

REACT

1990

STUDIES IN SCHOOL MANAGEMENT
STUDIES IN TEACHER EDUCATION
NO.1 (1990)
CONTENTS

Overview	Chong Keng Choy and Ho Wah Kam
1. TEACHERS' ATTITUDE AND PRINCIPALS' LEADERSHIP BEHAVIOUR.	Ee Chye Heng
2. PRINCIPAL LEADERSHIP BEHAVIOUR AND TEACHER JOB STRESS	Jenny Yong Sow Chun
3. PRINCIPAL LEADERSHIP BEHAVIOUR AND TEACHER JOB SATISFACTION	Cheong Heng Yuen
4. DIMENSIONS OF EFFECTIVE SCHOOL LEADERSHIP: THE TEACHERS' PERSPECTIVE	Joseph J. Blase
5. DIMENSIONS OF INEFFECTIVE SCHOOL LEADERSHIP: THE TEACHERS' PERSPECTIVE	Joseph J. Blase
6. PRINCIPAL LEADERSHIP AND STUDENT ACHIEVEMENT	Richard L. Andrews and Roger Soder
7. MANAGEMENT BY OBJECTIVES IN SINGAPORE SCHOOLS	Tang Swee Keng
8. ORGANISATIONAL STRUCTURE AND TEACHER MOTIVATION	Loh Ai
9. STUDENT-TEACHERS' BACKGROUNDS AND MOTIVES FOR TEACHING: A 1968-1981 COMPARISON	Soh Kay Cheng
10. SURVEY ON TEACHER EDUCATION OBJECTIVES	R.W. Mosbergen & Others
11. BEGINNING TEACHERS' PERCEPTIONS OF THEIR PRE-SERVICE TRAINING PROGRAMME	Phyllis Chew & Others
12. CLINICAL SUPERVISION — CAN WE MAKE IT WORK?	Maureen Ng
13. HOW TO GET A GOOD TEACHING PRACTICE GRADE?	Soh Kay Cheng & Others
14. INTER-RATER RELIABILITY IN TEACHING PRACTICE SUPERVISION	Yeap Lay Leng & Others
15. THREE METHODS OF ASSESSING CORE EDUCATION ASSIGNMENTS	Katherine Yip & Others
16. IN FURTHER PURSUIT OF THE 'EXPERT' TEACHERS	Chen Ai Yen
17. SAYS RESEARCH	

OVERVIEW

by Chong Keng Choy and Ho Wah Kam

This issue of REACT carries 16 abstracts of research articles and reports on School Management and Teacher Education. Most of the studies abstracted were conducted locally.

SCHOOL MANAGEMENT

Five of the eight abstracts in the area of school management were of studies carried out in Singapore, and the remaining three in the US. Three of the Singaporean research reports are on the leadership behaviour of principals in relation to teachers' attitude towards teaching, teacher job stress, and the job satisfaction of teachers. The other two local research reports are on teachers' perceptions of aspects of school management that impinge on their job performance. Two of the American studies deal with dimensions of effective and ineffective school leadership, and the third relates principal leadership to student achievement. Both the Singaporean and the American studies suggest that the leadership behaviour of the school principal is a critical, positive influence on the performance of teachers and students.

For example, Ee Chye Heng reported that in above-average schools the principals were perceived by their teachers to exhibit leadership behaviour most frequently, whereas the situation was quite different in below-average schools. Jenny Yong reported that teachers who perceived their principals as high in both Consideration and Initiating Structure experienced low stress levels, while those teachers who perceived their principals as low in both Consideration and Initiating Structure experienced the highest level of job stress. Cheong Heng Yuen reported that teachers who perceived their principals as high in both Consideration and Initiating Structure were more satisfied with their jobs than those who perceived their principals as being low on both dimensions.

J.J. Blase used task-related factors and **consideration**-related factors to describe principal leadership behaviour, while R.L. Andrews and R. Soder reported that students in schools whose principals were perceived by their teachers as strong leaders performed better in reading and mathematics than students in the other schools.

According to Tang Swee Keng, teachers reported that an open appraisal system gave, among others, benefits of better feedback on job performance and communication, and greater awareness of personal development needs and job motivation. Such a system **emphasised** the critical influence of the principal on teachers'

job performance and behaviour. Loh Ai reported that the primary school organisation exhibited strong features of centralised decision-making and formalisation of rules and regulations and the increasing strength in these features was related to the lowering of teacher motivation. Both Tang and Loh suggested that greater teacher involvement in decision-making was likely to help secure greater teacher motivation.

TEACHER EDUCATION

The eight abstracts in teacher education addressed a variety of related issues in the local setting. At the system level, the question of motives for joining teaching and the nature of training are of great interest. Soh Kay Cheng used data from two points in time (1965 and 1981) to show changing patterns in the students' background and reasons for teaching. The question of objectives in teacher education and their importance to different stakeholders (trainees, lecturers and principals) was investigated in the Mosbergen et al study, while **teachers'** perceptions of how well they were trained (a form of post-training evaluation) for their present positions were surveyed by Phyllis Chew and colleagues in an important follow-up study of certificate in Education beginning teachers.

At the programme level, questions on the nature of classroom supervision (see Maureen Ng's innovative study using naturalistic inquiry methodology) and its assessment (see Soh Kay Cheng et al's investigation and the abstract on the experiment conducted by Yeap Lay Leng and colleagues) predominated. Katherine Yip et al focused on the issue of consistency and efficiency in marking essay type questions.

After pre-service training, an important question remains: How do "expert" teachers teach and operate in the **classroom**? A team at the Institute of Education has been investigating this question, following some new work done in the US. Chen Ai Yen's abstract provides a very useful summary of the work to date.

ENDNOTE

In this issue we again include in a colourful broadsheet some key findings in snippet form from research studies not abstracted here. We hope you will find them interesting and thought-provoking, but the cautionary note is that the findings as given in these snippets should not be over-generalised.

Finally, we hope you will enjoy the abstracts and snippets in this collection. The sources of the different items are cited and we hope you will want to read the original documents deposited in the IE Library.

PRINCIPAL LEADERSHIP BEHAVIOUR AND TEACHER JOB SATISFACTION

by Cheong Heng Yuen

Abstract by
Mollie Neville

WHAT IS THE STUDY ABOUT?

The study explores the relationship between two factors in the **principal's** leadership behaviour, consideration and initiating structure, and the job **satisfaction** of teachers. Consideration involves the variables of mutual trust, respect for subordinates' ideas and consideration of their feelings. Initiating structure includes such factors as being task oriented with well-defined patterns of organisation, channels of communication and methods of procedure. The overall emphasis is people-centred with 'a certain warmth' shown by the principal in interpersonal relationships. Job satisfaction is measured on five dimensions (type of work, pay, promotion, principal and colleagues) subsumed under one overall score.

HOW WAS THE RESEARCH CONDUCTED?

A sample of 329 English-medium teachers from 26 secondary schools was selected from 91 government secondary schools in Singapore. The questionnaires were in two parts: Part 1, a 72-item questionnaire adapted from the Job Description Index (JDI) developed by Smith, Kendall and **Hulin** (1960) and Part 2, a 20-item Leadership Behaviour Description Questionnaire (**LBDQ**) used by Bernard (1983) who had adapted it from the LBDQ developed by Andrew **Halpin** (1966)

WHAT WERE THE MAIN FINDINGS?

- There was a significant association between the **principals'** score on consideration and initiating structure and teacher job satisfaction score.

Important factors in **consideration** were:

consulting teachers on important matters
before **implementation**,
treating teachers as equal,
putting teachers' suggestions into operation.

Important factors in **initiating structure** were:

co-ordinating work of the school,
maintaining **defined standards** of performance,
giving advance notice of change,
trying out new ideas,
demanding that teachers follow rules and
regulations.

- * Teachers who perceived their principals as high in consideration and initiating structure were more satisfied with their jobs than those who perceived their principals as being low on both dimensions.
- * Effects of consideration on job satisfaction were greater than those of initiating structure.

WHAT ARE THE PRACTICAL IMPLICATIONS?

- * Principals should be more aware of the effective use of consideration and initiating structure.
- * In both pre-service and in-service training for school leaders greater importance should be given to consideration and initiating structure. Areas should include enhancing morale, shared decision-making, treating teachers as equals and putting staff suggestions into operation. The use of case studies and **mentoring** is recommended.



This is an abstract of Cheong Heng Yuen's MEd thesis entitled "Relationship between Principal Leadership Behaviour and the Job Satisfaction of Teachers" (National University of Singapore, 1986). A copy of the thesis is in the IE Library.

CLINICAL SUPERVISION - CAN WE MAKE IT WORK?

by Maureen Ng

Abstract by
Maureen Ng

INTRODUCTION

The supervision of teaching is increasingly being advocated as a developmental process, i.e. to help teachers improve their instructional skills. Clinical supervision is believed to be an approach that can significantly improve supervision and teaching. The approach is "person-centred" and it uses the supervision cycle. It envisages a collegial relationship - the supervisor and teacher working as colleagues in improving teaching. Classroom observation data are gathered and analysed and teacher self-analysis and reflection is encouraged. Teachers have been reported to prefer clinical supervision to the more traditional forms, and administrators also support the approach.

WHAT WAS THE PURPOSE OF THE STUDY?

Clinical supervision has, however, been an approach that is advocated rather than used. What are the reasons for this theory-practice mismatch? Is clinical supervision incongruent with the realities present in school? These questions prompted the study, which investigated whether clinical supervision would work, and how it could work in the Singapore teacher training context. The study has provided some insights into (a) the clinical supervision process, (b) its usefulness, and (c) contextual factors affecting the method.

HOW WAS THE STUDY DONE?

The research design was naturalistic. This was to allow the realities of practice teaching to be captured. Goldhammer's 5-phase supervision model was used. The study covered 10 weeks of teaching practice. Clinical supervision was implemented with a sample of seven student teachers from IE's Diploma in Education programme. Data were collected through observation logs and interviews.

WHAT WERE THE FINDINGS OF THE STUDY?

- * The student teachers were receptive to the idea of clinical supervision; they said that they preferred it to being supervised by a more traditional mode.
- * The supervisor-teacher relationship was a unique feature. The collegial approach worked with some student teachers but not all. It was observed that some student teachers perceived a conflict in the supervisor's helper and evaluator roles. Those who were particularly anxious over the evaluation showed reluctance to be open, and this limited clinical supervision.

- * Good feedback on teaching behaviours was cited as a very beneficial aspect of clinical supervision. The student teachers valued the classroom observation data and felt that they learned from the process of self-analysis.
- * collaborative conferencing and the supervision cycle improved the quality of interaction and the supervision experiences of most of the student teachers. The approach was however time-consuming, and the supervisor was not able to meet the target of 5 supervision cycles per student teacher in 10 weeks of teaching practice.

SOME IMPLICATIONS OF THE FINDINGS

If clinical supervision can be integrated into the school structure, it can be a key element in effective staff development. College supervisors, cooperating teachers and Heads of Department should be conscious of the beneficial features of clinical supervision and try to use them in their own supervision, e.g. providing a supportive climate, using classroom observation data and encouraging teacher self-analysis. Teachers are also more likely to gain from supervision if they are willing to view it as 'developmental' and be open in their analysis of and reflections on their teaching.



This is an abstract of an MEd. dissertation by Maureen Ng entitled "An Inquiry into the Use of Clinical Supervision with Student Teachers" (National University of Singapore, 1987). A copy of the dissertation is in the IE Library.

TEACHERS' ATTITUDE AND PRINCIPALS' LEADERSHIP BEHAVIOUR

by Ee Chye Heng

Abstract by
Chong Keng Choy

WHAT IS THE STUDY ABOUT?

With increasing decentralisation in school management in Singapore, teachers may look more to their principals for direction, guidance, and support. The principals' leadership behaviour may affect their **teachers'** attitude towards teaching. This study explores the relationship between the principal's leadership behaviour and teachers' attitude towards teaching.

HOW WAS THE RESEARCH CONDUCTED?

Six **English-medium** government secondary schools were selected for this study. There were two above average schools, two average, and a pair of below average schools in terms of academic results obtained at the GCE 'O' Level examinations. Some 305 teachers of these six schools were asked to complete two questionnaires. One questionnaire is called the Principal's Leadership Behaviour Questionnaire, and the other is the **Educational** Attitude Inventory.

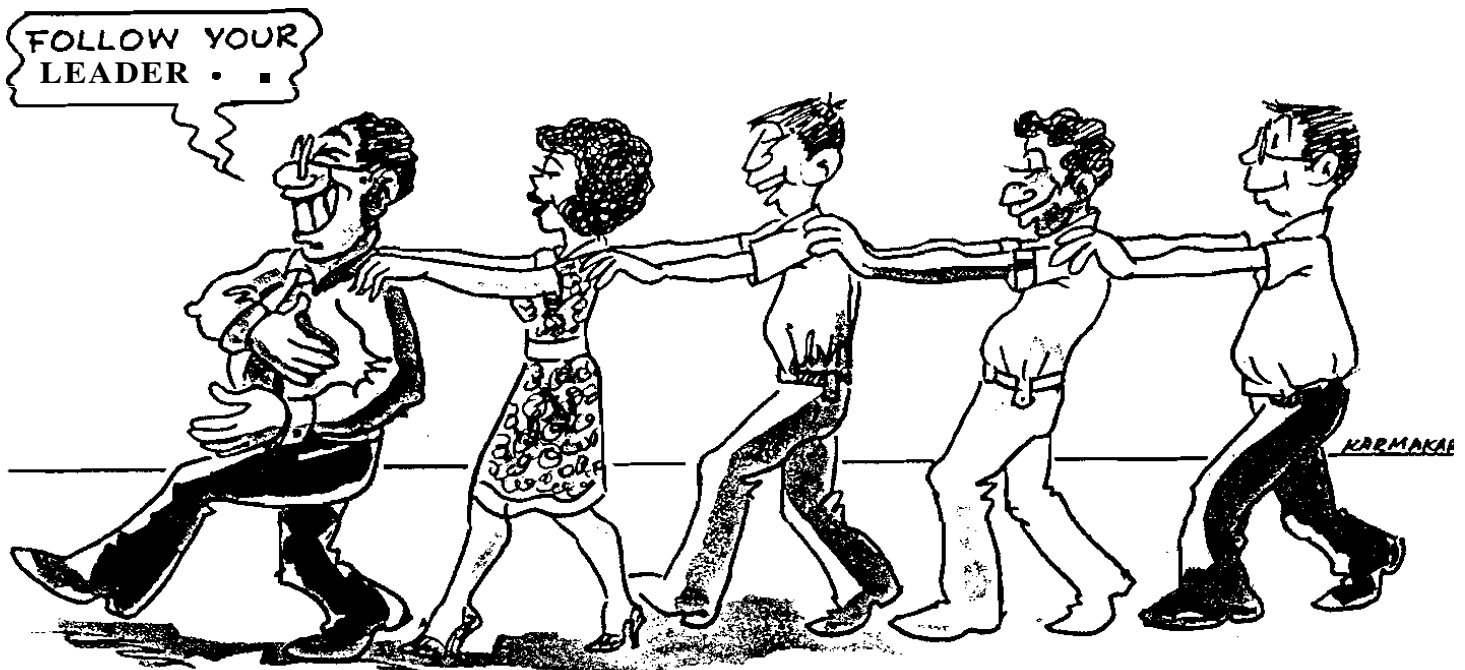
WHAT WERE THE MAIN FINDINGS?

- * The principals in the above average schools were perceived by their teachers to exhibit leadership behaviour most frequently, whereas the principals in the below average schools were perceived by their teachers to exhibit leadership behaviour least frequently.
- * In general, teachers showed good attitudes towards teaching.
- * There was correlation between principals' leadership behaviour and teachers' attitudes in both above average and average schools. Principals' leadership behaviour and teachers' attitude are not related in below average schools.

WHAT ARE THE PRACTICAL IMPLICATIONS?

- * It is advantageous for principals to exhibit leadership behaviour. Teachers may want their principals to lead them.
- * Principals are assured of better chances of success in the implementation of instructional programmes, given that their teachers show good attitudes towards teaching.

- * Principals and teachers should work together fruitfully for better schools for their pupils, because principals' leadership behaviour and teachers' attitude are likely to affect one another.



This is an abstract of Ee Chye Heng's MEd thesis entitled "The Relationship between the Educational Attitudes of Teachers and their Perception of Leadership Behaviour of the Principals" (National University of Singapore, 1986). A copy of the thesis is in the IE Library.

PRINCIPAL LEADERSHIP BEHAVIOUR AND TEACHER JOB STRESS

by Jenny Yong Sow Chun.

Abstract by
Richard Lancaster

WHAT IS THE STUDY ABOUT?

The first local study on teacher job stress has two purposes:

- * To see if there is any connection between Singaporean teachers' perception of their Principals' leadership behaviour and the teachers' self-reported level and sources of job stress.
- * To analyse the relationship between teacher job stress and teacher demographic characteristics: sex, qualifications, status in the school, type of classes taught, age and teaching experience.

HOW WAS THE RESEARCH CONDUCTED?

Two questionnaires were administered to 587 secondary school teachers who were English-medium teachers in twenty co-educational Government secondary schools which did not have pre-university classes.

The Leadership Behaviour Description Questionnaire developed by Halpin and Winer was one instrument. It was used to measure two characteristics of principal behaviour.

- * Consideration. Leaders high on this place emphasis on the people in the organisation. There is appreciation of staff effort, acceptance of staff suggestions for decision making, good staff rapport and open communication.
- * Initiating Structure. Leaders high on this direct their efforts mainly towards organisational maintenance. They endeavour to establish well defined patterns of organisation, channels of communication and methods of procedure.

It is expected that an effective leader will have both characteristics.

The other questionnaire was the Teacher Job Stress Questionnaire developed by the researcher. It covered seven dependent variables:

Global teacher job stress	Time pressure
Pupil discipline	Professional recognition
Pupil motivation	Role ambiguity
Role conflict	

WHAT WERE THE MAIN FINDINGS?

- * Teachers rated **40%** of their Principals high in both Consideration and Initiating Structure while **35%** of Principals rated low in both.
- * Teachers were less stressed when working with Principals high in both Consideration and Initiating Structure or Principals high in Consideration and low in Initiating Structure.
- * Teachers who perceived their Principals to be low in both Consideration and Initiating Structure reported the highest levels of job stress.
- * Only **4%** of the teachers reported themselves as being under very high stress but **40%** considered themselves in the high stress category and **43%** to be moderately stressed.
- * Of all the teacher demographic characteristics investigated, only the type of class taught by a teacher was associated with job stress; Normal classes were more stressful than Express.
- * Of the six job stressors, the most stressful were time pressure, pupil motivation and **pupil discipline.**

WHAT ARE THE PRACTICAL IMPLICATIONS?

- * 40% of **the** sample of teachers reported high or very high levels of job stress. Principals can reduce stress levels by showing more Consideration behaviours.
- * Secondary teachers report that their Principals' behaviour has little direct effect on pupil discipline and pupil motivation. So programmes are recommended to help teachers cope directly with those two stressors.

This is an abstract of Jenny Yong Sow Chun's MEd thesis entitled "**The Relationship between Teacher Perception of Principal Leadership Behaviour and Teacher Job Stress**" (National University of Singapore, 1986). One copy of this thesis is in the Reference section of the I.E. library and another is available for loan.

DIMENSIONS OF EFFECTIVE SCHOOL LEADERSHIP: THE TEACHERS' PERSPECTIVE

by Joseph J. Blase

Abstract by
Low Guat Tin

WHAT IS THE STUDY ABOUT?

The study focusses on the dimensions of effective high school leadership. The researcher reported on the impact of effective principals' **leadership** factors on their teachers and in turn their teachers' relationships with students, colleagues and parents.

HOW WAS THE RESEARCH CONDUCTED?

Data collected from teachers in a high school in USA through observations and a series of in-depth interviews spread over two and half years, formed the basis of this study. The teachers were asked to list and describe the behaviours of effective high school principals and to describe the impact of such behaviours on them.

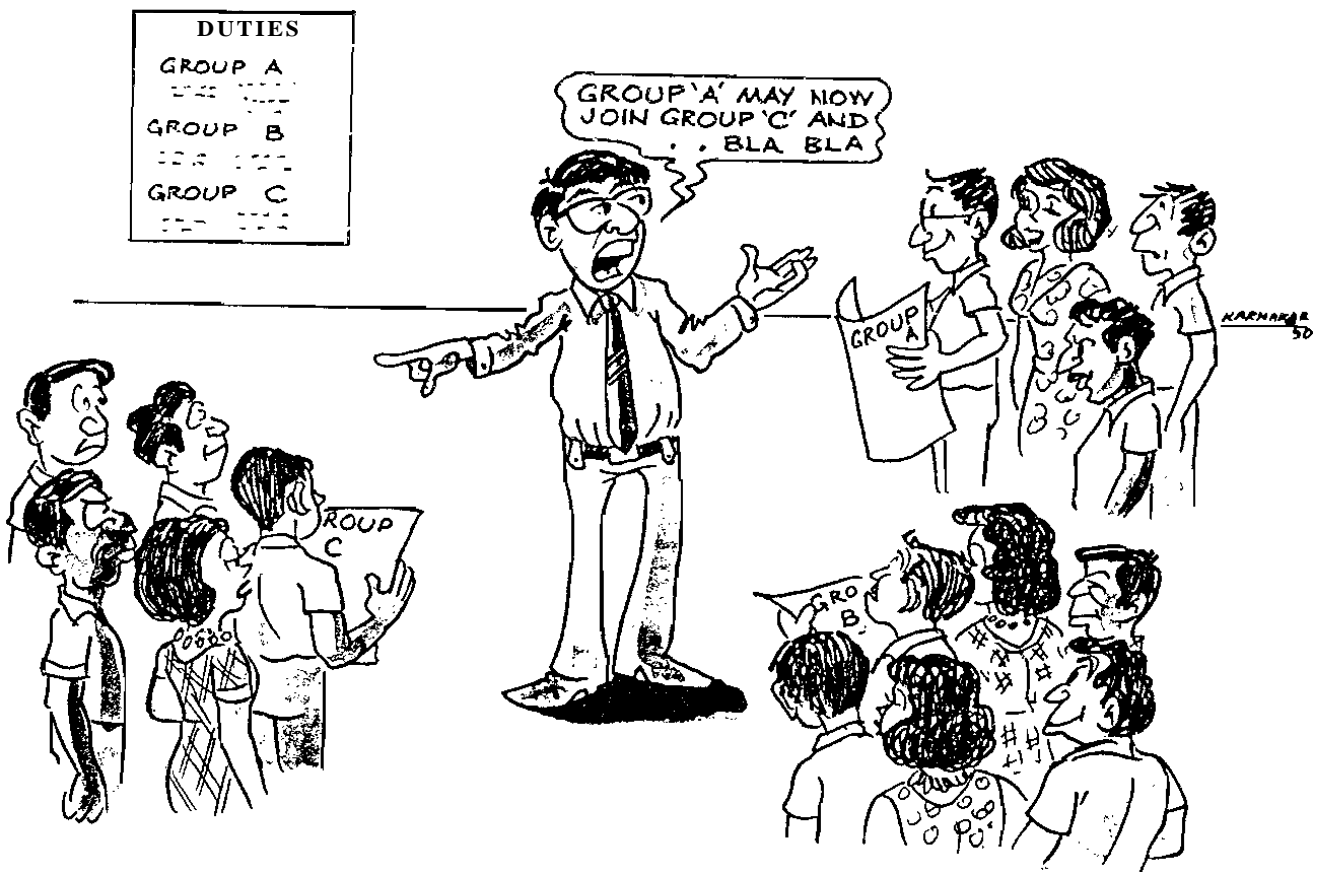
Data were thematically analysed and presented under two leadership dimensions, namely, task and consideration factors. Task factors refer to the task-relevant competencies, **e.g.**, planning, **organising** and consideration factors refer to activities that help meet teachers' socio-emotional needs, **e.g.**, recognition of teachers.

WHAT WERE THE MAIN FINDINGS?

- * Teachers identified nine task-related and five consideration-related factors as major dimensions of effective leadership. The task-related factors are: accessibility, consistency, **knowledge/expertise**, clear and reasonable expectations, decisions, **goals/directions**, follow-through, ability to manage time and problem solving orientation. The consideration-related factors are support in **confrontations/conflict**, **participation/consultation**, **fairness/equitability**, recognition and willingness to delegate authority.
- * The leadership factors affected teacher motivation, involvement and morale.
- * Leadership changes will bring about great changes in the sociocultural context of the school, **e.g.**, teachers' attitude and behaviour tended to change in response to leadership changes.
- * Effective leadership contributes to school cultures which are cohesive.

WHAT ARE THE PRACTICAL IMPLICATIONS?

- * University-level training programmes may need to change their knowledge and skill based emphasis in administration to an emphasis on leadership dimensions, in particular, that of leadership competencies such as working with people.
- * Relevant topics such as communication, group dynamics, team development could be included in a training programme.
- * When selecting, placing and evaluating school principals, much more attention should be given to the presence of people-related competencies.



This is an abstract of J. Blase, Dimensions of Effective School Leadership: The Teacher's Perspective. American Educational Research Journal, 1987, 24(4): 589-610. A copy of this article and journal is available in the IE Library.

DIMENSIONS OF INEFFECTIVE SCHOOL LEADERSHIP: THE TEACHERS' PERSPECTIVE

by Joseph J. Blase

Abstract by
Allan Walker

WHAT IS THE STUDY ABOUT?

Much research has been conducted into what makes a principal effective but very little effort has been devoted to identifying ineffective principal behaviours. The author sets out to identify the ineffective dimensions of school leadership by asking teachers what they think makes a principal ineffective. The study describes what ineffective principals mean to teachers. The relationship between leader characteristics and their impact on teachers was also discussed.

HOW WAS THE STUDY CARRIED OUT?

Unstructured and structured interviews, open-ended questionnaires, and observations were used to collect data from teachers in one large high school in the USA. The data collected related to teachers' views of ineffective school principals. The collected views were then sorted into task factors, or principal behaviours related to the unsuccessful completion of a task; consideration factors, principal's failure to cater for teacher work satisfaction and self-esteem; and personal factors, personal qualities of ineffective principals, as perceived by teachers. Finally, the study looked at the impact of ineffective principals on teachers themselves and on teacher's relationships with others.

WHAT WERE THE MAIN FINDINGS?

TASK FACTORS	CONSIDERATION FACTORS	PERSONAL FACTORS
Lack of accessibility	Lack of support and avoidance of conflict	Lacking authenticity
Inconsistency	Failure to provide opportunities for input	Lacking compassion
Lack of knowledge and expertise	Authoritarianism	Arrogant
Ambiguous expectations	(Being political	Unfriendly
Indecisiveness	Harassment	Manipulative
Poor defined goals and lack of direction	Favouritism	Insecure/narrow-minded
Lack of follow-through	Lack of recognition	Unintelligent

TASK FACTORS	CONSIDERATION FACTORS	PERSONAL FACTORS
Ineffective problem-solving orientation	Criticalness	Defensive
Evaluation of teaching	unwillingness to delegate authority	Prejudiced
Poor time managers	Intimidation	Immature
		Lazy/pessimistic

Figure 1: Teacher perspective of ineffective school leadership

WHAT ARE THE PRACTICAL IMPLICATIONS?

Principals who are ineffective leaders and display the factors displayed in Figure 1 impact on teachers' performance, in practical terms, in a number of ways.

- * Impact on teachers. Ineffective school principals negatively affect teachers' self-esteem and cause them to become less dedicated to their jobs. Ineffective principals are poor role-models for their teachers.
- * Impact on teacher-student relationship. Ineffective principals who do not support teachers make it more difficult for them to control students. This in turn distracts the teachers from concentrating on classroom instruction. As a result teachers tend to withdraw from caring for the students.
- * Impact on teacher-teacher relationship. Certain ineffective behaviours, such as favouritism, encourage feelings of anger, jealousy, and distrust among teachers. Once again, teachers tend to withdraw from all but the most basic commitments.
- * Impact on teacher-parent relationship. When principals do not support their teachers in confrontations with parents regarding discipline and instruction of students, teachers tend to become overly cautious and defensive.

In summary, ineffective principals, both directly and indirectly, negatively affect how their teachers perform in the classroom and relate to others in the school.

PRINCIPAL LEADERSHIP AND STUDENT ACHIEVEMENT

by Richard L. Andrew and Roger Soder

Abstract by
Low Guat Tin

WHAT IS THE STUDY ABOUT?

This study conducted in America attempts to show that the principal plays a very important role in the academic achievement of students, particularly blacks and low-income students.

HOW WAS THE RESEARCH CONDUCTED?

Teachers in 33 primary schools responded to a questionnaire which was developed by teachers, administrators and the researchers. The questionnaire measured 18 strategic interactions between principals and teachers. These interactions fall into four areas:

- The principal as the resource provider;
- The principal as the instructional resource;
- The principal as the communicator; and
- The principal as the visible presence.

In these four areas, whether as resource provider or communicator, the principal's emphasis is on school vision and goals.

Based on the teacher's perception of the principal as the instructional leader, the 33 principals were divided into three categories. A third of the principals were classified as strong leaders, another third as average leaders and the last group as weak leaders.

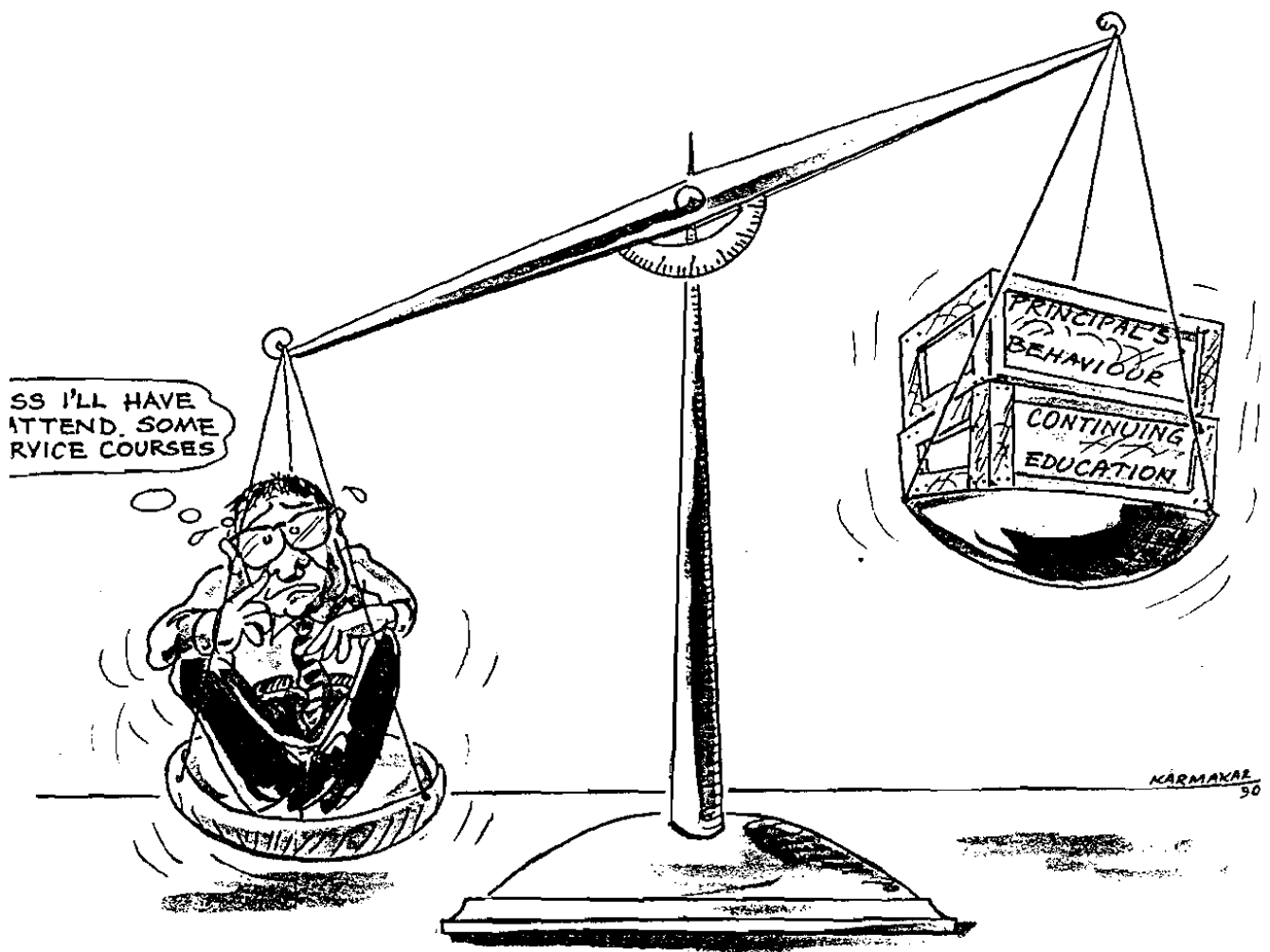
To measure improvements in **students'** academic performance, gains in the California Achievement Test were used. Data were totalled within schools for all students by ethnicity and free-lunch status.

WHAT WERE THE MAIN FINDINGS?

- * Students in schools with principals gauged as strong leaders made significantly greater gains in both reading and mathematics than students in the other schools.
- * In terms of ethnicity and free lunch-status, gain scores for students were very consistent across groups, from highest for schools with strong leaders to least for schools with weak leaders.

WHAT ARE THE PRACTICAL IMPLICATIONS?

- * Preservice training of principals could focus on the principal behaviours which are linked to improved academic performance of students. Such behaviours should be reinforced during training programmes.
- * The presence of principal behaviours which are associated with student achievement could be one of the criteria used in the selection of principals.
- * For principals who are already emplaced, continuing education should ensure that the desired principal behaviours are reinforced.
- * The extent of the presence/absence of such desired principal behaviours could serve as a basis for principal evaluation.
- * Teachers' perceptions of principals' behaviours might be incorporated as part of the process for principal selection, development and evaluation.



This is an abstract of Richard Andrews and Soder, Principal leadership and student achievement. Educational Leadership, 1987, 44(6): 9-11. A copy of this article and journal is available in the IÉ Library.

MANAGEMENT BY OBJECTIVES IN SINGAPORE SCHOOLS

by Tang Swee Keng

Abstract by
Leong Wing Fatt

WHAT IS THE STUDY ABOUT?

The study attempts to discover the effects and effectiveness of a system of staff reporting that is based on the concept of management by objectives (MBO). In addition, it also measures some variables of implementation and teacher characteristics that might be related to the success of the MBO-based system. The study was carried out after the system was applied in the pilot schools for one year. The researcher was interested in the teachers' perceptions of the benefits and problems that the MBO-based system of reporting had produced in their respective schools.

HOW WAS THE RESEARCH CONDUCTED?

The research approach was described as both descriptive and explanatory. The design of the study was of the survey type. It included correlation and ex-post facto analysis. Twenty schools were covered in the survey. A questionnaire was developed by the researcher to gather teachers' perceptions. Altogether, 629 teachers responded. For the correlation study, the researcher devised an index of success for each teacher who responded.

WHAT WERE THE MAIN FINDINGS?

The study found that the MBO-based reporting system could provide the following benefits:

- * feedback on job performance
- * better setting of priorities
- * increased awareness of school goals and needs
- * better awareness of personal development needs
- * greater objectivity in staff appraisal
- * improved **communication** between staff and superior
- * increased job motivation

In addition there were some evidence of:

- * better relationships between staff and superior
- * increased job satisfaction
- * better job performance

The study also found the following problems:

- * too time consuming
- * excessive paper work
- * difficulty in setting measurable targets and obtaining an overall performance rating
- * difficulty in measuring targets that were subjective

The success of implementation of the system was associated with the following:

- * the way the system was implemented
- * the superior's management style and support for the system
- * autonomy in setting and implementing targets
- * frequency of the periodic reviews
- * age and length of service of the teachers

There was, however, no correlation with the type of school or the sex of the teacher.

WHAT ARE THE PRACTICAL IMPLICATIONS?

- * For the teachers concerned, they benefit from having feedback on their job performance. Staff appraisal based on this system would be more objective. Teachers would be more keenly aware of school goals and school needs.
- * On top of that, they would also possess greater awareness of their own personal developmental needs. With the greater awareness of needs, teachers would find it easier to set priorities.
- * Relationships between teachers and their immediate superiors would improve after some time through improved communication between them. In the end, the teachers would experience job satisfaction through greater motivation and better job performance.
- * It would be necessary to overcome the difficulties associated with the implementation of the system. Excessive paperwork and time-consuming procedures would have to be imaginatively handled through better organisation.
- * The setting and measurement of performance targets would also present quite a challenge to the organisers, who might have to confine the targets to only a few that are essential, and using verifiable indicators in place of quantification in measuring the more qualitative type of targets.

This is an abstract of Tang Swee Keng's **MEd** thesis entitled "Perceptions of the Use of Management by Objectives in Singapore Schools" (National University of Singapore, 1986)

A copy of the thesis is in the IE Library.

ORGANISATIONAL STRUCTURE AND TEACHER MOTIVATION

by Ioh Ai

Abstract by
Chong Keng Choy

WHAT IS THE STUDY ABOUT?

The role of the teacher was becoming more complex and demanding. The principal had taken on greater autonomy and responsibility. The author of this study wanted to examine the relationship between teacher motivation and some features of the school **organisational** structure.

HOW WAS THE RESEARCH CONDUCTED?

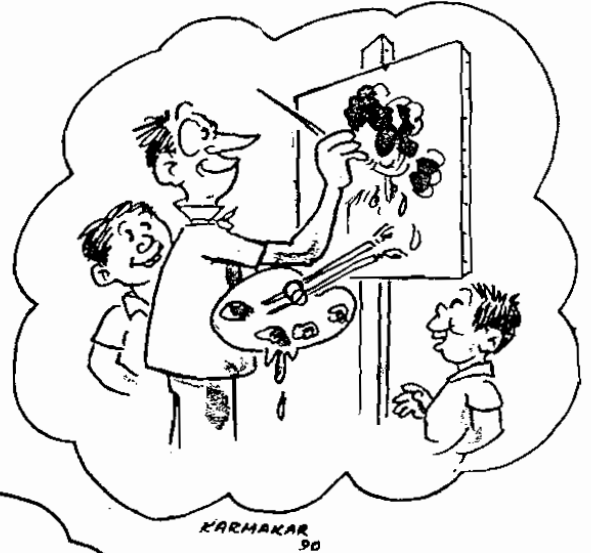
Eighteen primary schools were selected for study. Fifteen teachers from each school were asked to complete a questionnaire to provide their perceptions on relevant aspects of their teaching job and their schools. **Hage's** axiomatic theory of organisation, and Vroom's and Porter and **Lawler's** expectancy theory of expectation were used to help the author develop the items in the questionnaire.

WHAT WERE THE MAIN FINDINGS?

- * Some primary schools had greater formalisation of rules and regulations than others.
- * The primary school organisation had three strong features of centralised decision-making, formalisation of rules and regulations, and stratification of reward distribution.
- * Increasing strength in these three features of the organisation in the primary school are related to the lowering of teacher motivation.

WHAT ARE THE PRACTICAL IMPLICATIONS?

- * The principal in the primary school may work out strategies to involve teachers in decision making, in order to achieve a higher level of teacher motivation.
- * The principal may work at providing a conducive environment for creative teaching and learning, and revising rules and regulations that hinder creative work in the school.
- * The principal may work at making rewards and recognition for good work done by teachers more wide spread and justly distributed.



This is an abstract of Loh Ai's MEd thesis entitled "The Relationship between Organisation Structure and Teacher Motivation in a Sample of Primary Schools in Singapore" (National University of Singapore, 1986). A copy of the thesis is in the IE Library.

STUDENT-TEACHERS' BACKGROUNDS AND MOTIVES FOR TEACHING: A 1968-1981 COMPARISON

by Soh Kay Cheng

Abstract by
Tony Bastick

Why did you become a teacher? Was it because it suited your temperament, or was it because you liked children, or that you were influenced by your parents, or what? These are interesting questions and the answers to questions like these were of interest to the researcher-teacher educator who conducted this study. The specific purpose of his study was to better understand the teacher education process through discovering trainees' motives for teaching.

An earlier enquiry into motives for teaching was carried out in Singapore in 1965 and reported in Lau Wai Har et al's Why Teach? (1963). It is common knowledge that there have been many social and economic changes in Singapore since 1968; the researcher of this study was also interested in how these changes might have influenced motives for teaching and encouraged trainees from different family backgrounds. Hence this study parallels the 1965 study in order that comparisons could be made.

HOW WAS THE STUDY CARRIED OUT?

While there are many conceptual problems with trying to compare groups of teacher trainees over a time-span of one and half decades, in this study, the researcher made considerable effort to compensate for these problems by re-phrasing some of the 1965 questions and re-composing groups of 1981 trainees to match some aspects of the 1965 groups. He then gave the parallel questionnaires to the 1981 parallel groups of trainees and compared their responses with those of the 1965 groups.

WHAT WERE THE RESULTS?

The main findings were that:

- * The ratio of **males:females** had changed from **1:1** in 1965 to **1:5** in 1981. Female teachers came more from middle class backgrounds.
- * They had had more prior experience in teaching.
- * They were motivated more by **realising** their own potential and furthering their own education; by their liking for children and were less influenced by their teachers and relatives.
- * They thought teaching was less **of** a noble profession than did the 1965 group; that teaching offered less variety than did the 1965 group.

- * They chose teaching less because they had no alternative; and were less motivated by financial difficulties than were the 1965 group of trainees.

The researcher suggested that the increase in female trainees might be linked to economic changes. In 1981 starting teachers were grossly underpaid compared with those in 1965. He used the GNP per capita increase of approximately 173% to give perspective to the large increase in education expenditure of 279% compared to the smaller increases in teachers' starting salaries ranging from 68% to 122% depending on qualifications. With the male 'bread winners' in higher paid non-teaching employment, 'second-wage' females from middle-class backgrounds, who tend to have higher qualifications than females from working-class backgrounds and who face fewer financial and employment pressures, were in a competitive position to take up the teacher training places on offer. Also, the teacher-pupil ratio in secondary schools remained at 1:23 throughout the period. This continuing "shortage of secondary teachers" combined with the easing of requirements on relief teachers could account for the greater access the 1961 trainees had to pre-training teaching experience.

WHAT ARE SOME OF THE IMPLICATIONS FOR SCHOOLS?

1. The researcher warns us of two negative implications of this trend towards a female profession: (a) Boys' lack of male role models; and (b) shortage of male teachers for more rugged types of activities.
2. On the positive side, the researcher says that (a) the few males attracted to teaching may, like the middle-class females, not therefore come primarily for the salary; and (b) being middle-class these female trainees tended to be more intelligent to hold values consistent with those propounded by education and had come to teach for positive reasons (at least, not because of financial difficulties or having no alternatives).

This abstract was based on "Student-Teachers Backgrounds and Motives for Teaching: A 1968-1981 Comparison" by Soh Kay Cheng. Occasional Paper No. 11. Singapore: Institute of Education, 1983. It is available at the IE Library.

SURVEY ON TEACHER EDUCATION OBJECTIVES

by R.W. Mosbergen and others

Abstract by
Chin Long Fay

The curriculum of teacher education should aim primarily at providing graduate trainee-teachers with the necessary repertoire of knowledge, skills and attitudes to enable them to perform effectively both in and out of the classroom. The expectations of school principals, as consumers, and teacher educators, as trainers, are of immediate concern as they are directly involved in the training of teachers.

WHAT IS THE STUDY ABOUT?

The investigators sought to answer the following questions:

- * What are the areas of knowledge, skills and attitudes that principals and IE lecturers expect the trainee-teachers to have acquired by the end of their training in IE?
- * What relative importance do principals and IE lecturers give to different areas of knowledge, skills and attitude?
- * What special skills are identified as important to trainee-teachers in relation to the environment, special needs and organisation of junior colleges and secondary schools?

HOW WAS THE RESEARCH CONDUCTED?

The study was carried out in two phases. First, a questionnaire survey was conducted of all secondary school and junior college principals and IE lecturers. The second phase took the form of interviews with stratified random samples of principals and IE lecturers who had responded to the questionnaire. Altogether 120 principals and 115 IE lecturers responded to the survey questionnaire.

WHAT WERE THE MAIN FINDINGS?

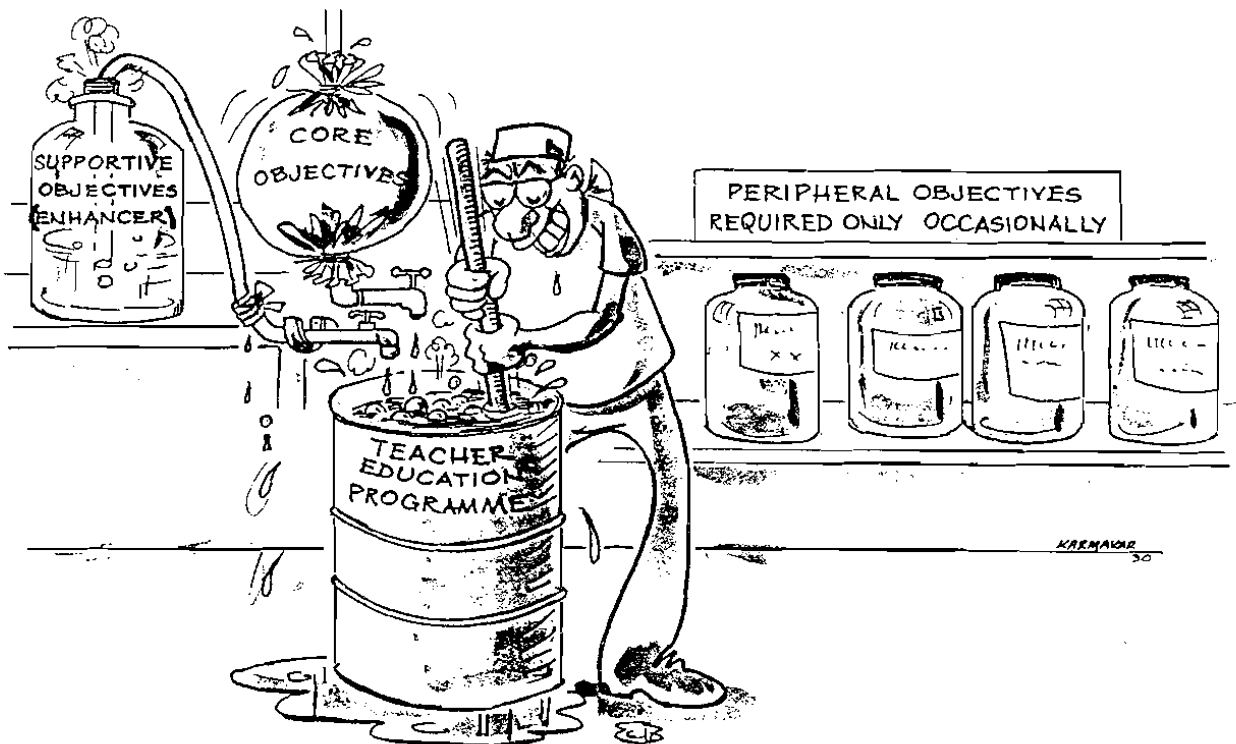
- * High priority was accorded by both principals and IE lecturers to those items of knowledge and skills needed for effective classroom teaching. Knowledge of school syllabuses, assessment procedures and educational policy and goal; skills in motivating pupils, subject teaching, class control and communication. Personal qualities such as responsibility, conscientiousness and integrity were also considered very important.
- * Objectives that were considered to be of medium priority included knowledge of examinations, curricula, the administrative structure and philosophic-political basis of education; skills in

evaluation, the use of resources and some aspects of communication. Similarly, personal qualities such as confidence, good judgement and punctuality were considered to be of medium priority.

- * Of low priority were those objectives which involve knowledge of certain theoretical foundations of education, pupil services and special curricular provision; skills in conducting discussions and tutorials, in using drills and non-verbal communication. Such personal qualities as leadership, alertness, proper attire and offering suggestions were considered to be of low priority.

WHAT CONCLUSIONS CAN BE DRAWN?

- * First, this study found a sizeable communality of views between principals and IE lecturers with respect to the objectives of an initial training programme for graduate teachers.
- * The "core objectives" were those directly useful and applicable in classroom teaching. The "supportive objectives" were those thought necessary to enhance the "core objectives" directly. The "peripheral objectives" were those which the teacher might need, but only occasionally.
- * The results suggest that planners of teacher education programmes should seriously take account of the more important objectives as seen by school principals, trainees and trainee-teachers.



This is an abstract of the "Survey on Teacher Education Objectives: the views of junior college/secondary school principals and IE lecturers" (1980) by R.W. Mosbergen et al, Institute of Education.

BEGINNING TEACHERS' PERCEPTIONS OF THEIR PRE-SERVICE TRAINING PROGRAMME

by Phyllis Chew and Others

Abstract by
Hazel Mah Yuet Har

It seems obvious that recommendations of teacher education graduates are the best source of information for improving teacher education programmes. Most of these evaluation or follow-up studies concentrate on the beginning teacher's first year of teaching since it is felt that this first year affects the level of professional competency one is able to develop and maintain in later years and positions.

WHAT IS THIS STUDY ABOUT?

The authors set out to determine:

- the strengths and weaknesses of the Institute of Education's Certificate-in-Education programme (1985) as perceived by this sample of graduates,
- * the concerns of these graduates in relation to their first year of teaching, and
- the improvements (if any) that can be made to the **programme** based on these graduates' responses.

HOW WAS THE STUDY DONE?

A questionnaire was mailed to each of the **224** graduates who accepted their appointment to the Singapore Education Service. The questionnaire consisted of three sections: Section A required some background information, Section B required subjects to give their views on the usefulness of courses which made up the programme, and Section C dealt with the concerns and problem areas usually encountered in the first year of teaching. Of the **224** questionnaires mailed, 170 formed the study's sample.

WHAT WERE THE FINDINGS?

- Of the 5 courses that the subjects were required to rate on the criterion of usefulness. Teaching Practice and Instructional Technology were ranked the top two in the **programme** by the subjects. However, there was one component - Paperwork in Teaching Practice - that was rated as 'useful' only by 57.7% of the cohort. By 'useful' is meant the extent to which the course had helped them in relation to classroom teaching.
- Other courses in the Certificate-in-Education programme also fared well, although not as **well** as Teaching Practice and Instructional Technology.

- * About 74% of the subjects felt that the training they had received was beneficial.
- * of the 18 areas of concerns listed, "Organising and conducting ECA" and "Coping with paperwork related to school administration" were the two concerns that the subjects felt that their training did not prepare them well for.

WHAT DO THE RESULTS MEAN TO TEACHERS AND TRAINERS?

Firstly, teachers and especially the cooperating teachers in schools, where the student teachers are attached for Teaching practice, could help the student teachers by giving them firsthand experiences in 'Organising and conducting ECA' and in 'coping with Paperwork'. This would contribute towards producing better trained teachers.

Secondly, since student teachers rated practice-based components in the training programme more highly than those regarded by them as "theoretical", trainers should consider relating their so-called "theories" to actual practice or experience in the classroom.



This is an abstract of "A Follow-Up Study of Certificate-in-Education (July 1985 Intake) Students After One Year of Full Time Teaching" by Phyllis Chew, Hazel Mah, Gayle Whitson and John Tan, Research Papers Series, Educational Research Unit, Institute of Education, 1989.

HOW TO GET A GOOD TEACHING PRACTICE GRADE?

by Soh Kay Cheng and Others

Abstract by
Soh Kay Cheng

As the test of teachers is in the teaching, it is logical for teaching practice to play a major role in teacher education. Much time and manpower have therefore been devoted to teaching practice and its supervision. Two obvious functions of teaching practice supervision are to provide guidance to the neophytes and to evaluate their progress in acquiring teaching skills in the classroom.

WHAT IS THE STUDY ABOUT?

The study was an attempt to collate the views and expectations of supervisors who were intimately involved with teaching practice. It was believed that an **understanding** of how the supervisors regard teaching practice and how they carried out this important task would bring about a better insight into factors affecting the reliability and validity of the assessment of teacher-trainees.

HOW WAS THE RESEARCH CONDUCTED?

A questionnaire was specially designed for this survey, seeking answers to the following questions: (a) How do supervisors see their roles (manager, counsellor, instructor, observer, feedback, or evaluator) in an ideal situation and in actuality? (b) What emphasis do supervisors place on various teaching skills of the teacher-trainees, at the earlier and later stages of teaching practice? (c) What is the common practice of grading? What sources do supervisors use for this purpose? What factors are considered when awarding a grade? and (d) What do supervisors see as the functions of teaching practice? The questionnaire was completed by 86 teaching practice supervisors of Diploma in Education and Certificate in Education students.

WHAT WERE THE MAIN FINDINGS?

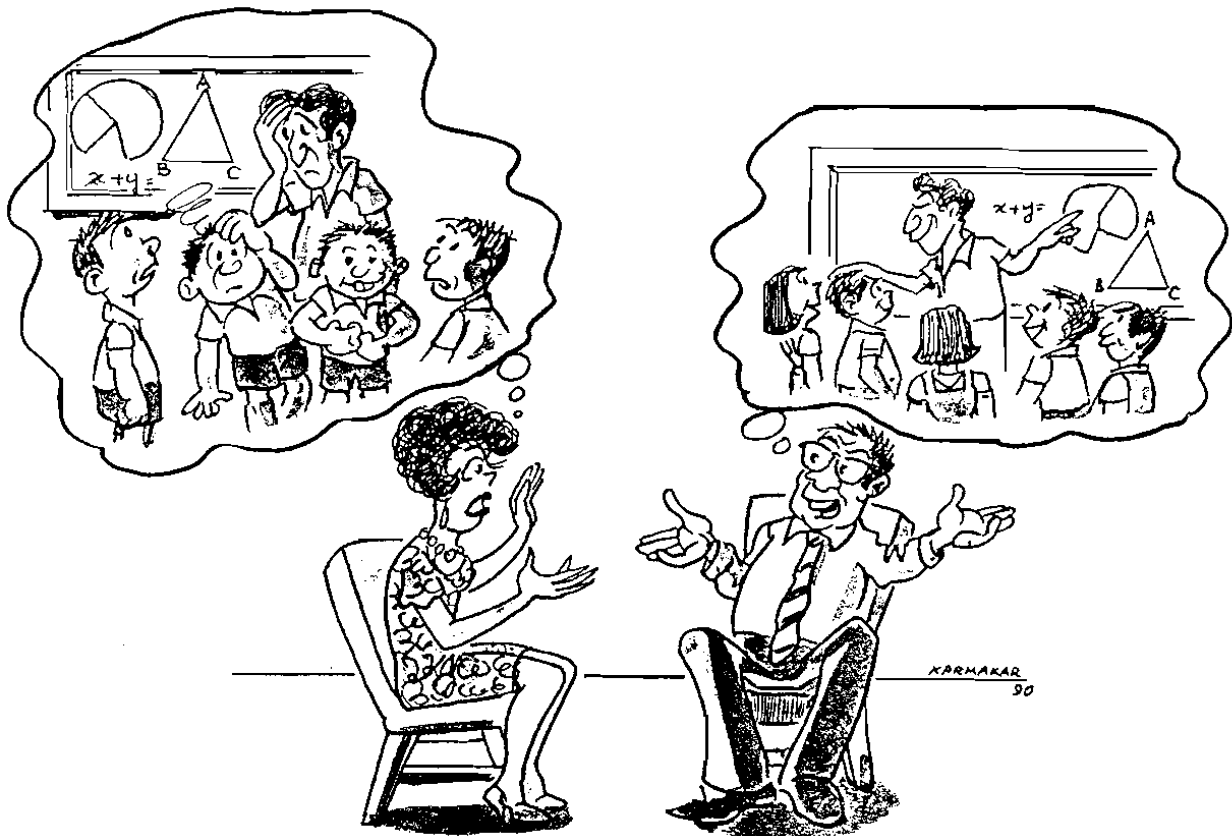
The supervisors saw themselves as playing the role of showing the way (instructor, counsellor, feedback) more than judging the students.

During the earlier stage of teaching practice, the supervisors emphasized more the students' teaching competencies such as lesson planning, questioning, communication, motivating pupils, use of teaching aids, and reinforcing pupils. During the later stage, the emphasis shifted to more general aspects such as instructional strategies, class control, feedback and use of class time. In both stages, three aspects were emphasized, namely, questioning techniques, reinforcing **pupils**, and lesson planning.

Supervisors' own observation records were the **most** important source of information for **awarding** the **final** grades. Next in

WHAT WOULD THE RESULTS MEAN TO TEACHERS AND TRAINERS?

This study highlights the commitment of IE to produce valid and fair teacher assessments in the monitoring of teacher growth. While student teachers are often assessed by different IE supervisors on different teaching episodes, the subjective teacher ratings can be made more credible if the IE supervisors constantly interact amongst themselves on how they normally do their ratings. Similarly, school supervisors or heads of departments among themselves can make more use of such exchanges in the evaluation of their teachers. Should the teachers likewise constantly interact with their supervisors on how they prepared, presented and managed their lessons and classrooms, a greater 'fidelity' in teacher ratings which has not been demonstrated in this study may be achieved. This study acknowledges the benefits of exchanging ideas in the enhancement of mutual understanding.



This is a research report entitled "Assessment of Teacher-Trainees Project: An Experimental Study of Inter-rater Reliability of Teaching Practice Supervision (A Pilot Study)" (1985), prepared by Yeap Lay Leng et al. A copy of this report is in the IE Library.

THREE METHODS OF ASSESSING CORE EDUCATION ASSIGNMENTS

by Katherine Yip and Others

Abstract by
Katherine Yip

As part of their pre-service training, students in the Diploma in Education Programme are required to complete a written assignment for the Core Education (or Principles and Practice of Education) component which carries 40% of the overall grade for that course. Since the marking of the assignment is usually done by a number of lecturers, it gave rise to questions such as consistency of marking, although all markers adhered closely to a marking scheme. This study was undertaken to see if a more consistent method of marking was possible in the context of the evaluation of coursework.

WHAT WAS THE STUDY ABOUT?

Specifically, the authors set out to compare three methods of assessment, namely, analytical marking, global (impressionistic) marking, and sample ranking, with the aim of identifying a particular method which will yield greater reliability.

HOW WAS THE STUDY DONE?

Thirteen scripts with marks ranging from A to Ct, or rank values of 1 to 8, were chosen. All scripts were coded so that readers had no knowledge of the identity of the students (writers). Three markers were identified, each of whom was involved in three rounds of marking, using the three modes of assessment mentioned earlier. An index of reliability was computed for each mode of assessment.

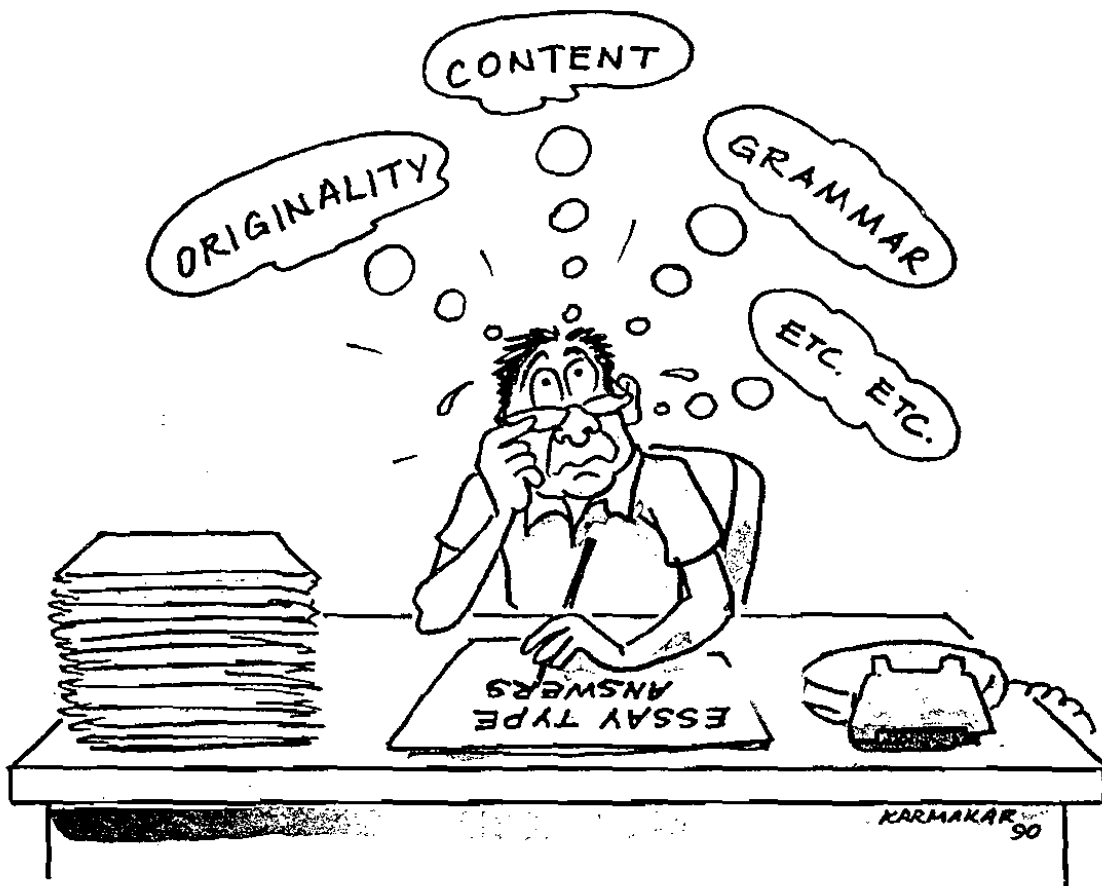
WHAT WERE THE FINDINGS?

- Analytical marking, which employed a detailed marking scheme, did not yield significant differences in the mean scores of the assignments.
- A wider spread of scores was found in Analytical Marking than in Global Marking.
- Analytical marking yielded the best interrater reliability index.

WHAT ARE THE IMPLICATIONS FOR TEACHERS?

There are two important implications for teachers marking essay-type answers in school:

- To improve the reliability of marking to be carried out by two or more teachers in assessing essay answers of a particular grade level, for instance, it is best to use analytical marking.
- However, since global, impressionistic marking is often used in school, it would seem that if some element of analytical marking can be incorporated into global marking, it should improve the reliability of global marking.



This is a research report entitled "Assessment of Teacher-Trainees Project: A Study of Three Methods of Assessing Core Education Assignments" (1986) by Katherine Yip et al, Institute of Education.

IN FURTHER PURSUIT OF THE 'EXPERT' TEACHERS

by Chen Ai Yen

Abstract by
Chen Ai Yen

How 'expert' teachers think and behave has been the focus of a number of studies in the United States, Britain, and Australia in recent years. Most of these studies concentrated on the behaviour of 'expert' mathematics teachers. In Singapore, lecturers from the Institute of Education (IE) have been inquiring into the cognition, decision making and judgement of 'expert' chemistry, economics and literature teachers in addition to their knowledge-base and classroom performance.

HOW WAS THE STUDY DONE?

The IE studies used both clinical and naturalistic research methods to observe teacher classroom behaviours and to investigate into their understanding, decision making and judgment. Twelve Junior College teachers, four in each of the three disciplines, were studied. The procedure for the study was as follows: First, the 'expert' teachers were asked to plan a 45-minute lesson on a given topic. They then taught in a clinical setting to a small group of 'unknown'¹ students in a microteaching lab. The lesson was video recorded to facilitate observation and diagnosis of teaching behaviours. The teachers were interviewed immediately after the lesson for reflective recall. Two to four weeks later they were interviewed again after viewing the lesson on videotape. Second, the teachers were observed teaching their own classes in school. Information gained from the observation and interview data were then checked for trust-worthiness in a process of triangulation. This involves interviews with the clinical and '**natural**' classroom students, the **teachers'** colleagues, the selectors (Specialist Inspector and school principals) and other significant members of the school.

WHAT WERE THE FINDINGS?

The studies show that the 'expert'¹ teachers have capacities that are superior to effective experienced teachers in terms of content knowledge and pedagogic knowledge. They perform at a high level in planning a lesson, in carrying out systematic instruction, in communicating ideas and in judging student needs, abilities, problem areas and achievement levels. They are aware of the scope, depth, links and examination requirements of their subjects resulting in students performing at a high level of learning. They are also characterised by dedication to teaching their subjects and a deep concern for their students, particularly in helping the students to imbibe life-skills (not just subject-specific skills) and in assisting weaker ones.

Not all the 12 teachers selected for study match the above criteria. Upon further analysis of the observation and interview data, only one chemistry teacher, two economics teachers and two literature teachers fit the above description of an 'expert' teacher. It is also interesting to note that all the teachers selected for study by the Ministry of Education Specialist Inspectors and principals are women.

A variety of characteristics unique to the subjects taught have also emerged. The chemistry '**expert**' teacher has sound content knowledge and is keenly aware of the requirements of the syllabus. Her delivery of content is **systematic** and organized, characterised by clear and thorough explanations, and the use of suitable analogies to help her students better understand difficult and abstract concepts. She is also skilled in questioning and gives feedback appropriate to the needs of the students.

The '**expert**' economics teachers are continuous learners with a deep interest in their subject - good and logical communicators, showing less concern for transmitting factual knowledge but attaching great importance to conveying a few key concepts and principles.

The 'expert' literature teachers, however, see effective teaching as firstly achieving a judicious balance of openness to the text, preferring to guide their students towards their perceived interpretation; and secondly, conveying enjoyment, which they define as getting into the text, deriving ideas from it, and making connections with the real world.

WHAT ARE THE IMPLICATIONS FOR CLASSROOM TEACHERS?

Classroom teachers can learn many lessons from the Singapore study. It would appear that '**expert**' teaching can be emulated in some areas. The knowledge and capacities of teachers can be expanded as they engage in life-long education and habitual reflection about their practice. However, expert teaching is more than superior cognition, capacities, actions and judgements, more than exemplary classroom teaching. The experts teach by example, going beyond the classroom. Students are impressed and helped not only by their knowledge and abilities but also by their deep concern and loving care.

'Expert' teachers provide instructional leadership to the novice teachers beyond what David Berliner has described as '**mental roadmaps**'. They are exemplary and an inspiration to members of the teaching profession as well as to other professions that demand the highest moral standards to make their vocation a success. Their sense of responsibility appears to correspond to Fritz Oser's categories of moral cognition: normative morality, situational morality and professional morality. It appears that 'expert' teachers, being human beings and not mechanical expert systems, may differ somewhat in their actions and **expertise**, but all distinguish themselves in professional morality. In their professional decision making, they appear to have developed a sensitive balance between fairness, care and truthfulness. As such, they have totally integrated their knowledge and capacities with their action and professional morality and commitment.

This abstract was based on Chen Ai Yen's report entitled "**In Further Pursuit of the 'Expert' Teachers**" (1990). A copy of the report is in the IE Library.

Dear Fellow Professional

React to REACT

Now that you have read REACT, we hope you will share with us some of your views so as to help us improve REACT. Please therefore complete the reactionnaire and return *it* to us through your principal at your earliest convenience.

Also, please answer the following questions:-

1. Are you a JC/Secondary/Primary teacher? _____
2. How long have you been in the service? _____ years
3. What main subject(s) do you teach? _____

Thank you.

THE EDITORIAL BOARD

REACTIONNAIRE

1. How do you find the language on the whole?
Reasonably readable () Some difficulty () Too technical ()
2. What themes/topics would you like to see in future issues of REACT?

3. In what ways can REACT be improved so as to meet the needs of classroom teachers more satisfactorily?

4. Please indicate the extent to which you have found each of the abstracts INTERESTING and USEFUL.

	<u>Not read</u>	<u>Not</u> <u>Interesting</u>	<u>Interesting</u>	<u>Very</u> <u>Interesting</u>	<u>Not</u> <u>Useful</u>	<u>Useful</u>	<u>Very</u> <u>Useful</u>
(1) Teachers' Attitude .. ()	()	()	()	()	()	()	()
(2) Principal Leadership Behaviour & Teacher Job Stress ()	()	()	()	()	()	()	()
(3) Principal Leadership Behaviour & Teacher Job Satisfaction ()	()	()	()	()	()	()	()
(4) Dimensions of Effective School ... ()	()	()	()	()	()	()	()
(5) Dimensions of Ineffective School . ()	()	()	()	()	()	()	()
(6) Principal Leadership and Student ()	()	()	()	()	()	()	()
(7) Management by ()	()	()	()	()	()	()	()
(8) Organisational Structure ()	()	()	()	()	()	()	()
(9) Student-teachers1 Backgrounds ()	()	()	()	()	()	()	()
(10) Survey on Teacher. ()	()	()	()	()	()	()	()
(11) Beginning Teachers' Perceptions of ()	()	()	()	()	()	()	()
(12) Clinical Supervision. ()	()	()	()	()	()	()	()
(13) How To Get a ()	()	()	()	()	()	()	()
(14) Inter-rater Reliability in ()	()	()	()	()	()	()	()
(15) Three Methods of ... ()	()	()	()	()	()	()	()
(16) In Further Pursuit of ()	()	()	()	()	()	()	()
(17) Says Research ()	()	()	()	()	()	()	()

THANK YOU FOR YOUR COOPERATION



Principals with strong leadership qualities are a critical factor in effective schools.

S.M. Hord, J.E. Hall (1984) "Principals Use Research-based Techniques for Facilitating School Effectiveness" Paper presented at AERA Annual Meeting-New Orleans.



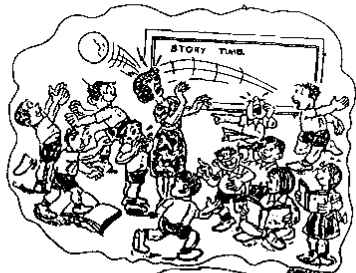
Those teachers who share the same perception of their roles as their principal have higher morale than those who hold different perceptions

J.E. Baldwin (1979) "Role Perception and Teacher Morale" Doctoral Dissertation Brigham Young University.



Good teaching includes teaching students how to learn, how to remember, and how to control their own learning.

T. Good, and J. Brophy (1986) "Teaching the Lesson" In R. Slavin, (ed.), *School and Classroom Organization*. Hillsdale, New Jersey: Erlbaum.



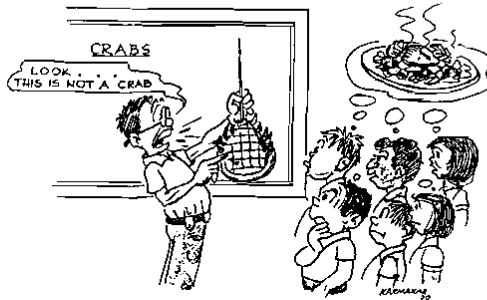
In primary schools, a small class size can lead to better teacher morale, a less hectic classroom and pupils achieving better.

D. Mueller, Clinton Chase and J. Waldoh, (1985), "Effects of Reduced Class Size in Primary Classes." *Educational Leadership* (45,5):48-50.



The morale of teachers is influenced less by what the principal does and more by the characteristics of the teachers themselves, such as their personality, their perceptions and their expectations.

K.P. Smith, (1989), "It's a Question of Morale". *The Practising Administrator* (11, 2-5).



Effective teachers not only know their subject matter but also the misconceptions which students have which will interfere with the learning of that subject matter.

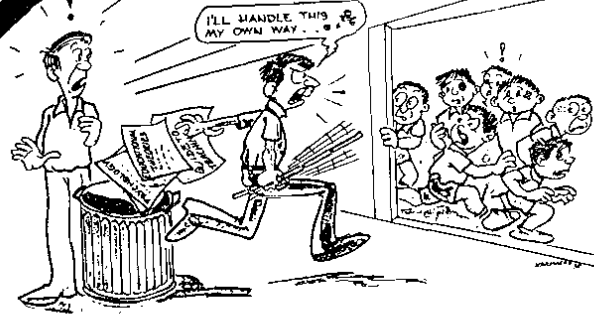
A.C. Porter and J. Brophy, (1988), "Synthesis of Research on Good Teaching: Insights from the Work of the Institute for Research on Teaching". *Educational Leadership* (45, 8):74-85.



The best principals spend as much as 50% of their time talking with their teachers about instruction.

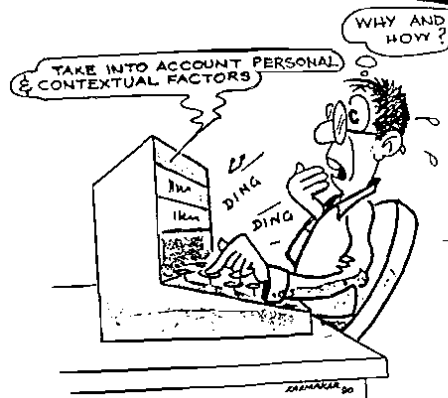
G.R. Austin and S.P. Holowenzak, (1985) An Examination of 10 Years of Research on Exemplary Schools. In G.R. Austin and M. Garber, (eds.), *Research on Effective Schools*. London: Academic Press, Inc.

SAYS RESEARCH



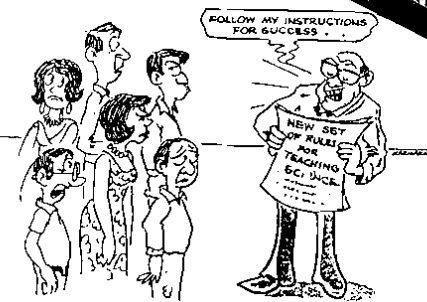
Beginning teachers have doubts about their choice of profession and are in a state of conflict between the knowledge they have acquired in teacher education programmes and the reality of school life.

Miriam Ben-Perez and Lya Kramer-Hayon (1990) 'The Criteria and Context of Professional Dilemmas Encountered by Novice and Senior Teachers', *Educational Review* 42, 1, 33-40



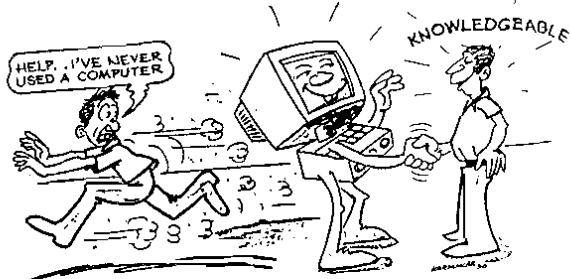
For teachers, understanding the *how* and *why* of teaching requires taking into account the ranges of personal and contextual factors which operate to influence the teacher's decision and the behaviours he/she exhibits.

J. Baird et al. (1997) 'Individual Development During Teaching Training', *Research in Science Education* 11, 182-191



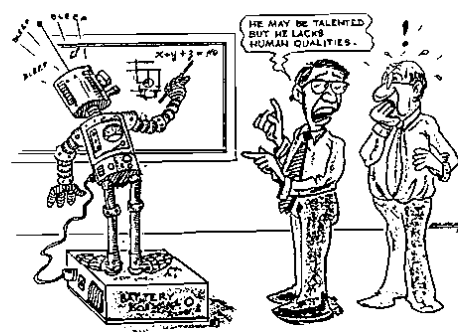
Primary school principals strongly believe that their main responsibility is that of an instructional leader.

E.H. Siehri and J.J. Beck. (1981) 'Elementary Principals: Instructional Leaders or School Managers?' *Phi Delta Kappan*, 62, 7, 528.



Negative reaction of teachers to computers is often the result of lack of knowledge and experience which therefore suggests that what teacher educators do would make a difference.

Mike Summers. (1990) 'Starting Teacher Training - New PGCE Students and Computers', *British Educational Research Journal*, 16, 179-97.

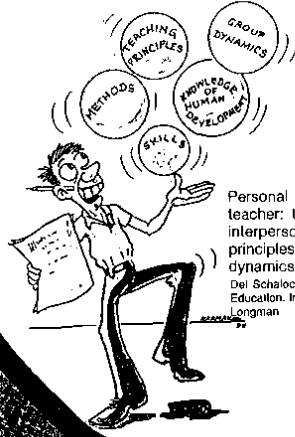


Internalization of both a theory base and practical knowledge into the teacher's existing belief and conceptual framework is essential for beginning teacher development.

M.G. Wodlinger. (1990) 'April: A Case Study in the Use of Guided Reflection', *The Alberta Journal of Educational Research*, 36, 25, 115-132

Although it is ultimately sensible to seek academically talented and intelligent teachers, it appears that... other human qualities may be equally important.

K.R. Howey and S.M. Strom. (1987) 'Teacher Selection Reconsidered', in M. Haberman and J.M. Backus (eds), *Advances in Teacher Education*, Vol 3, Norwood, New Jersey: Ablex Publishing Corporation



Personal characteristics known or assumed to relate to the effectiveness of a teacher: the ability to communicate orally and in writing; the ability to relate interpersonally, knowledge of content to be taught; knowledge of teaching principles, methods and skills; knowledge of human development and group dynamics... (Oregon Teacher/Preparation Institutions).

Dei Schalock. (1983) 'Methodological Considerations in Future Research and Development in Teacher Education', in K.R. Howey and W.E. Gardner. (eds), *The Education of Teachers. A Look Ahead* New York: Longman

Research shows that during teaching practice, the major influence on the trainee is the cooperating teacher and not the supervisor.

Nancy L. Zimphar. (1987) 'Current Trends in Research on University Supervision of Student Teaching', in Martin Haberman and Julie M. Backus, *Advances in Teacher Education*, Vol 3, Norwood, New Jersey: Ablex Publishing Corporation.



SAYS RESEARCH