observations, and to explain away some of their specific management actions or inactions.

While the above comparisons make clear that there are distinct differences in the nature of the response patterns between high and low CL teachers, they do so with little reference to the principal's behaviour. That is to say, the comparisons virtually ignore the conceptual level of the principal (PCL), and therefore do not speak to the interactive dynamics within the supervisory conference.

### **Interactive Responses**

In order to compare the nature of the interactive responses, one dyad from each of the four study groups will be described.<sup>3</sup> Each dyad exemplifies the dynamic interaction which characterized all the dyads in any one of the study groups. In the first dyad, a high CL teacher is conferencing with a low CL principal; in the second, a high CL teacher with a moderate CL principal. In the third dyad, a low CL teacher is conferencing with a high CL principal; in the fourth, a low CL teacher with a low CL principal. Following the descriptions of the interactive responses within each dyad, the two high TCL responses will be compared with the two low TCL responses. A brief demographic description introduces each dyad.

#### **High TCL: Low PCL (Barry and Margaret)**

Barry has a total of 20 years of teaching experience, of which the most recent two have been at the intermediate level (grades 4-7). His previous

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<sup>3</sup> The four study groups are explained in the section dealing with the method of the study.

experience includes 16 years at the secondary level (grades 8-12) and two years as a district subject-matter consultant. He has been in his present school for two years. At the time of the observations, Barry was teaching a grade 6 class. Margaret has a total of eight years of experience as an administrator, three of which were as an elementary school vice-principal and five years as an elementary school principal. She has been principal of her present school for five years.

Barry's responses demonstrated that he was a high CL teacher; however, it should be borne in mind that Barry was being supervised by a low CL principal and this may account for some lowering in his own complexity of thought. These comments notwithstanding, Barry evidenced the kind of responses which typically characterize a high CL person. He displayed an openness to examining his classroom management behaviours, particularly those for which the principal complimented him. He made it clear that the principal's supportiveness enabled him to examine his approach to classroom teaching. For example, he was able to re-assess his own interpretation of a specific pupil's behaviour on the basis of the conference discussion. When he detected that Margaret was using the conference to work towards her own agenda of more goal-directed teaching in the school, Barry was able to read what was happening without his confidence or concentration being disturbed. When Margaret's preoccupation with her own agenda caused her to engage in a somewhat convoluted monologue, he listened politely but did not react. This "reading" of the principal's behaviour and the adjusting of his own actions to accommodate Margaret's agenda without compromising his own priorities marked his response patterns throughout the conferences.

Barry also proved to be capable of defending his procedures and actions by explicating the reasons underpinning his choices, and he did so without hint of



defensiveness. Had Margaret's approach been anything but relentlessly supportive of his different yet acceptable teaching style, Barry admitted that he would have found it difficult not to act with compliance or in counter-dependent ways. One measure of the level of support he perceived was indicated by the amount of information about his own teaching that he volunteered to Margaret. For example, he volunteered a concern about "dead time" at the end of a lesson when the pupils had finished their assigned work, had toiled hard in doing so, and needed a change of pace. Barry asked Margaret if she had any specific advice to give on this situation and he welcomed her suggestion of poetry reading because it appealed to his basic philosophy that such "fill-in" activities should be educationally sound and not be designed merely to "keep kids busy". From this suggestion, he extrapolated what he himself could have done in the lesson in question. This extrapolation was not only consistent with a high CL teacher open to suggestions, but also it presented him with a profound insight into the nature of his own teaching.<sup>4</sup>

#### **High TCL: Moderate PCL (Kate and Domingo)**

Kate has a total of 18 years of teaching experience, 16 of which were at the primary level (grades 1-3) and two with a primary-intermediate split class. She has taught at her present school for four years. At the time of the observations she was teaching a split grade 3-4 class. Domingo has a total of 18 years as an administrator, five of which were as an elementary school vice-principal and 13 as an elementary school principal. He has been the principal of his present school for two years.

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<sup>4</sup> The complete case study of Barry and Margaret is contained in Grimmett and Crenan (1988b)

Kate, who had the highest conceptual level among the sample teachers, was regarded by Domingo, and by the project observers, as a superb teacher. Throughout both post-observation conferences, Domingo revealed considerable difficulty in knowing how to help such a consummate professional to improve the management of her classroom. Although Kate recognized Domingo's difficulty in this regard, she responded to his effort in an open-minded and accepting manner. Indeed, the success of the conferences was probably due more to Kate's ability and willingness to listen carefully and to hold her reactions in abeyance until she was clear about the point Domingo was trying to make, than to Domingo's skills as a supervisor.

In her first recall interview, Kate reported that Domingo's use of praise as a precursor to critical feedback helped her deal with what the principal had interpreted as weaknesses in her instructional management (e.g., excellent class control precedes concern about putting key words on the chalkboard). Yet despite Domingo's supportive orientation, he tended to pre-empt his own questions with further questions and comments which offered partial answers to his original question. Kate reported not only that she became aware of this tendency, but also that she regarded his attempts at elaboration as unacceptable criticism because they were not actually grounded in the observation data. Clearly, Kate's reaction to this extraneous information afforded her the opportunity to argue with Domingo. However, she did not do so; instead, she elected to sift through his sometimes convoluted remarks to respond to what she believed to be the point at issue. By distancing herself in this way from the principal's remarks, she was able to weigh his observations carefully in light of the needs and demands of her own classroom situation. This intellectual manoeuvre also allowed Kate to disagree with Domingo

when she considered his suggestion to be incongruent with her own philosophy of classroom management.

In the second conference, Domingo's difficulties in helping such a capable teacher grew more apparent. Despite his continued use of praise to affirm Kate's competence, his tendency to convolute rather than facilitate lesson appraisal became exacerbated. Moreover, because his stated purpose for the conference was to let Kate know how he felt about the lesson, Domingo tended to state his concerns and invite Kate's reactions to those concerns, rather than posing questions which would permit Kate to appraise her own lesson. He tended to focus on particular details of the lesson without regard for the overall purpose and, as a consequence, his analysis was fragmented. Had Kate not been able and willing to transcend her frustration and surprise over Domingo's lack of consideration of the purpose and context of the lesson, it is conceivable that the remainder of the conference either would have not taken place, or would have been somewhat unproductive for the teacher.

In her recall interview, Kate stated that she was disappointed that Domingo did not, for example, connect this second observation to the first one (e.g., putting key words on the chalkboard), nor did he use the breakdown on her lesson plan, which he had asked for and was given, to structure the conference. She also wondered why Domingo chose to criticize time slippage in one transition yet ignore the other eleven transitions which evidenced no time slippage. In the conference itself, Kate detached herself from her feelings and concentrated instead on trying to learn something from the principal's comments. She listened actively, retained the scattered suggestions in her mind, and when those suggestions began to form a whole idea for her, she weighed both its usefulness and appropriateness. If she

considered the idea to be acceptable, she would think it through to the level of implementation for her next lesson. When she regarded an idea as unacceptable, she explicated the rationale for her position and attributed her disagreement with Domingo's view to basic differences in the interpretation of classroom events. Yet, despite their philosophical differences, Domingo remained extremely respectful toward and supportive of Kate as a highly capable teacher. Kate recognized and appreciated this support.<sup>5</sup> It would seem that an atmosphere of supportiveness can promote the kind of collegial interdependence, which encourages a teacher such as Kate to engage in an open examination of her own teaching and enables her to release the full power of her conceptual abilities.

#### **Low TCL: High PCL (Audrey and Brian)**

Audrey has a total of 15 years of teaching experience, ten at the intermediate grade level (grades 4-7) and five at the primary level (grades 1-3). She had taught in her present school for four years. At the time of the observations, Audrey was teaching a grade 3 class. Brian has a total of eleven years of experience as an administrator, one of which was as an elementary school vice-principal and ten as an elementary school principal. He has been principal of his present school for four years.

Brian began both conferences by asking eliciting questions intended to help Audrey analyze her own lesson. Rather than stating his concerns directly, he emitted cues about the lesson using a soft-spoken, low-key approach. However, when he realized that Audrey was not picking up these cues, he switched from

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<sup>5</sup> The complete case study of Kate and Domingo is contained in Grimmert and Crehan (1988b)

trying to facilitate lesson appraisal to stating his concerns directly, albeit tentatively. This change in Brian's conferencing approach, which occurred much earlier in the second conference than in the first, was brought about by the nature of Audrey's responses.

Audrey did not respond to Brian's cueing attempts. She neither offered a critical analysis of her own management behaviour, nor did she agree or disagree with the cues. Rather, she tended to act defensively in the conference, indulging in instances of disparaging pupils' behaviour and rationalizing her own. Each conference essentially pinpointed her lack of adequate monitoring but, in both cases, she attributed blame for the management shortcomings in the lesson to the pupils themselves. Indeed, her projection of blame seemed to suggest that it was the pupils' responsibility to behave appropriately and not her responsibility as teacher to expect that they do so and to enforce such expectations through consistent and purposeful circulation and scanning. The attribution of blame, however, was only one version of her projecting responsibility for the lesson onto the pupils. When Brian stated his concern that the distribution and collection of props had taken too long (some 20 minutes were used to hand out and return slates) thus slowing down the pace of the lesson, Audrey again absolved herself of her responsibility for the management of her class. Although she acknowledged that the time loss did occur, she stated that having a class of 30 pupils inevitably elongates any distribution process and that the pupils "like to return their own" (line 288, Conference transcript). Whether through the attribution of blame or the projection of a preference, Audrey essentially shifted the responsibility for her actions as the manager of her classroom onto the pupils. Such denial of responsibility is characteristic of a low conceptual level person.

it was, however, not merely responsibility that Audrey was inclined to deny; she also attempted to deny reality. As far as she was concerned, both lessons observed were not typical of what usually happens in her classroom. By using this low CL neutralization tactic, Audrey did not have to accept the principal's recorded observations and data interpretations. Consequently, she maintained that the problem with the first lesson was not that it was not well planned, but that it was overplanned, causing her to be unduly constrained by its stifling structure. In the second lesson, she refused to accept the connection made by Brian between and among the various dimensions of classroom management, of which prop distribution and lesson pacing was but one example. Despite Brian's switch from an eliciting to a directive approach, he gave supportive and positive feedback to Audrey for aspects of the lesson which he regarded as acceptable. Interestingly, Audrey did not comment in either recall interview about Brian's supportive attempts. She did, however, indicate that she felt comfortable in the supervision experience, and that she did not feel that Brian was being unduly critical. She characterized the supervisory relationship between herself and Brian as satisfactory but not rewarding.<sup>6</sup>

#### **Low TCL: Low PCL (Joshua and Bob)**

Josh has a total of seven years of teaching experience, of which one year was at the primary level (grades 1-3), one at the intermediate grade level (grades 4-7), and five in a middle school (grades 6-8). This was his first year in his present school. At the time of the observations, Josh was teaching a split grade 6-7 class. Bob has a total of 11 years of experience as an administrator, two of

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<sup>6</sup> The complete case study of Audrey and Brian is contained in Grimmett and Crehan (1988a).

which were as an elementary school vice-principal and nine as an elementary school principal. He has been principal of his present school for three years.

Josh, who had the lowest conceptual level among the sample teachers, responded in the conferences in a manner which suggested that the whole supervision experience was refutational rather than confirming for him. Josh constantly deflected the discussion away from the focus which Bob was trying to establish. This he did by interrupting the principal before the latter had finished explaining a concern in order to present his own interpretation of the event. Further, he engaged in tangential discussion, the connection of which to the point at issue was tenuous at best, by responding not to the question posed by Bob but to a selected sub-part of that question. Surprisingly, Bob reinforced Josh's deflection behaviour by praising him for the quality of his off-task remarks. The overall result was a non-productive cyclical interaction characterized by very little exploration of Bob's concerns about the lesson and by considerable indifference on Josh's part even to acknowledge the existence of those concerns.

This failure to perceive the intent and substance of a question typically characterizes low conceptual level persons who interpret the interpersonal dynamic of supervision in terms of personal and professional threat. Rather than open themselves up to different sources of information, they avoid such encounters out of fear, a basic lack of self-confidence, and a need to defy external control. They also try to project onto others blame for what happened (in this case, cooperative planning with the librarian) or to take subtly away from the competence of others to undertake something as important as a rigorous lesson appraisal. Josh proved to be no exception to this. He subtly tried to influence Bob's judgment of his management by providing an exaggerated appraisal of its success and by making

reference to the fact that Bob had missed some of the better management moments in the lesson because Bob had been late in arriving for the observation.<sup>7</sup>

### Comparison of High and Low CL Teachers

The within-dyad analysis has shown important differences in teacher responses to principals' supervisory initiatives. The two low CL teachers tended to deflect the discussion focus, deny responsibility and reality, refuse to accept the validity of the principal's observations, and ultimately made themselves impervious to any source of information which would likely challenge and expand their teaching ability. Just as Audrey neutralized Brian's observations by declaring her lesson to be atypical or by refusing to recognize relationships, Josh neutralized Bob's stated concerns, not by denying them directly, but by focussing on some aspect of the concern which was either less threatening or allowed him to stamp his own approval on the lesson. Unlike their high CL counterparts, both of whom used intellectual manoeuvres in ways which freed them to think critically about a particular concern, the two low CL teachers used intellectual tactics in ways which obviated them from having to explore the issue in question. For them, supervision appeared to be interpreted as evaluation and therefore constituted an unfortunate but necessary evil they had to tolerate but in no sense indulge.

The two high CL teachers, by contrast, displayed a willingness to learn and an openness to feedback. They listened actively to what their respective principals had to report and weighed carefully the observational evidence and the

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<sup>7</sup> The complete case study of Joshua and Bob is contained in Grimmert and Crehan (1988a).



resulting interpretations and suggestions. Both teachers were capable of extrapolating from what the principal observed to what they could plan to do in future lessons. They could also explain why they had made the management choices they had; that is, they could justify their actions without becoming defensive. In the final analysis, they saw themselves, rather than the principal, as the important instructional decision-makers. They evaluated supervisory suggestions rather than blindly complying with them and when they assessed the suggestions to be inappropriate or erroneously based, they saw the disagreement philosophically as a case of different priorities or different interpretations of classroom events.

#### DISCUSSION OF THE INTERACTIVE RESPONSES

The preceding analysis has shown that high and low CL teachers respond quite differently during supervisory conferences. The analysis has also suggested, albeit implicitly, that these response differences are associated with the conceptual level of the principal. The presence of these response differences among different TCL-PCL pairings raises questions about the developmental theorists' views of conceptual level matching, about the type of supervisory approach that may promote teacher growth, and about the relative importance of content and process. These three questions will be addressed briefly for each dyad within the context of the treatment groups in the study.

#### **High TCL: Low PCL (Barry and Margaret, Treatment #1 Group)**

Previous research by Thies-Sprinthall (1980) suggests that a counterproductive "match" occurs when the teacher is developmentally more mature than the

supervisor. However, contrary to the general expectations arising from developmental theory, the Barry-Margaret dyad shows clearly that a low CL principal can function effectively as a supervisor. What is much less clear is the extent to which the success of the conference was more attributable to Margaret's conferencing skills or to the fact that she was supervising a high CL teacher or to the effects of the interactive dynamics between Barry and Margaret. What does seem to be clear is that Margaret consciously used an enabling style whereby she presented her observations to Barry in a value-neutral way, thus affording him the opportunity to apply his conceptual abilities to appraise his own management practices, and to weigh them in light of his personal philosophy of classroom management.

Despite the fact that Barry believed that Margaret probably had a management style quite different from his own, he had a strong sense that she respected his ability as a teacher and was prepared to support him in whatever way he chose to execute good teaching. Margaret's supportiveness, together with her enabling orientation, helped Barry not only to remain open to her feedback, but also to give him the confidence to volunteer information about other management problems and to ask for specific suggestions to solve those problems. It would seem that an enabling orientation, combined with supportiveness and mutual respect, creates a climate of trust and facilitates teacher development. Taken together, these characteristics appear to be necessary conditions for the supervision of a high CL teacher.

However necessary these conditions might seem to be, they may not be sufficient to ensure success when there is a potentially counterproductive "match" in the supervisory dyad. It may well be the case that content knowledge is at

least equally as important as conferencing process skills. Both Barry and Margaret were included in the Treatment #1 study group in which teachers and principals together received the content workshops on classroom management. Because the dyad was involved in this "common language approach" (Hunter, 1984), it is possible that the collegial nature of the treatment permitted a more effective harnessing of appropriate content as focii for conference discussion. More importantly, it provided the teacher with access to the principal's content agenda for both the observation and the conference dialogue. Common knowledge of content, together with Margaret's enabling and supportive style in combination with Barry's high conceptual level, probably accounts for the positive outcomes observed in this supervision dyad.

The success of this dyadic interaction raises three sequential questions. First: could an effective way of supervising capable, high CL teachers be one involving an enabling orientation coupled with the teachers having access to, and understanding of, the relevant knowledge about the instructional practices under scrutiny? This question prompts a second: to what extent is Margaret's enabling style characteristic of Glickman's (1985) "nondirective orientation" which he recommends for use with high conceptual level teachers? If similarities between the two supervisory approaches can be established, a third and most trenchant question can be raised: to what extent do teachers, who can think and analyze independently and who are well-versed in relevant knowledge about specific teaching practices, need to be supervised by principals at all? The findings of the present study permit only the raising of these questions; answers must await further research.

**High TCL: Moderate PCL (Kate and Domingo, Treatment #2 Group)**

Although the preceding analyses of TCL and interactive responses suggested that this supervision dyad was successful in terms of impact on the teacher's classroom management practices, previous research (Thies-Sprinthall, 1980) and developmental theorists (Glickman, 1985) would claim that the pairing represents a mismatch which could have a miseducative effect. The question then arises as to why the interactive dynamics in this dyad were associated, not with miseducative, but with educative effects. There would seem to be at least three plausible explanations which might account for the successful outcomes. The first is that the success of the dyadic interaction may have been due more to factors arising from Kate's high conceptual level than to the nature of Domingo's conferencing skills. It was she who sorted out what the principal meant to say and focussed on that intent in a productive way. At the same time, however, Domingo reflected the importance of a supportive orientation which seemed to enable Kate to take full advantage of her own conceptual abilities. This supportive, enabling approach not only suggests a second explanation for the positive outcomes of the conference, but also raises a question regarding the extent to which an enabling, supportive orientation differs from Glickman's (1985) "nondirective orientation". Certainly, Domingo's tendency to criticize and offer suggestions rather than listen actively and paraphrase is very different from Glickman's conception of nondirective supervision. In this sense, Domingo's enabling approach is also very different from that of Margaret. But the essence of supportiveness and professional respect is similar to both Margaret's approach and Glickman's conception. This, then, raises a further question of whether a teacher of high conceptual level functions better when the supervisor practises nondirective behaviours within conditions of support

and interdependence or whether such a teacher needs only the requisite conditions of support and collegial interdependence? The Kate-Domingo case does show that, even in situations in which the supportive supervisor does not practise nondirective behaviours, positive changes in the teacher's classroom management practices can occur.

A third explanation for the educative effects which occurred in this dyad may have been the result of Kate's exposure, along with other teachers in the treatment #2 study group (teachers only), to relevant content knowledge about classroom management practices. If there is any plausibility to this explanation, it then raises the question of whether high conceptual level teachers need to be supervised at all when they are given systematic access to, and training in, specific instructional practices? Once again, the present study merely permits the raising of these questions; further research needs to be conducted to address them empirically.

#### **Low TCL: High PCL (Audrey and Brian, Experimental Group)**

Although previous research by Thies-Sprinthall (1980) and by Grimmert (1984) would suggest that Brian could function as a more effective supervisor than a low CL principal, his dyadic interaction with Audrey makes clear that successful supervision is not automatically associated with a high conceptual level principal. Because one of the characteristics of high CL people is their ability to be flexible, to adapt and adjust to the context of a specific situation, it seems reasonable to expect that Brian would have been able to transcend his frustration with Audrey's lack of responsiveness to his cueing attempts. Although he did switch from an eliciting orientation to a directive approach, this adaptation to the situation does

not reflect the ability of high CL persons to use multiple coping behaviours, nor was the adjustment effective in helping Audrey to recognize and accept her deficiencies as a classroom manager. Brian was apparently willing to accept Audrey's focus on factors which were of little consequence to the needed improvement in her classroom management practices as evidence of progress. To explain Brian's lack of success solely on the basis of Audrey's resistance toward his observations and interpretations of classroom events would be not only to attribute an undeserved blame to Audrey, but also to ignore the situational context and one of the tenets of developmental theory (i.e., ideal "match"), both of which suggest alternative explanations for the rather unproductive outcomes of the two conferences.

Although not reported in the earlier description of the interactive responses in the Audrey-Brian dyad, there are two main contextual factors which may explain why the conferences were not associated with much success in terms of impact on Audrey's classroom management practices. First, instructional supervision seemed to be a low priority for Brian. In her second recall interview, Audrey reported her perception that Brian had difficulty in finding time for supervision, and as a consequence, she solicited help for specific problems from other teachers in her school. Audrey's perception received at least some support from the fact that Brian had not supervised her classroom for four years, despite his knowing that Audrey had received from the principal of her previous school two evaluation reports which had called into question her competence as a teacher. In addition to indicating a low priority, this absence of supervision for such an extended period of time suggests that Brian may lack experience as a supervisor, and therefore may not function at a high conceptual level with respect to the supervisory

process. Indeed, the concrete, unidimensional nature of his lapse into a directive mode--despite his recall interview in which he credited Audrey as being "an intelligent woman who picks up on subtleties" (lines 1601-1602, Conference transcript)--suggests that he may have been functioning at a low conceptual level.

A second contextual factor, which may have exacerbated the situation even further, is that Audrey's prior socialization vis-a-vis instructional supervision may have left her with negative feelings about the whole process. Collectively, the priority which Brian seemed to have assigned to his role as an instructional leader, his possible lack of experience as a classroom supervisor, and Audrey's previous experience with evaluation, may constitute one possible explanation for the lack of educative effects in this dyad.

A second possible explanation for the outcome characterized by Audrey as satisfactory but not rewarding, arises from the notion of conceptual level matching. Developmental theorists (e.g., Glickman, 1985) suggest that the ideal conceptual level "match" exists when the supervisor is one stage of development ahead of the teacher. This, they argue, creates the kind of positive disequilibrium that has been found to motivate teachers to growth and improvement. Therefore, it is to be assumed that if the supervisor is more than one stage ahead of the teacher, the disequilibrium would not serve as an energizing, pulling force; rather, it would create a dysfunctional situation characterized by too much dissonance which would effectively interfere with the teacher's ability to think, and thus militate against growth and development. If there is any validity to this line of reasoning, and if Brian's conceptual level is in fact high with respect to the supervisory process,<sup>8</sup>

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<sup>8</sup> Among all the principals in the sample, those with the highest conceptual levels collected the most accurate classroom management data, at least as judged by the

then it would seem that a two-stage difference may have served to inhibit, rather than to enhance, the success of this supervisory intervention.

There is a third possible explanation for the marginal gains in classroom management made by Audrey. Brian was included in the Experimental study group in which only the principals received both the content workshops on classroom management and the process workshops on supervisory skills. None of the participating teachers in this study group attended the classroom workshop sessions. Thus, by reinforcing the positional authority of the principal, it is possible that the treatment itself may have attenuated the very effects it was intended to produce.

Regardless of the extent to which either, or both, of the situational context and developmental theory explanations truly account for the lack of observed success in this dyad, the nature of the interactive responses does raise some important questions about the low TCL-high PCL pairing. For example, should an eliciting orientation be used with a low CL teacher? Is the eliciting approach more effective when used with a high CL teacher? Should a principal adopt a more directive approach with a low CL teacher like Audrey, and if so, how can the principal avoid violating professional autonomy? Would a more effective combination be constituted between a moderate CL principal and a low CL teacher, as suggested by developmental theory? Answers to intriguing questions such as these must await future research.

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<sup>8</sup>(cont'd) correspondence between their observations and those of the project coders.



**Low TCL: Low PCL (Joshua and Bob, Control Group)**

Previous research (Thies-Sprinthall, 1980; Grimmert, 1984), developmental theorists (Glickman, 1985), and the preceding analyses of TCL and interactive responses would all suggest that the Joshua-Bob supervision dyad is not likely to result in positive changes in the teacher's classroom management practices. A close examination of the interactive responses in this pairing confirms that this was indeed the case. When Bob raised a concern, Josh deflected the focus by interrupting or going off at a tangent. Bob, in turn, tolerated this tangential discussion, proving to be unwilling or unable either to challenge the teacher's habitual responses or to return to the original point of concern. Indeed, the principal completed the confoundment initiated by the teacher by praising Josh for his off-task remarks. This pattern of interactive responses occurred even when Bob initiated discussion in the form of an eliciting question. Frequently, Josh failed to understand the intent of the question. Although the data do not permit an assessment of whether his lack of comprehension was intentional or unintentional, the evidence does make clear that Josh did not seek clarification of the question and that he began talking about something which he wished to address and which appeared to be of marginal relevance to the question posed. Bob again demonstrated his tolerance for, and approval of, Josh's unfocused commentary.

What we have in this dyad is a principal trying not to be directive yet failing in his attempt to use an eliciting orientation because of his inability or unwillingness either to retain and retrieve his initial point, or to withhold supervisory approval and probe the teacher's remarks in light of the original point of concern. At the same time, the teacher seemed intent on confounding the

issues raised for discussion in order to avoid a close examination of his management behaviour. Such avoidance tendencies on the part of the teacher and the rapid formulation of judgment (in this case, approval) on the part of the principal are typical of low CL practitioners. This problematic situation raises the question of what can be done with such a dyad to ensure some semblance of positive impact on the teacher's classroom management practices? Raising the conceptual level is one possibility, but Thies-Sprinthall's (1984) study found that the conceptual level of practitioners appeared to be highly resistant to developmental change. Because the Joshua-Bob dyad was in the control group which received no treatment at all, it is not possible to say whether a "common language approach", a staff development initiative with the teacher deliberating with other teachers around relevant knowledge of specific instructional practices, or the principal being trained in conferencing skills and relevant classroom management content, would have made a difference to the outcome. However, since the majority of practitioners fall into the category of low conceptual level (Bernier, 1976; Oja, 1977; Silver, 1975), this dyad might be representative of the "private, cold war" that Blumberg (1980) suggests characterizes most supervisory interventions. If that is the case, then it raises a fundamental question about the supervision of teaching: to what extent does instructional supervision contribute to positive teacher development and an improvement in classroom teaching practices when the conceptual level of both participants is low? If further research were to confirm that other dyads produce outcomes similar to those found in the Joshua-Bob dyad, then it would prompt a serious examination of why instructional supervision is practised at all in dyads in which both the principal and the teacher are low conceptual level individuals. More positively, however, examination of the

interactive responses in the Barry-Margaret dyad suggest that low CL principals can, under certain conditions, be effective supervisors.

It will be recalled from the earlier description of the interaction in the Barry-Margaret dyad that no firm conclusion could be drawn as to whether the success was more attributable to the principal's enabling, supportive orientation or to the teacher's high conceptual level. What the dyad did make clear, however, was the importance of a reciprocal relationship between the principal's orientation and the teacher's responses to that orientation. If it can be assumed--despite the gloomy evidence to the contrary (Glickman, 1985: 33-36)--that teachers and principals do have the capacity to learn,<sup>9</sup> then it becomes possible to explore ways of teaching low CL principals how to become effective supervisors. Such a training program would not set as its goal the raising of the principals' conceptual level (although more abstract ways of thinking might be a serendipitous outcome); rather, it would provide systematic training in conferencing skills specifically designed for low CL principals. In other words, it might be more beneficial for the practice of instructional supervision to accept, rather than to bemoan, that most principals function at a low conceptual level. If, as Glickman (1985) suggested, there should be a match between teachers' level of abstraction and staff development activities, then, by extension, a similar consideration could be given to in-service supervision programs for school principals.

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<sup>9</sup> It is not important, at least for purposes of this discussion, that teachers, relative to other college majors and professions, are less able academically. What is important is that these teachers did graduate and, in so doing, demonstrated their ability to learn. The same observation applies to school principals, many of whom hold at least one graduate degree.

## IMPLICATIONS FOR INSTRUCTIONAL SUPERVISION

The four dyads discussed in this paper suggest some important implications for both the theory and practice of instructional supervision. Perhaps the most trenchant of these implications concerns the importance of the teacher's conceptual level relative to the principal's conceptual level and the conceptual level pairing.

### Teacher Conceptual Level

Given the original purpose of the study to test the effects of supervisory intervention on supervisee classroom management, the focus at the outset was much more on the principal than on the teacher. That initial focus received even more attention because the study groups were established on the basis of the principals' conceptual levels. The teachers' conceptual level was incidental to the project. However, the quantitative analysis by PCL<sup>10</sup> revealed some puzzling results; for example, the teachers in the control group, as a whole, had higher change scores than did those in the experimental group; the teachers in treatment groups #1 and #2 ("common language" and collegial, respectively) both had higher change scores than did the experimental group. These findings, together with the critical feedback from Goldsberry (1988) and Putnam (1988),<sup>11</sup> prompted a much closer look at the teacher's conceptual level.

The role of the teacher in the success of the supervisory conference seems to have been largely ignored in the literature, which has focussed mainly on the contribution of the principal as an instructional leader. While the quantitative

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<sup>10</sup> This analysis was reported in detail by Grimmatt and Crehan (1987).

<sup>11</sup> We are also indebted to our 1988 critics for their observations regarding the potential for teacher manipulation by principals. We have in progress a paper which re-examines the above four dyads for evidence of manipulation.

analysis (Grimmett and Crehan, 1987) suggested that CL pairing was the variable having the greatest explanatory potential, the qualitative analysis reported herein suggests strongly that it is the teacher's CL which may be the key variable in explaining the success of the supervisory process. By contrast, this same analysis also hints at the possibility that the reason for lack of success may be the principal's CL, irrespective of teacher CL. Given these two findings, it is conceivable that conference success might be enhanced if the teachers, together with the principals, were also exposed to process knowledge. If the "common language approach"<sup>12</sup> is interpreted more broadly to include knowledge about both relevant content and supervisory process skills, then it may be possible to reduce not only the hierarchical mystique surrounding the principal, but also the risk of manipulation of the teacher by the principal.

### Conceptual Level "Match"

Another important implication suggested by the analysis and discussion of the interactive spones concerns the conceptual level "match" theory put forward by the developmentalists. It is possible that in its present form, the theory is too simplistic to account for the complexity of the supervisory process. For example, the findings of this study--in particular those from the four dyads discussed in this paper--suggest the need for a revised definition of the ideal "match". Rather than stressing the slight developmental maturity of the supervisor over the teacher, developmental theory should emphasize the high and/or moderate conceptual level pairing between supervisors and teachers as the most productive "match". In

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<sup>12</sup> The quantitative analysis revealed that the teachers in the "common language" group (treatment #1) collectively had the highest change score among the four study groups from the pre-workshop to the post-workshop observation.

other words, the power of matching as a predictive variable may be increased if its definition is expanded to include conceptual level pairing.

In addition, there is a need to consider other factors which seem to have an attenuating effect on the principal's conceptual level. Take, for example, the extent to which Domingo, a moderate CL principal seemed to feel overwhelmed by his respect for the superior competence of teacher Kate, or the actions of both Bob (low PCL) and Brian (high PCL) with regard to teacher autonomy. Although Bob explicitly stated that he viewed curriculum as a teacher-controlled domain and Brian seemed unsure of the distinction between teacher autonomy conceived as the right to individualistic classroom management practices or as the collegial responsibility to maintain and improve competent teaching practice, both principals appeared to be inhibited by the possibility of violating the professional autonomy of teachers Josh and Audrey. It is, of course, possible that consideration of factors such as teacher competence and autonomy could complexify conceptual level "match" theory to the point of reducing its usefulness. However, in its present form the developmental matching theory seems to lack adequate predictive and explanatory power. This is not to suggest that the theory itself is inadequate; rather, the observations are intended to suggest ways to improve the theory.

### **Supervision of High Conceptual Level Teachers**

Yet another important implication to emerge from the analysis and discussion of the interactive responses concerns the speculation that competent, high CL teachers who are provided with content-relevant knowledge in a collegial setting need to be supervised at all by principals. Certainly, it would be more cost-effective if principals could concentrate their attention on less capable, and

perhaps lower CL, teachers. However, is it possible for a teacher to see his or her reflection without a mirror? In the words of the Scottish bard, Robert Burns:

Oh wad some power the giftie gie us  
To see oursels as others see us!

To the extent that a principal can serve as a mirror into which the teacher can look and explore what is seen, the teacher can engage in a reflective appraisal of his or her own classroom practices. Even low CL principals, provided they are given some systematic exposure to both content knowledge and process skills, could learn to use the supervisory conference as a reflective device to enable teachers to analyze their own performance.

#### CONCLUDING NOTE

The implications discussed in the preceding section, together with the questions raised in the discussion of the interactive responses, are potentially useful to the advancement of theory and the improvement of practice. However, a note of caution is in order. Despite their potential usefulness, neither the implications nor the questions should be interpreted as firm conclusions. Although the findings reported here do indicate that instructional supervision seems to be more successful under some conditions than under others, any conclusion about the nature of those conditions must be regarded as tentative. Only further research with a larger sample over a longer period of time can corroborate or disconfirm the type of supervision most appropriate for highly capable, developmentally mature teachers, and the importance of the teacher's role in the supervision of instruction.

## REFERENCES

- Bernier, J. (1976). A psychological education intervention for teacher development. Unpublished doctoral dissertation, University of Minnesota. *Dissertation Abstracts International*, 1976, ED 776 932
- Blumberg, A. (1980). *Supervisors and teachers: A private cold war* (2nd ed.). Berkeley, CA: McCutchan.
- Glickman, C.D. (1985). *Supervision of instruction: A developmental approach*. Boston: Allyn and Bacon.
- Goldsberry, L. (1988). Critic/discussant for session 54.15 *The supervisory conference* held at the annual meeting of the AERA, New Orleans.
- Grimmett, P.P. (1984). The supervision conference: An investigation of supervisory effectiveness through analysis of participants' conceptual functioning. In P.P. Grimmett (Ed.), *Research in teacher education: Current problems and future projects in Canada*. Vancouver: CSTE/CSCI, pp. 131-166.
- Grimmett, P.P., & Crehan, E.P. (1987). *A study of the effects of supervisors' interventions on teachers' classroom management performance*. Paper presented at the annual meeting of the Canadian Association for Teacher Education, Hamilton, Ontario.
- Grimmett, P.P., & Crehan, E.P. (1988a). *A comparison of conferencing strategies used in two different supervisory dyads and the effects on teachers' classroom management behaviour*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans.
- Grimmett, P.P., & Crehan, E.P. (1988b). *A study of the effects of supervisory intervention on teachers' classroom management performance: Final report*. Report submitted to the Social Sciences and Humanities Research Council of Canada, Ottawa.
- Hunter, M. (1984). Knowing, teaching, supervising. In P.L. Hosford (Ed.), *Using what we know about teaching*. Alexandria, VA: ASCD, pp. 169-203.
- Oja, S.N. (1977). A cognitive-structural approach to adult ego, moral, and conceptual development through in-service teachers education. Unpublished doctoral dissertation, University of Minnesota. *Dissertation Abstracts International*, 39, 5356A.
- Putnam, J. (1988). Critic/discussant for session 54.15 *The supervisory conference* held at the annual meeting of the AERA, New Orleans.
- Silver, P. (1975). Principals' conceptual ability in relation to situation and behavior. *Educational Administration Quarterly*, 11(3), 49-66.
- Thies-Sprinthall, L. (1980). Supervision: An educative or mis-educative process? *Journal of Teacher Education*, 21(4), 17-20.
- Thies-Sprinthall, L. (1984). Promoting the developmental growth of supervising teachers: Theory, research, programs and implications. *Journal of Teacher Education*, 35(3), 53-60.