TEACHER STRESS
AND
CURRICULUM CHANGE

A Conceptual Analysis
and
Framework for Research
(1988)

Ian McKay
ABSTRACT

The demands of work place stress upon the person who carries out the task. There are a number of studies of occupational stress in the corporate business world. However, research of stress in Australian schools has received little attention despite generalisations that teaching is second only to the medical profession in the quantity of pressure experienced.

This study is based on the view that significant organisational consequences arise from the stress to which an individual is exposed.

Curriculum change is described and occupational stress is examined. The needs of teachers are discussed. Major theories of motivation, and existing and proposed promotion structures are considered and assessed. A suggested framework for research follows and sample elements which could be used in a research instrument, aimed at quantifying stress in the teaching profession, has been provided.

The purposes of this study are to investigate the relationship between teacher stress and curriculum change, to identify concepts and variables which are important in understanding and explaining the relationship between teacher stress and curriculum change, to build a conceptual framework and determine an appropriate methodology for further research.
on the relationship between teacher stress and curriculum change, and to prepare sample elements for a questionnaire which may be used as part of the research methodology in a future investigation.

Figure 1. SIMPLIFIED MODEL OF THE STRESS PROCESS IN AN ORGANISATION (Ratsoy and Friesen, 1985)
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Chapter 1

INTRODUCTION

The purposes of this dissertation are:
1. to investigate the relationship between teacher stress and curriculum change,
2. to identify concepts and variables which are important in understanding and explaining the relationship between teacher stress and curriculum change,
3. to build a conceptual framework and determine an appropriate methodology for further research on the relationship between teacher stress and curriculum change, and
4. to prepare elements which could be used in a questionnaire or interview schedule which would form a part of the research methodology in a future investigation.

Due to its effects in teaching and the implications for school systems, research of teacher stress requires immediate attention (Fergusson, 1984). Stress is not a new phenomenon. Moreover, research has indicated that there is a high incidence of occupational stress among teachers (Wilkinson, 1988). At a time when considerable attention is being given to significant curriculum changes, teaching methods and student assessment, research of teacher stress is considered essential. As there is
1. INTRODUCTION

No known recent research into the relationship between teacher stress and curriculum change, it is intended that this study will contribute to the knowledge and understanding of that relationship.

PURPOSE OF THE CHAPTER

The purpose of this chapter is to indicate the significance of the relationship between teacher stress and curriculum change. The prevalence of stress among teachers and recent trends in curriculum change are examined with a description of the approach taken in the study.

DEFINITIONS OF KEY TERMS

STRESS

Stress has been defined as an individual's physiological, psychological and behavioural response to a demand which is perceived to exceed the individual's capacities to meet that demand (Ratsoy et al, 1986). Levi's definition (1979:26) states that occupational stress occurs "where discrepancies exist between occupational demands and opportunities on the one hand and the workers' capacities, needs and expectations on the other". Hosking and Reid (1985) referred to stress as an "... imbalance between the workers' skills, attributes and abilities and the task required of that worker".

CURRICULUM

A curriculum is a statement or plan of what is or should be taught in schools. Curriculum theory contains four major fields of study: course planning; organisation and
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justification of content; analysis of social conditions; and description, analysis and evaluation of curricula (Barnes, 1982).

CURRICULUM CHANGE

Where there is an alteration or variation of any of the four fields of curriculum theory, a fifth factor arises - the management of change. Traditional subjects are challenged and their value questioned. "Designing a curriculum is virtually equivalent to defining education itself" (Barrow, 1978:18). To propose a change to the curriculum "when the term curriculum is vague and all-embracing is effectively to put forward a view of what education ought to consist of or what education really is".

SIGNIFICANCE OF THE STUDY

"At one time, I considered teaching to be my life but that was before I married Gwen and had a family. Now things have changed. I see teaching as a way of getting an income to support my family; but I cannot seem to be able to spend the time with them that I know I should. Take today for example. I had four periods on but my two spare periods were taken up with school assembly and then a supervision. I have three classes of tests to mark which must be ready by tomorrow. There's no other way of doing it but to work into the night. How I'm going to cope with the new curriculum requirements I do not know."

This rather commonplace conversation between teachers at the end of a working day highlights the pressures which some feel are becoming more onerous as each day passes.

During the past two decades, there has been an increasing tendency for both parents of families to be in the work force.
Additionally, the incidence of a break-up of family life and parent separation is increasing. Sizer (1984:6) remarked:

The attitudes of parents and their expectation for their children are very powerful influences ... far more powerful than many weary, confused mothers and fathers of adolescents realise.

In recent years, work-related stress has received increasing attention. The changes which are brought about by the introduction of new curricula into educational systems appear to add to the claim that the number of problems has increased. Seidman and Zager (1987:27) pointed out that "the effects of teacher burnout on both organisations and individuals can be quite harmful".

THE PREVALENCE OF TEACHER STRESS

Teaching has "... historically been viewed as a labour of love" (Schwab et al, 1986:14). Teachers are now required not only to pass on knowledge and skill to students but are also expected to remain in touch with technological advances, to prepare learners for specific jobs, and to promote the school "image" through coaching sports teams, training choirs and bands, debating teams and inter-high, intrastate and interstate competition groups. As time passes, more and more is added to the "responsibilities" of teachers. In some instances, it is assumed that teachers should take over the traditional role of parents in feeding and clothing children. Sizer (1983:680) indicated the problem which occurs in many high schools: "The goals for high schools are numerous and seem to continue
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multiplying with little regard for the severe limits imposed by a lack of school staff." As a consequence, teachers often find that the burdens placed on them become too great and that they do not have the ability to meet these diverse and numerous demands. Negative attitudes about the profession arise. Already sensitive feelings are further irritated by a lack of promotion opportunities, salaries out of line with qualifications and a shortage of the time required to take on extra work. Sizer (1983:681) wrote of teacher/pupil contacts:

Teachers know that time on task ... is important for all students and that personal attention to each student pays great dividends. However, most high school teachers deal with well over a hundred young people daily, in groups that gather for less than an hour.

Teachers' salaries and benefits are not competitive with those in fields that require comparable preparation - particularly at the top levels. Sizer (1983:681) added: "The psychic rewards of teaching provide some compensation - but they don't pay dental bills."

Teachers are susceptible to " ... developing chronic feelings of emotional exhaustion and fatigue, negative attitudes toward their students, and a loss of feelings of accomplishment on the job" (Schwab et al, 1986:14). Ratsoy and Friesen (1985) found that teachers ranked higher on negative feelings towards personal accomplishment than the norm.

Emotional exhaustion may be perceived by the school principal or staff as a response to working too hard. Teachers
may attempt to cope with exhaustion by "depersonalising their co-workers and students and by putting distance between themselves and others" (Schwab et al, 1986:15). Boyd (1983:3) wrote: Teachers "... are a more crucial concern than the academic program because even a superb curriculum, poorly taught, would be useless".

The problems which teachers have faced in previous decades have been multitudinous but none are more debilitating than that which besets them now: "... job dissatisfaction, emotional exhaustion, and the many other psychological, physical, and behavioral manifestations related to job stress or burnout" (Kottkamp and Travlos, 1986:234). A survey conducted by the National Education Association of the United States of America (1980) concluded that 35 percent of school teachers experienced job dissatisfaction with their current positions. A similar survey conducted three years later found that 40 percent of teachers would not take up the profession if they had the chance to start anew.

CURRENT TRENDS IN CURRICULUM CHANGE

For many years, school curricula have been based on subjects to be taught. School routines have been worked out to 190 six-hour days and students have been grouped according to their age. Schools have owned a curriculum of labels - English, maths, science, social science. However, this is no longer enough. Shallcrass (1983:2) pointed out the inadequacy of the system: "As the environment changes, the system flounders like
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a dinosaur that can't cope with the new conditions". Continuing the analogy, Shallcrass added: "We may be happy to flounder in the swamp of the first industrial revolution but ... for them [schoolchildren], that is already dead fish". Sizer (1984) expressed the view that high schools are not assisting students at Piaget's formal or hypothetic-deduction stage. Too many schools have laid emphasis on "coverage" of subjects without teaching children how to think. The education system that functions purely to pass on knowledge was designed for a society that is rapidly disappearing. Shallcrass emphasised that a system which aimed at assisting all to become competent learners would be malleable and responsive to the learners' needs. The system should promote creativity and flexibility and develop a positive attitude to lifelong learning.

The report of the 1981 National Commission on Excellence in Education, *A Nation at Risk*, cited a high rate of illiteracy among American teenagers and recommended that attention be given to curriculum standards, the school calendar, and teachers (Healy, 1984). The report prescribed the "new basics" of four years of English, three years of mathematics, science and social studies, and six months of computer studies. The report further advised that college-bound students should study foreign languages for two years.

Sizer (1984) extended foreign languages to include all students. The four basic curriculum areas which he suggested are inquiry and expression, maths and science, literature and
the arts, and philosophy and history, all of which are derived from traditional subjects. Sizer linked students' mastery of subject matter with the necessity for teachers to be more involved with the selection of content, curriculum structure and teaching methods.

Current economic and social trends also point to the pressing requirement for change in secondary schools. The Tasmanian Education Department policy statement Secondary Education: The Future enlarged on the concerns:

Because the future is characterised by uncertainty, challenge and increasing economic competition, schools must provide programs that enable students to make important decisions themselves, accept responsibility, act independently and flexibly, and show initiative. The capacity to change and respond effectively to changing circumstances is one of the most important qualities all students need for the future. To enable students to use these qualities constructively, they need an understanding of the nature of work and society. They must realise that they are going to enter a world where competition is inescapable.

Barnes (1982:293) described the problems of curriculum change and remarked: "Change makes great demands on teachers' time and energy - to plan, write materials, make visits and so on". Changed conditions and purposes "... take away the teacher's reliance on existing routines and compel him or her to work out new methods, an experience which can be very disturbing".

Receptiveness to change is an important teacher attribute. Duke pointed to personal intrinsic factors which assist in bringing about change (1987:142): "A positive orientation to
change doubtless is closely related to other factors, such as personal expectations and openness to criticism".

When reviewing Goodlad's *Study of Schooling*, Tyler (1983: 462) emphasised that effective changes in schooling require the participation of teachers in defining goals, designing curricula, planning instructional procedures, and in developing the necessary understanding, skills, and attitudes to perform the roles they have helped to define. Educational improvement requires a team effort and the development of a highly effective team takes time, "far more time than planners usually allow".

Ravitch (1985) identified the central problem of schools as "uncertain convictions, confused ideas, and irresolute standards not ... insufficient knowledge, weak techniques or inadequate resources".

The old curriculum was concerned with subject teaching. The trend has been one of moving away from subject matter into "fields of knowledge" or "realms of meaning", which is more a matter of teaching children how to think and how to learn rather than concentrating on particular disciplines. Many have pointed to the necessity for all teachers to be closely involved with curriculum processes.

**THE NEED FOR FURTHER RESEARCH**

Despite comprehensive occupational stress research, little has been carried out in the high-stress teaching profession. During the past decade, some attention has been given to
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teacher stress in the United States, Canada and Great Britain but there is a dearth of study which focusses on stress in Australian schools. At a time when change is occurring at an seemingly increasing rate, when administrative structures are undergoing massive reorganisation, school councils with greater budgetary control are being formed, and entire curricula are being replaced, the effects of these upheavals on the individual teacher need to be examined.

This dissertation provides a theoretical background to occupational stress and curriculum change. A framework for further research is also presented. The development of the research involves individual schools and its members of staff.

APPROACH TAKEN IN THIS STUDY

Stress in individuals has long-term effects on the organisation (Ratsoy and Friesen, 1986; Blase, 1986; Wilkinson, 1988). McGrath (1976) enlarged on the organisational perspective and pointed out that perceived stressors in the organisation affect the individual who is anticipating an ability or inability to respond and the consequences of that response. The anticipation of inability has certain effects on the individual which, in turn, poses organisational consequences.

The perceptions of needs, motivation of teachers, provision of opportunities to increase professional abilities, incentives, and promotion structures all pertain to job satisfaction, an integral conceptual factor of stress (Schwab
et al, 1986). Lack of control or autonomy in the job also contributes to stress. The reported long-term consequences of stress include the failure to achieve organisational and personal goals and a loss of collegiality (Kottkamp and Travlos, 1986).

This study examines the literature on occupational stress and highlights the major features of curriculum change. The related concepts of needs, motivation, incentives and career ladders are also discussed. A conceptual framework and the determination of an appropriate methodology for further research on the relationship between teacher stress and curriculum change is provided.

Material for this dissertation was gathered from the education faculty libraries and main libraries of Melbourne, Monash and Tasmanian Universities and the library of the clinical school of the Royal Hobart Hospital (a faculty of the University of Tasmania). Information from circulars, journals and policy statements distributed by the Tasmanian Education Department and the Australian Medical Association is also included in the dissertation.

ORGANISATION OF THE DISSERTATION

Stress is further defined and the consequences of stress within the individual are described in Chapter 2. The outcomes of stress and its consequences for the organisation are related with problems of leadership styles exercised in bureaucracies. Stress is viewed as a person's anticipation of
his or her qualitative and/or quantitative ability to fulfil the demands placed on the individual.

Chapter 3 contains a discussion of the needs associated with the abilities of teachers to cope with pressures experienced in their profession. Needs vary according to the stages of a teacher's professional life and are directly related to motivation. Many have regarded reward structures as providing a form of motivation for the employee. These reward structures are normally based on payment or a hierarchical framework.

Chapter 4 is centred around the curriculum, that which prescribes the skills, values, concepts and attitudes which are to be taught. Relationships between adoption, development, innovation and change are explained and ways in which the curriculum may be organised are presented.

A synthesis of other studies of occupational stress and outlines of some possible research designs are presented in Chapter 5. A detailed description of one of these designs is tendered with further details concerning its methodology. The chapter contains sample elements, drawn from the concepts and variables mentioned in previous chapters, which could form part of a questionnaire to research stress in teaching.

Chapter 6 contains a summary of the dissertation. Implications for further study are drawn and a summary of the proposed research methodology is provided.
1. INTRODUCTION

SUMMARY

The purpose of this dissertation is to provide a theoretical background and review of research of the relationship between teacher stress and curriculum change and to determine a methodology for further research.

Stress is defined as a perceived lack of an individual's capacity to respond to a demand. Occupational stress is seen as a conflict between demand and opportunity, and the needs and expectations of the worker.

A curriculum is a plan or document of the intended substance of learning. The four fields of curriculum theory are situational analysis, planning, content organisation, and evaluation. Skilful management is required when change in any of the four fields occurs.

The task of teaching is changing as time passes. The curriculum is evolving from a concentration on subject matter to an acceptance of the complete education of the child. Those duties which were, at one time, considered traditional responsibilities of parenting are now being handled in schools and teachers are expected to take on more responsibilities due to changing family structures.

There is a significant and complex connection between role ambiguity and new curricula. Research has shown that increasing numbers of teachers experience stress from their jobs to the extent that many try to distance themselves from students and other staff. These actions have significant consequences on the
1. INTRODUCTION

effectiveness of the school organisation.
The purpose of this chapter is to identify concepts and variables which are important in understanding and explaining the phenomenon of stress in teachers.

OVERVIEW

Research has demonstrated that stress has consequences for the organisation and its goals. The realities of teaching have made it a profession in which considerable stress is experienced. Technological change, preparing children to live in a highly complex multicultural society and the diverse expectations which society has for schooling have increased the susceptibility of the individual teacher to be psychologically and physically affected.

Stress is an individual's perception that the demands made of that person are greater than his or her physical and/or psychological resources. The causes of stress are wide-ranging and have been categorised by Kottkamp and Travlos
2. TEACHER STRESS

(1986) as role ambiguity, role conflict, role overload and powerlessness. The two affective resources of emotional exhaustion and job satisfaction are related to concepts of the work environment.

A principal's leadership influences the school climate. However, the link of a principal's behaviour with the causes of stress and the affective responses is questioned. An account is given of the research findings of Syrotuik and D'Arcy (1983), Lusthnus (1975), Kottkamp and Travlos (1986), Schwab et al (1986), Seidman and Zager (1987), Blase (1986 - see appendix, figure 13) and Wilkinson (1988). The two subcategories of each of congruent and incongruent behaviour which people exhibit within an organisation are defined and symptoms are described. The individual outcomes of stress are characterised by physical and psychological health problems. The deleterious effects of work-related stress and burnout on the financial health of an organisation have been found to be considerably significant. At a time when there is far-reaching curriculum change within the education system, it is considered appropriate that teacher stress should be researched. An examination of the perceptions of teachers at a time of considerable reorganisation should prove to be beneficial in assisting staff with the implementation of future curriculum changes.
DEFINITIONS

Occupational stress is the psychological conflict which occurs where occupational demands and opportunities are at variance with the worker's capacities, needs and expectations. McGrath (1976) defined stress as "... the anticipation of inability to respond adequately to perceived demand, accompanied by anticipation of negative consequences for inadequate responses". While small degrees of stress form part of human needs, Eddington (1984) saw concentrated stress as "... a trauma to the emotions rather than to the body - although both can be present."

Teacher burnout was defined by Seidman and Zager (1987) as "... a negative pattern of responding to stressful teaching events, to students, and to teaching as a career as well as a perception that there is a lack of administrative support". Although there is a relationship, burnout and stress are not synonymous as the former is an outcome of stress. Seidman and Zager (1987:27) pointed out that burnout is contagious: "When dissatisfied and depressed teachers are present in a school, others can be infected with the disease, with lethargy, cynicism and despair".

Difficulties occur when defining, in a way which can be measured, the difference between work-related stress and pressures attributable to personal factors such as family
2. TEACHER STRESS

crises. Hosking and Reid (1985) suggested that this is probably
the reason for so much diversity in the literature. Furthermore, the material may reflect the bias of the
researcher. Blase (1986:14) saw the difficulties inherent in
highly structured research instruments which "... control the
research subject's responses so that they do not accurately
reflect the subject's perceptions of a given phenomenon".

CAUSES OF STRESS

When defining causes of stress, Kottkamp and Travlos
(1986) used the four situational variables of role ambiguity,
role conflict, role overload and powerlessness which they
called "stressors":

• Role ambiguity refers to instances where inadequate inform-
atation about expectations is available for an individual when
carrying out tasks. Role ambiguity has been linked with job
dissatisfaction, anxiety and poor production (Kahn et al,
1964), increased pulse rate with and high blood pressure
(French and Caplan, 1973), lower self-esteem (Margolis et al,
1974), and depression and resentment (Caplan and Jones, 1975).

• Role conflict exists when a person perceives incompatible
work demands. It is related to job dissatisfaction, a sense of
futility, low self-esteem and job-related tension (Kahn, 1964).

• Role overload occurs where an individual perceives a work
load which is greater than he or she can complete in the
2. TEACHER STRESS

available time. A variety of individual reactions are manifest including low job satisfaction, poor interpersonal skills, tension (Kraut, 1965), absenteeism, low motivation and low participation in organisational planning (French and Caplan, 1973).

Powerlessness describes the condition where an individual feels a lack of control over sought outcomes. It is related to job dissatisfaction (Shepard, 1972), poor performance, tardiness (Cummings and Manring, 1977), low self-esteem and anxiety (Gilbert and Mangelsdorff, 1979).

AFFECTIVE RESPONSES

The affective responses to work were identified as emotional exhaustion and job satisfaction:

Emotional exhaustion (Schwab et al, 1986 and Seidman, 1987), job dissatisfaction, physical exhaustion and other behavioural, psychological and physical manifestations are related to burnout. Emotional exhaustion refers to a condition arising from the feeling of depletion of emotional resources and that one is "... no longer able to give to others on the psychological level" (Kottkamp and Travlos 1986:236). It is also related to cynicism, inflexibility, negativism and a sense of helplessness and hopelessness (Freudenberger, 1977), high absenteeism, high staff turn-over, and low morale (Maslach and Jackson, 1981 - see appendix, figure 12).
2. TEACHER STRESS

Job satisfaction is an individual's affective evaluation of a job (Kottkamp and Travlos, 1986) and is related negatively to the outcomes of poor mental health (Kornhauser, 1965), early retirement (Vroom, 1964), staff turn-over (Waters and Roach, 1971), absenteeism (Porter and Steers, 1973), tardiness and grievances in organisations (Mirvis and Lawler, 1977).

A major source of concern about teacher stress is the consequences it has for the organisation. The effects of stress are noticeable particularly in a time of radical curriculum change.

HUMAN BEHAVIOUR IN BUREAUCRACIES

LaBier (1988) described occupational stress in a bureaucracy and pointed out that pressure may lead to irrational and pathological behaviour. Two types of behaviour may be exhibited - congruent, in which there are no symptoms, and incongruent in which symptoms are presented.

CONGRUENT BEHAVIOUR

The characteristics of congruent behaviour exist in two categories - the irrational adaptives and normal positives.

Irrational adaptives include those individuals with a lust for power, a desire to subjugate or destroy others and a strong desire for personal gain. Other individuals may have a passive dependency with tendencies for submission to masochistic humiliation.
Normal positives are "normal" by traditional psychiatric criteria. They pursue and accept as normal and well-adjusted a desire for success, recognition and security. Like most people, they possess some minor irrational repressed attitudes. Their productive orientation (Frorum, 1947) is more dominant. Stimulation is sought from their work and they are not afraid to leave a job for one which offers greater interest or better prospects. The personal development of the normal positive character is clearly defined.

Situational changes, either positive or negative, produce the symptoms described in each of the above.

INCONGRUENT BEHAVIOUR

The two categories of incongruent behavior are the irrational non-adaptive and normal negative.

By traditional psychiatric criteria, irrational non-adaptive people are emotionally disturbed and show symptoms of the disturbance in their work. Their passions interact with aspects of the "bureaucratic psychostructures" in ways which result in the manifestation of psychiatric symptoms in the work setting. Classification is twofold and is dependent on the severity of the disturbance. In the first, significant emotional disturbance interferes with both basic relationships and the ability to work throughout most of their lives. Gross distortions of reality exist with an inability to comprehend or
exercise work responsibilities which result in impaired relations with co-workers. Of the second, there are clear neurotic conflicts and symptoms in the job setting - anxiety, depression, alienation, destructive tendencies and an unconscious conflict arising from relationships of early life.

Normal negatives show psychiatric symptoms at work without any significant underlying pathology. Within the normal range of character, they develop symptoms which, at times, respond to the situational stress or the pathological aspects of their career, for example, lack of training or competency, or to the work environment. Traits of the predominantly productive person such as loyalty, fairness, authority and assertiveness may develop into the submissiveness, overbearing domination, withdrawal or destructiveness of an unproductive person.

In relating the four stressors and two affective responses to organisational consequences, Kottkamp and Travlos (1986) identified the school principal as having a significant impact on the behaviours of the individual teacher within the school organisation.

SCHOOL LEADERSHIP

The structure of an organisation is often viewed in diagrammatic form with the chairman of the board at the apex and the newly-appointed rouseabout at the base. Chernis (1980) and Green (1984) confirmed the connection between the structure
of an organisation and the stress encountered by those who occupy positions within that organisation. It is contended, however, that the actual structure provides less stress than the encumbents' leadership and motivational styles. Caldwell and Forney (1982) noted that the greatest influence for determining direction, climate and leadership in a school is the example set by the principal.

The principal's ability to project the vision which he or she holds for the school has been referred to as "thrust behaviour". Kottkamp and Travlos (1986) stated that high thrust behaviour is a necessary component of the school climate. Desirable outcomes arising from this behaviour are greater confidence in the individual's and the school's effectiveness (Andrews, 1965), greater loyalty to the organisation (Kanner, 1974), higher student morale and lower drop-out rates (Hartley and Hoy, 1972, Mullins, 1976), greater adaptability to change (Thomas, 1976), and higher job satisfaction (Schwandt, 1978). "The principal with high thrust behaviour is likely to have a positive effect" on the school whereas the principal with a low thrust behaviour "... is likely to have a negative effect" (Kottkamp and Travlos 1986:238).

Due to the position held within the organisational structure, the effects of continued stress on the principal can lead to disastrous consequences for the whole school.
Research into teaching stress has received some attention, mainly in Canada and the United States. Research findings have been included in this chapter as they bear relationships with perceptions of teaching in Australian schools.

**REVIEW OF RESEARCH**

Lusthnus (1975) found that principals in the province of Quebec, Canada, experienced more strain in their jobs than other professional groups. In a survey of all Oregon school administrators from vice principal to superintendent, Gmelch et al. (1982) revealed that 70 percent of the total life stress which administrators experienced arose from their jobs. Sixty percent responded to the survey. Earlier research undertaken by Swent and Gmelch (1977) found that 75 percent of administrators' life stress came from their jobs.

In a study of administrators from Saskatoon, in the province of Saskatchewan, Canada, Syrotuik and D'Arcy (1983) found that role conflict was the most important source of stress. Two years later, however, MacPherson reported low levels of role conflict, role ambiguity and emotional exhaustion and mild to moderate levels of overall job stress in principals in Nova Scotia. Jankovic (1983) sampled 88 percent of Alberta's principals and found that only mild to moderate levels of stress were experienced. Kottkamp and Travlos (1986:235) pointed out that these conflicting results were
2. TEACHER STRESS

"... probably due to the differing conceptual frameworks and operational definitions used in the various inquiries".

Ratsoy and Friesen (1985) researched stress in Alberta, Canada, in 1983-4. The aims of the research were to:

• Obtain the views of various categories of teachers concerning their major sources of occupational stress.
• Investigate the intensity and frequency of stress experienced by district personnel.
• Compare the levels of stress experienced by district personnel with those identified in comparable studies.
• Examine the organisational consequences of the occupational stress experienced in the district.

Ratsoy and Friesen drew a number of major generalisations from their research:

1. Positions were identified, particularly English, social science, and elementary general grade teachers, where the percentage of highly stressed incumbents is greater than average.

2. The work load factor was clearly rated highest among the potential sources of stress.

3. The most stressful situations are not necessarily those which are frequently encountered.

4. Problem students were viewed as a major source of stress.

5. Among school-based personnel, high levels of stress are
2. TEACHER STRESS

associated with the middle years of experience in the system and with middle years in the position held.

6. Although the proportion of respondents reporting burnout was lower than in some organisations, there were still many who reported a high degree of burnout.

7. The majority of respondents indicated dissatisfaction with the stress-coping programs in the district.

8. Personnel appeared to rate somewhat higher on Personal Accomplishment burnout than the norms established for the instrument.

9. Background variables did not explain variance in burnout scores.

10. Superordinates were viewed as a resource in stress situations by only one in eight respondents.

In their research into the sources and consequences of teacher burnout in New Hampshire, U.S.A., Schwab, Jackson and Schuler developed and tested a burnout model (which does not, however, include the variable of personality). "Whereas the existing empirical studies ... examined isolated organizational and personal variables in relation to burnout, none has looked at these variables in combination" (Schwab et al, 1986:19).

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2. TEACHER STRESS

### SOURCES OF BURNOUT

**Organizational Factors**
- Role Conflict
- Role Ambiguity
- Participation in decision making
- Social support networks
- Reward structure
- Autonomy

**Personal Factors**
- Expectations for profession
- Background variables: sex, age

### PSYCHOLOGICAL REACTIONS

(Aspects of Burnout)
- Emotional exhaustion
- Depersonalisation
- Personal accomplishment

### CONSEQUENCES

- Intention to leave job
- Absence from work
- Effort exerted on the job
- Lower quality of personal life

---

**Figure 2. MODEL OF TEACHER BURNOUT**
(Schwab et al, 1986)

The results obtained by Schwab et al supported the theory of the burnout phenomenon among teachers. On average, aspects of emotional exhaustion were experienced by teachers almost every week. "Fortunately, feelings of personal accomplishment are experienced weekly and probably serve to keep most teachers somewhat motivated" (Schwab et al, 1986). The causes of burnout were cited as being role conflict, role ambiguity, role overload (high professional expectations), powerlessness, low
autonomy, low participation in decision making, little collegial support, and a reward/punishment system of administration.

Schwab et al concluded that teachers suffering from burnout were more likely to expect to leave teaching, exert less effort teaching than they once did, have difficulty relaxing, controlling their temper and relating to family members, and be absent from work.

It was also found that the consequences of burnout were related with aspects. Teachers experiencing high levels of emotional exhaustion were more likely to leave teaching, be absent from work, and experience problems with family and personal life. Individuals experiencing depersonalisation or low feelings of personal accomplishment also had family difficulties and tended to exert less effort in their jobs. "In summary, not only does the quality of work performance appear to decline but so does the quality of life beyond teaching" (Schwab et al, 1986:26).

Findings from the research carried out by Kottkamp and Travlos (1986) include the following:
- Role conflict, role overload and role ambiguity are all related at moderate levels.
- Role conflict, overload and ambiguity are relatively independent variables.
- All job stressors correlate positively with emotional
2. TEACHER STRESS

exhaustion and negatively with job satisfaction.
. None of the stressors, job satisfaction nor emotional
exhaustion have significant relationships with thrust
behaviour.

Seidman and Zager (1987) researched teacher stress in
southern Indiana, U.S.A.. Teachers associations'
representatives rated stressfulness and degrees of burnout
within their schools. Four schools were rated as low and ten
schools as high. Comparing the two ratings, schools with low
stress and burnout were found to have teachers who gained
greater satisfaction from their careers, more perceived
administrative support available to teachers, teachers who
coped better with job-related stress, and more positive
attitudes towards students.

Blase (1986) categorised major-sources of stress from the
responses to a questionnaire which was administered in
universities of southern and western U.S.A.. Blase ranked these
by obtaining a percentage of the number of times a similar
response was provided. Categories were defined as
organisational (39 percent), student (17.8 percent), admini-
strative (16.9 per cent), teacher (9.4 percent), parents (5.1
percent), occupational (3.1 percent), personal (2.7 percent),
academic program (2.3 percent), public attitudes (1 percent),
and miscellaneous (2.6 percent). Blase then prescribed a number
of subcategories which dealt with aspects of the major categories.

A number of stress themes underlying responses have been revealed - control of time, which is "directly connected to an individual's perceptions of coping efficacy", quantitative and qualitative overdemand, which refers to receiving too many demands and a perception that the tasks are too difficult, qualitative and quantitative underdemand, where there are too few demands and the work is perceived as too simple to be tolerable, undermining effective instruction of students and detracting from general performance effectiveness, which relates to an inability to operate and an inadequacy of resources to achieve performance goals, threatening to self, where work factors are perceived as threats to basic needs or values, change, where the individual "perceives that a stimulus requires significant emotional, attitudinal or behavioral adjustments", and negative feeling states, arising from interactions with stressful conditions.

Wilkinson (1988) researched stress in a North Tyneside (U.K.) school. He also identified the themes of control of time, inability to attain desired standards, shortages of resources, conflict between the individual's desires and work demands, and ambiguity from a lack of delineation of responsi-
2. TEACHER STRESS

CONSEQUENCES OF STRESS

Hosking and Reid provide useful information about work-related stress in Victoria. In the years 1982-3, the State Insurance Office compensation bill for the Victorian Education Department employees rose $6.2 million from the 1981-2 assessment. It was further estimated that 45 percent of the amount was attributable to "... mental conditions such as work-related anxiety" (1985:4). Fifty one percent of the 212 teachers who retired early were reported to have done so as a means of distancing themselves from their causes of ill-health. The bill arising from their actions was estimated by the accountants Coopers and Lybrand at $70.3m.

Research into the outcomes of occupational stress has shown it to be a primary cause of poor physical health. Common among health problems are high blood pressure, increased blood pulse (Cinciripini, 1986), frequent headaches and increased irritability. Current medical opinion also indicates that gastritis, duodenal ulcers (Parry et al, 1986), irritable bowel syndrome (Milne et al, 1986), orthopaedically unidentifiable back pains and heart failure are often caused through work-related tension (Silverman et al, 1987). Other manifestations occur in the poor psychological health described earlier to which Knox et al (1986) added increased
anxiety and chronic depression. Organisational problems include reduced interest on the part of the employee, high staff turn-over, and increased absenteeism, all of which influence those within the organisation whose work is linked with the stressed individual (Sergiovanni and Starratt, 1979).

COPING STRATEGIES

Exercise, time management, and organisational changes are some of the methods by which most people cope with stress. While these may provide temporary relief, they do not address the real causes of stress (Hosking and Reid, 1985). Coping strategies can be identified as direct action which are concerned with changing the source of tension, and as palliative, which aims to reduce the feelings arising from that tension. According to Wilkinson (1988), the discussion of problems with colleagues is the strategy which most teachers use.

A number of strategies to reduce the incidence of burnout and consequences arising from burnout were offered by Hosking and Reid (1985):

. Establish clear lines of authority and responsibility to reduce conflict and ambiguity.
. Solicit teacher input in decision making to reduce feelings of powerlessness.
. Facilitate the development of social support among teachers
by providing time for those with expertise to help others. 
. Where personnel are appointed by the school, all staff should be involved in the selection process to increase feelings of responsibility and ownership. 
. Involve teachers in goal setting and self-evaluation to reduce role conflict and role ambiguity. 
. Encourage interaction between experienced staff and beginning teachers to increase collegial support.

**SUMMARY**

Concepts and variables which are important in understanding the phenomenon of teacher stress have been identified in this chapter.

The definitions which have been provided and the accompanying research demonstrate that stress has consequences for the organisation and its goals. Problems with separating personal factors from organisational pressures need to be addressed.

Considerable sums of money are spent by governments in supporting those who, through work-related stress, cannot be employed in a full-time capacity. The psychological conflict of stress may manifest itself in a number of ways which include physical illnesses, poor psychological health and difficulties within an organisation.

The stressors of role ambiguity, role conflict, role
overload and powerlessness lead to job dissatisfaction and where any of these appear in excess, emotional exhaustion can result. Burnout occurs where the individual is physically and psychologically exhausted to the extent where work is no longer possible.

LaBier's (1988) congruent and incongruent pathological behaviours affect the achievement of organisational goals and are particularly perceptible in those who occupy leadership positions.

While studies have shown that a school principal has the greatest influence in the well-being of a school, effectiveness cannot be achieved by the principal alone. All others within the school provide an essential service - a chain is only as strong as its weakest link. Stress placed on an individual may influence the proper functioning of sections of the organisation which will, in turn, diminish the organisation's overall effectiveness.

The following table presents definitions and sample variables of the concepts which have been discussed in this chapter.
2. TEACHER STRESS

Figure 3. CONCEPTUAL FRAMEWORK: TEACHER STRESS

<table>
<thead>
<tr>
<th>CONCEPT</th>
<th>DEFINITION</th>
<th>SAMPLE VARIABLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burnout</td>
<td>Exhaustion of physical and psychological resources.</td>
<td>Negative response to events, profession, career structure, students, associates. Work is no longer possible.</td>
</tr>
<tr>
<td>Stress consequences</td>
<td>The effects which pressure from an organisation has on an individual.</td>
<td>Personal - high blood pressure, increased pulse, ulcers, irritability. Organisational - reduced participation, high staff turnover, absenteeism.</td>
</tr>
<tr>
<td>Causes of stress</td>
<td>Factors which are unique to the system and contribute to stress.</td>
<td>Working conditions, role problems, pupil problems, time pressures.</td>
</tr>
<tr>
<td>Stressors</td>
<td>Organisational factors which contribute to stress.</td>
<td>Role conflict, role ambiguity, role overload. Powerlessness is a dimension of alienation.</td>
</tr>
<tr>
<td>Role conflict</td>
<td>A perception of incompatible work demands.</td>
<td>Job dissatisfaction, high job-related tension, lower self-esteem, greater sense of futility.</td>
</tr>
<tr>
<td>Role ambiguity</td>
<td>Inadequate information about work expectations.</td>
<td>Job dissatisfaction, poor production, lower self-esteem, dissatisfaction with life.</td>
</tr>
</tbody>
</table>
### Figure 3 (contd). CONCEPTUAL FRAMEWORK: TEACHER STRESS

<table>
<thead>
<tr>
<th>CONCEPT</th>
<th>DEFINITION</th>
<th>SAMPLE VARIABLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role overload</td>
<td>Perception of a work load greater than can be accomplished.</td>
<td>Low job satisfaction, poor interpersonal skills, low motivation, absenteeism, low participation.</td>
</tr>
<tr>
<td>Powerlessness</td>
<td>Perception that an individual cannot control sought outcomes.</td>
<td>Job dissatisfaction, poor work performance, tardiness, lower self-esteem, increased anxiety.</td>
</tr>
<tr>
<td>Affective responses</td>
<td>Manner in which an individual reacts to the work environment.</td>
<td>Job satisfaction, emotional exhaustion.</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>An affective evaluation an individual experiences towards a job.</td>
<td>Negatively related to absenteeism, high staff turnover, tardiness and grievances.</td>
</tr>
<tr>
<td>Emotional exhaustion</td>
<td>The feeling of depletion of emotional resources.</td>
<td>Sense of physical exhaustion, lack of any positive feelings, low morale, high absenteeism, inflexibility, negativism, cynicism. A subset of burnout.</td>
</tr>
<tr>
<td>Congruent behaviour</td>
<td>Lack of symptoms of irrational and pathological behaviour with an organisation.</td>
<td>1. Irrational adaptives: a lust for power and to subjugate. 2. Normal positives: possess minor irrational repressed attitudes.</td>
</tr>
<tr>
<td>Incongruent behaviour</td>
<td>Symptoms of behaviour caused by stress are present.</td>
<td>1. Irrational nonadaptives: a unsatisfactory relationships, inability to work. b. Anxiety, depression, alienation, destructive tendencies. 2. Normal negative: Symptoms developed in response to situations or environment.</td>
</tr>
</tbody>
</table>
### Figure 3 (contd). CONCEPTUAL FRAMEWORK: TEACHER STRESS

<table>
<thead>
<tr>
<th>CONCEPT</th>
<th>DEFINITION</th>
<th>SAMPLE VARIABLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thrust</td>
<td>A dynamic behaviour characterised by efforts to &quot;move the organisation&quot;.</td>
<td>Task oriented, essential to open school climate, higher teacher satisfaction and morale. Not directly related to stressors or affective responses.</td>
</tr>
</tbody>
</table>
Chapter 3

RELATED CONCEPTS:
NEEDS, MOTIVATION AND INCENTIVES

The purpose of this chapter is to identify further concepts and variables which form a background to the phenomenon of teacher stress and which appear to be relevant to exploring the relationship between teacher stress and curriculum change.

OVERVIEW

The proposal that people work best when they are achieving the greatest satisfaction from their job is a major theme of this chapter.

A teacher's task is to educate children. The curriculum is the overall plan of that education. The needs which are associated with the profession, the ways in which teachers may be motivated, and the stress literature which is related to needs and motivation, are discussed.

Problems arise when student enrolments in schools decrease. These difficulties occur in curriculum offerings, teacher transfers, career progression and school closure. Lack of a collaborative environment and minimal participation in the decision process in these areas can lead to low morale.

Motivation is a stimulated drive to satisfy a need. The
3. RELATED CONCEPTS

theories formed by Herzberg, Maslow, McClelland, McGregor, Argyris and Vroom are examined and relationships with teacher stress are considered.

Career ladders are a form of environmental incentive in which the extrinsic and intrinsic are involved. It has been argued that if there is continual change within an organisation, a career ladder is unnecessary.

NEEDS

A need has been described as a state of tension in a person which directs the person's behaviour towards certain goals. Gates et al (1948:617) noted: "Need ... is used as an inclusive term to embrace drives, impulses, goal sets, urges, motives, desires, wants and wishes".

TEACHERS' NEEDS

Reynolds and Clark (1982) classified needs into three groups - those pertaining to education as a whole, to the school, and to the individual teacher. The Schools Commission Report (1977:18) indicated a fourth group which appertains to working groups of teachers.

Needs are related to periods of teaching life which Morant (1981) classified as induction, extension, refreshment, and conversion (see appendix figure 15).

Fessler et al (1983) divided the teaching career into stages:

1. Pre-service - this is the initial preparation in a college or university, or retraining for a new role.
3. RELATED CONCEPTS

2. Induction - the first few years of teaching. The teacher seeks acceptance by students, other teachers and supervisors.

3. Competency building - the teacher strives to improve teaching skills.

4. Enthusiasm and growth - practitioners receive high levels of job satisfaction and progress in professionalism.

5. Career frustration - job satisfaction is low. Teacher burn-out is more noticeable in this stage.

6. Stable and stagnant - the teacher does what is expected but little, if any, more.

7. Career wind-down - retirement or a career change is in sight.

8. Career exit - the teacher retires or otherwise terminates the job.

Collegial and social support assists the teacher in meeting professional needs at all stages. The importance of this support lies in the "... receipt of understanding which can reassure an individual's value as a colleague, helping self-esteem, and reducing role ambiguity" Wilkinson (1988:191).

CONTRACTION OF SCHOOLS

As in other parts of the western world, enrolments in many Australian schools are declining. An article appearing in The Bulletin (April 19 1988:38) predicted:

In 1986, 1.68 million people in Australia were aged 65 and over - 10.5 percent of the total population (16m.). In 2025, 3.8 million people will be 65 and over - 16.1 percent of a total population of 23.8 million people.

During the period of contraction, teachers' needs take on an added dimension. Bush (1980:460-3) identified serious problems involved during contraction in the areas of
3. RELATED CONCEPTS

curriculum offerings, teacher redeployment, school closure and career progression. "Solutions to a number of role problems causing stress (e.g. administrative, pastoral vs. academic demands, loss of self-esteem) may be difficult to find in times of contraction" (Wilkinson, 1988:191).

THE CURRICULUM

The number of teachers at a school diminishes in line with student enrolments. Difficult curriculum decisions have to be made by principals and senior staff. Subjects which cater for a small number of students may become luxuries which schools may be unable to afford. Due to lower staff turn-over, the curriculum could become fossilised with long term aims put to one side and staff pursuing their own interests (Hoy and Miskel, 1978).

STAFF TRANSFERS

During contraction, movement from one school to another considerably decreases. Most change is based on female staff leaving due to pregnancy, because a husband is transferred, or through "natural wastage". "It was mostly heads and deputy heads who talked of another danger of little staff movement - that of teachers getting 'stale' or 'falling into a rut'.'' Frustrated teachers may "satisfice" (March) rather than optimise: "Some would take the easy way out, and get by in their teaching with as little effort as is required" (Bush 1980:477). Greater disenchantment may be noticeable with a resultant lack of motivation in the whole school staff.
3. RELATED CONCEPTS

PROMOTION PROSPECTS

The number of promotable positions diminishes in line with falling student enrolments. An absence of promotional impetus may turn attention from school goals with a consequent decrease of effectiveness caused by a conflict between personal satisfaction and job dissatisfaction. Wilkinson (1988:190) added:

Symptoms of role conflict can include ... low morale in terms of job satisfaction, or a sense of futility and tension. To overcome conflict and ambiguity there is a need to encourage the creation of an environment for collaborative interaction.

Bush (1980:476) wrote of the growing evidence of "moonlighting" jobs undertaken by some teachers which "... seems to be linked to the degree of commitment to the job of teaching itself, and to growing disenchantment".

If movement initiated by external sources is unavailable, school administrative personnel could provide refreshment by regularly instituting positional changes within the school and encouraging innovation (Wilkinson, 1988). These changes may relieve stress from role conflict and powerlessness. However, attention would need to be given to role ambiguity arising from uncertainty in occupying a different position and role overload which could result from assuming different responsibilities.

SCHOOL CLOSURE

Bush (1980:467) pointed out that the over-riding criterion for deciding which school should close is its popularity: "If parents believe that school A rather than school B will provide
a better education for their children, then let officials and politicians alike recognize the reality of demand".

**MOTIVATION**

An understanding of the ways in which people are motivated assists in comprehending the manner in which curriculum change is related to teacher stress.

Motivation has been described as a matter of reducing tension arising from unsatisfied needs. Robbins (1980:294) described motivation as an internal condition, generated by a perception of goal value, with certain desired outcomes:

An unsatisfied need creates tension which stimulates drives within the individual. These drives generate a search behaviour to find particular goals that, if attained, will satisfy the need and lead to the reduction of tension.

Organisations provide incentives with the intention of inducing cooperative behaviours from members of that organisation. Spuck referred to early motivational theories and their limited view of the employee being motivated solely by fiscal reward. Currently, organisations provide other incentives to gain cooperation (Spuck, 1974). However, in Wilkinson's research of stress (1988:186), it was found that "senior management ... in particular voiced concern over the degree of support given by external agencies".

"A person stops at a traffic light not because the light turns red, but because that person says 'I want to stay alive'" (Glasser, 1987:656). Stimulus/response theory postulates that human behaviour is caused by external events.
"Nothing will change for the better until educators and others understand that stimulus/response theory – under which everyone operates – is wrong."

The Weekend Australian (19.3.88) contained an article in which it was written that the chief executive officer of a company should be less a commander and more a coach who "converts people and persuades them to shared values". The C.E.O. of Averett Express, a successful Tennessee trucking company, explained: "We just take the coach approach – lots of feedback, lots of encouragement; our people do the rest". Effectiveness increased when the 1400 employees were divided into "product-improvement groups" of between three and ten members.

MOTIVATION THEORIES

The question of how people are motivated was examined by Maslow, McGregor, Herzberg, Vroom, McClelland, and Argyris.

Maslow's Theory

Maslow classified needs into the following hierarchical order:
1. Physiological needs, including hunger, thirst, shelter, sex, and other bodily needs.
2. Safety needs, including security and protection from physical and emotional harm.
3. Social needs, including affection, belongingness, acceptance and friendship.
4. Esteem, involving internal factors such as self-respect,
autonomy, and achievement. External factors under this heading include status, recognition by others, and attention from others.

5. Self-actualisation, the drive to become what one is capable of becoming, involves personal growth, achieving one's potential, and self-fulfilment.

Robbins (1980) explained that as each group of needs becomes substantially satisfied, the next need becomes dominant. However, movement up the hierarchy does not necessarily preclude downwards movement as an individual may lose interest in satisfying needs of a higher order if deprived of lower level fulfilment. "... When dealing with people with whom we work, most of us have a tendency to behave as though the needs of others, particularly our subordinates, are at lower levels." (Everard and Morris, 1985:28).

Figure 4. MASLOW'S HIERARCHY
(Robbins, 1980)
3. RELATED CONCEPTS

Despite the apparent logic and acceptability of Maslow's work, it appears that research has not confirmed the theory. Robbins (1980:296) wrote: "Maslow provided no empirical substantiation, and several studies that sought to validate the theory found no support".

**McGregor's Theory**

Seemingly opposing aspects of supervision are described by McGregor's theory which is broadly dichotomous in nature. The negative aspect, which McGregor called **Theory X**, holds that people find work inherently distasteful and will attempt to avoid it, that most people are unambitious, shirk responsibilities and seek direction whenever possible, that there is little capacity in most employees' abilities to solve problems, and that workers must therefore be coerced to achieve the organisation's objectives.

The imposition of a reward/punishment style relates to a condition which may be seen as threatening to the worker's beliefs, values and needs. Role strain is likely to result in stress when it undermines central dimensions of the self. Blase (citing Pearlin et al, 1981) further explained: "The prolonged presence of noxious stimuli, especially the kind represented in role strains, seems to strip away the insulation that protects the self against threats".

**Theory Y** is described as being positive in nature. The underlying assumptions are that work can be seen to be as natural as play if conditions are favourable, that employees
will exercise self-direction and their capacities for creativity if they have a sense of commitment, that creativity is not necessarily the province only of those who administer, that motivation occurs at levels similar to those described by Maslow, and that organisational gains can be more easily achieved if employees are able to control their own work activities (Robbins, 1980; Everard and Morris, 1985).

Overuse of Theory Y may lead to role overload where job complexity is perceived to increase and work demands are seen as being too difficult. An outcome of overload is confused thinking (Blase, 1986:23):

From an interactionist's standpoint, stress occurs when demands tax or exceed resources ... an individual's capacity for attention shrinks ... resulting in cognitive fatigue and insufficient attention to perform other demanding tasks.

**Herzberg's Theory**

Herzberg postulated that satisfying factors are different from those which dissatisfy. He grouped the characteristics of achievement, recognition, interest in the work, responsibility, career advancement, and personal as intrinsic satisfying factors. Extrinsic dissatisfying factors include company policy and administration, supervision, relationships with supervisors, peers and subordinates, the conditions of the workplace, and salary. In Herzberg's view, a dual continuum exists — satisfaction is the opposite of no satisfaction, dissatisfaction of no dissatisfaction. Attending to dissatisfying hygiene factors results in no dissatisfaction but not
3. RELATED CONCEPTS

necessarily in satisfaction. However, opportunities for satisfaction are increased (Everard and Morris, 1985). It was in this vein that Wilkinson (1988:186) wrote: "Senior and middle management reported frustration arising from the need to provide resources, whilst more junior staff reported stress arising from a lack of materials to do the job."

Herzberg held that motivation can be improved by emphasising intrinsic factors such as recognition, the work itself, growth and responsibility. Ainley et al (1986) stressed that the long-term consequences for the educational system are directly related to levels of teacher satisfaction.

House and Wigdor (1967) questioned Herzberg's theory on the grounds of its methodology, reliability, lack of satisfactory measurement, inconsistency with research, and the assumption of a relationship between satisfaction and productivity. However, Herzberg's theory can be useful in its relationship with educational reward as it is largely consistent with teachers' accounts of their work (Johnson: 1986).

Vroom's Theory

Vroom's contingency theory views motivation as a response from a person's perceived needs and their alignment with specific goals. In this, it shares some of Herzberg's features. The expectancy theory holds that satisfaction is gained from performance and emphasises performance as an end rather than a means of achieving a goal, the reward being in participation.
3. RELATED CONCEPTS

(Sergiovanni and Starratt 1979:171).

An optimal level of arousal is essential to performance. However, "... under conditions of high levels of arousal, attention becomes restricted, ... task relevant cues are neglected", and a narrowing of attention is likely to affect performance (Blase, 1986:24).

McClelland's Theory

The three elements of McClelland's theory may be related to the third and fourth level (Porter, Robbins) or the three higher orders (Everard and Morris) of Maslow's pyramid:
1. The need for achievement ($n_{Ach}$) - to excel and achieve in a set of standards and to strive for success.
2. The need for power ($n_{Pow}$) - to make others behave in a way which they may not have otherwise done.
3. The need for affiliation ($n_{Aff}$) - for friendly and close interpersonal relationships.

"From his research into the achievement need, McClelland found that high achievers differentiate themselves from others by their desire to do things better" (Robbins, 1980: 297). Not entrusting achievement to chance, they set themselves goals to attain and are unlikely to accept goals set for them by others. They seek advice mostly from experts or those who can provide the necessary information or skills. Entrepreneurial skills play an important role. The achiever tends to set attainable but challenging goals. Although payment may be seen as a gauge of success, the achiever is not likely to see it as a major
motivating force. Where achievement drives are weak, responsibility and participation increases motivation (Everard and Morris, 1985).

School effectiveness can be enhanced by teachers with nAch characteristics as they demand much of the school. If individuals with high nAch are not provided with work of a sufficiently challenging nature, boredom may result in skewing the individual's focus from school goals. Blase (1986:24) added:

An interactional model of stress argues that conditions perceived as underdemanding frequently result in boredom and dissatisfaction, mental impoverishment, alienation, distractibility and loss of initiative and capacity for involvement.

McClelland's research evinced a relationship of nAff and nPow with success. Those with low nAff and high nPow appeared to be the best administrators.

Validation of McClelland's research has been reasonably successful but it appears that the nAch has been given the greatest and perhaps undue emphasis (Robbins, 1980).

Argyris' Theory

Organisations may use a "change agent", an internally trained person or a consultant, to help accomplish change. Argyris' change agent's major assignments are the generation of information, improvement of the decision process, and gaining commitment from the organisation's members (Robbins, 1980).

An understanding of the theories of motivation provides insight into various means of addressing teacher stress.
However, knowledge of theories requires practical application. To this end, the influence of the principal in setting the ethos of the school by translating his or her vision into common daily practice is of considerable importance.

THE PRINCIPAL'S INFLUENCE

A principal's "thrust behaviour" may provide an impetus for staff to share the ethic of the child as the centre of learning. The previously-mentioned Averett Express chief executive demonstrated this belief in the manner in which he motivated staff to work towards effectiveness. The infusion of professionalism in schools cannot be achieved by external bodies alone.

Thrust behaviour, which is not to be confused with brute force, assists in establishing the principal's vision of professional ideals so that they become integral parts of the modus operandi of all who are concerned with the child's education - "... an ideal state of affairs the passionate commitment to which drives leaders and followers to an intense and focused striving" (Starratt, 1988:2). However, Kottkamp and Travlos (1986) found that attempts to motivate others through setting a personal example do not necessarily affect the four stressors, job dissatisfaction or emotional exhaustion. Despite the findings, it is suggested that research which incorporated a slightly modified operational definition would reveal a link between a principal's acknowledgement of difficulties teachers countenance during school contraction and stress.
3. RELATED CONCEPTS

resulting from role conflict. Blase (1984) indicated support as an important method of coping with stressful feelings. Wilkinson (1988:191) thought along similar lines:

Individuals need help to reinforce their personal resources by the creation of conditions which can help them to influence their work situation, engage in meaningful and socially important activities, feel a sense of belonging to the work groups, and satisfy their needs for self-esteem.

A number of organisational schemes have been suggested and initiated to induce cooperative behaviours from employees.

INCENTIVE SCHEMES

Incentives are contemplated rewards leading to a modification of a person's behaviour (Mitchell et al, 1983). Some analysts hold that while "ancillary rewards" (Lortie, 1975:101) such as convenience of the timetable, security, and retirement benefits are incentives for prospective teachers, they are not as effective once a person is employed because they do not promote professionalism (Spuck, 1974). This relates to Herzberg's satisfying and dissatisfying factors. "To be effective ... incentives must be focused, variable, contemplated, and responded to with purpose" (Johnson 1986:61).

A classification of incentive schemes, the Teacher Reward and Satisfaction Scales, was developed in the United States. The extrinsic incentives category includes monetary rewards and ability to influence school policy; environmental incentives include support and recognition by the community, physical and structured social conditions; and intrinsic
incentives embrace pride of workmanship, social interaction with peers, and agreement with district goals and policy.

A similar survey was undertaken in Tasmania in 1985. The "Work Environment Scale" (Fisher and Fraser, 1983:231) examined the areas of involvement, peer cohesion, staff support, autonomy, task orientation, work pressure, clarity of task specifications, control over task, relationships with superordinates, acceptance of innovation, and physical comfort of the work place. Results from both studies indicate that extrinsic, environmental factors and intrinsic rewards attract recruits to teaching, and that the quantity and quality of intrinsic and environmental rewards correlate with teacher retention and, inversely, with absenteeism.

**MERIT PAY**

Johnson (1986:61) wrote: "The term 'merit pay' might be used to denote a bonus plan that supplements the standard pay scale and rewards teachers for special services". Merit pay, based on both expectancy and equity theories, assumes that value rewards and equitable compensation produce motivation. Johnson (1986) detailed an English scheme which concluded without decisive answers about its success. American schemes differ from the English in that payment is made to the school, not the individual.

Despite commonly-held beliefs, merit pay may not be as entirely effective as some would believe. A number of conditions must be met when instituting the plans which Lawler
3. RELATED CONCEPTS

(1983) described: the reward must be seen by the worker to be of value, measurement of performance must be valid and conclusive, assessments must take into account levels of performance, information about assessments and methods of reward must be available, trust in the scheme must be high, and workers must inwardly accept the merit system. If Lawler's analysis is correct, merit pay would be difficult to sustain because the process is closely tied with the product, work is successive, and mutual understanding and cooperation is of great importance. Mutual support is particularly relevant where stress arises as the major thrust of a support group "... is its role in legitimating (i.e., recognizing and accepting the feelings of the individual under stress" (Blase, 1984:182).

The criteria for selecting the most suitable employee incentive scheme are:

. Positive rewards are more powerful than negative sanctions.
. Rewards are effective only when related to expectations of performance.
. Effort, as well as results, should be acknowledged.
. Rewards should be accessible to not only those who achieve but also to those who do as well as they can.
. Continuous effort is more valuable than "sporadic performance of a heroic nature".
. The chief purpose should be organisational and individual productivity improvement.
. Teachers should have considerable control over the frequency
3. RELATED CONCEPTS

of granting rewards.

Cooperative action and individual initiative should be encouraged in schools (Schlechty and Ingwerson, 1987).

Another common organisational incentive structure which is designed to motivate people is the career ladder.

CAREER LADDERS

A career has been described as a patterned series of adjustments which are made by an individual within a network of institutions and formal organisations. A career involves formal and informal relationships within the working environment (Becker, 1976). A career ladder consists of hierarchical positions within an organisation.

Steinle and Fletcher (1986) described four concepts of careers: as advancement, as a profession, as a sequence of jobs, and as a lifelong sequence of experiences.

The structure holds little, if any, opportunities for upward movement for teachers who wish to remain in the classroom nor does it directly relate to their classroom experience.

While catering for McClelland's \( \text{nAch} \) and perhaps his \( \text{nPow} \), with other applications to Maslow's "esteem" or "autonomy" orders, the relevance of the present system of promotion in the teaching profession is questioned.

The disquieting effects of the merit pay scheme in England in the 1800's and the broad opinions of other similar schemes, the diverse philosophies of motivation, the bottle-neck of
applicants and paucity of promotional vacancies, the seemingly unfair methods of teacher assessment used in some schools, and the decrease in school sizes with the resultant problems of lack of commitment to ensuring that the student receives the best possible education, present a problem to which a number of possible solutions have been tendered.

The Holmes Group (Murray, 1986) suggested a binary career for classroom teachers:

Career professional teachers would be people capable of assuming full responsibility not only for the classroom but also for certain aspects of the administration of the school and even of the university. The professional teacher would be an autonomous teacher in the classroom.

The instructor, a person whose ultimate career aspirations lie elsewhere, would teach for a few years under the supervision of a career professional teacher.

Guthrie (1986:306) provided another solution: "Researchers have repeatedly identified leadership as a crucial factor in school effectiveness". Guthrie viewed school-based management as the most important administrative task. Staff would be assigned to a school only with the principal's approval and, over time, the most capable of them should be able to earn as much as the school principal.

Suggestions from New South Wales

The N.S.W. Department (Telfer and Swann, 1986) proposed changes to their structure which are, in essence, a reallocat-
ion of duties and a change in the number of positions.

The Institute of Inspectors of N.S.W. Schools (Telfer and Swann, 1986) proposed an alternative structure again without changing the basic concept of a career ladder.

The N.S.W. Teachers' Federation short-term proposal is similar to that of the Institute of Inspectors. ("Annual Conference Report" 1982:12). Over the long term, the Federation propose:

... the elimination of hierarchies and the complete democratisation of all school administrators, the involvement of parents and students in creating educational policies of a school, and the creation of staffing procedures which will guarantee sufficient relief ... to permit effective implementation of those policies.

Telfer and Swann (1986) prescribed three principles which should underpin any promotion structure:

1. Teachers in secondary schools need scope for promotion within their subject specialisation.
2. The structure needs to accommodate teachers interested in administration.
3. Guidelines for participative management need to be formalised.

Tasmanian Suggestions

The Tasmanian Teachers' Federation's arguments for change were to motivate and satisfy staff through providing opportunities for leadership, and to permit movement into and out of posts of responsibility with dignity. Three models were offered for consideration.
In July, 1988, the Tasmanian Education Department proposed yet another scheme (The Price Proposal). The author recommended that the Department should retain a career ladder with some amendments which originate from emergent educational policies and practice. The paper's title, "A Common Administrative Structure", is a misnomer as allocations reveal a number of disparities which would add to the perceptions of role overload, a significant predictor of emotional exhaustion (Kottkamp and Travlos, 1986).

Further details of the four Tasmanian models may be found in the appendix (figures 16-19).

The present career ladder structure is unsatisfactory for many as they see their colleagues trying to do many things which are not directly concerned with teaching simply to get a good report. This was also indicated by Blase (1984:185):

Structural conditions of schools explain why, to some extent at least, schoolwide problems are frequently viewed by teachers in negative terms, such tasks are defined as depleting valuable time and energy which could be better spent in instructing pupils.

SUMMARY

Concepts and variables which form a background to the phenomenon of teacher stress and are considered relevant to exploring the relationship between teacher stress and curriculum change have been identified in this chapter.

A need is a lack of something which motivates an individual to seek a desired end. The working needs of teachers
3. RELATED CONCEPTS

may be categorised as preparing to enter the profession, developing teaching abilities in the job, gathering experience, and acquiring expertise. Collegial support assists teachers in meeting those needs and raising self-esteem.

Declining student enrolments decrease curriculum options, staff transfers and promotion opportunities and may result in schools closing. Contraction presents role problems which may prove difficult to solve.

Herzberg indicated "ownership" as a primary motivating factor. A responsibility of the school administration is to work consistently towards removing dissatisfying factors by ensuring that Maslow's lower order needs are met and by providing an environment in which the higher orders may be addressed. McClelland's "need for power" may be useful in achieving common purpose. The "need for affiliation" concerns shared values while the "need for achievement" involves seeking desired outcomes. McGregor's theory concerns two types of behaviour. One views coercion as a motivator and the other considers that workers are self-directing. Argyris believed that a change agent assists reform by improving the decision process. Vroom's theory of satisfaction from efficient performance should be directed towards the achievement of the school's aims. Knowledge that a principal is aware of the problems which teachers face helps to reduce stress arising from role conflict.

Structures built on rewards and threats often fail because
they do not take into account an individual's response to the professional growth factors of achievement, recognition from others, increasing interest in the job, and advancement in a career, or the personal growth factors of attaining a personal standard, accepting responsibility, and the drive to excel.

Merit pay schemes based on students' results produce inequities and iniquities when instituted by a regional educational authority. The best incentive structures view a career as a sequence of experiences through working life. They are linked with the higher orders of esteem, autonomy and self-actualisation of Maslow's hierarchy.

The following table presents definitions and variables related to the concepts which have been described in this chapter.

Figure 5. TEACHER STRESS: RELATED CONCEPTS

<table>
<thead>
<tr>
<th>CONCEPT</th>
<th>DEFINITION</th>
<th>SAMPLE VARIABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need</td>
<td>A state of tension which requires satisfaction.</td>
<td>Embraces drives, impulses, goal sets, urges, wants and wishes. Pertains to education, the school, groups of teachers and individuals.</td>
</tr>
<tr>
<td>Teacher needs</td>
<td>Needs of individuals relevant to the teaching profession.</td>
<td>Differ according to career stages. Dialogue is necessary to determine requirements.</td>
</tr>
<tr>
<td>School contraction</td>
<td>Reduction in student enrolment.</td>
<td>Affects curriculum offerings, teacher transfers, career progression. Schools may close.</td>
</tr>
</tbody>
</table>
### 3. RELATED CONCEPTS

#### Figure 5 (contd.) TEACHER STRESS: RELATED CONCEPTS

<table>
<thead>
<tr>
<th>CONCEPT</th>
<th>DEFINITION</th>
<th>SAMPLE VARIABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maslow's theory</td>
<td>Hierarchical order of needs.</td>
<td>Physical needs - hunger, thirst, shelter, sex.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Safety needs - security and protection from physical and emotional harm.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social needs - affection, acceptance, friendship.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Esteem - self-respect, autonomy, achievement, recognition.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self-actualisation - personal growth, achievement of potential, self-fulfilment.</td>
</tr>
<tr>
<td>McGregor's theory</td>
<td>Two aspects - Theory X: workers must be coerced.</td>
<td>Need for independence, responsibility, ambiguity tolerance, ownership, decision-making capability.</td>
</tr>
<tr>
<td></td>
<td>Theory Y: workers exercise self-direction.</td>
<td></td>
</tr>
<tr>
<td>Herzberg's theory</td>
<td>Satisfying factors differ from dissatisfying factors.</td>
<td>Intrinsic satisfying factors - achievement, recognition, interest, responsibility, career advancement, and personal growth.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Extrinsic dissatisfying factors - company policy and administration, supervision, relationships with supervisor, peers and subordinates, working conditions, salary.</td>
</tr>
<tr>
<td>Vroom's theory</td>
<td>Satisfaction is gained from performance and participation.</td>
<td>&quot;Expectancy&quot; - alignment with specific goals. Reward associated with performance. Personal goals dominate.</td>
</tr>
<tr>
<td>Argyris' theory</td>
<td>Change agent - individual who modifies and assists.</td>
<td>Generation of information, improvement of decision process, gaining commitment.</td>
</tr>
</tbody>
</table>
3. RELATED CONCEPTS

<table>
<thead>
<tr>
<th>CONCEPT</th>
<th>DEFINITION</th>
<th>SAMPLE VARIABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>McClelland's theory</td>
<td>Three needs - for achievement, for power, for affiliation.</td>
<td>Need for achievement can be taught High nAch persons demand high standards. Essential that high nAch be directed towards school goals.</td>
</tr>
<tr>
<td>Merit pay</td>
<td>A bonus plan.</td>
<td>Reward must be seen to be of value Performance must be valid. Assessment must consider level of performance. Information must be available. Trust must be high. Workers must &quot;own&quot; the system. Difficulties with assessment.</td>
</tr>
<tr>
<td>Work environment</td>
<td>Descriptive factors of school climate.</td>
<td>Staff involvement, peer cohesion, staff support, autonomy, task orientation, work pressure, clarity, physical comfort, innovativeness, supervisory control.</td>
</tr>
<tr>
<td>Career</td>
<td>A patterned series of adjustments within an organisational network.</td>
<td>Can be seen as advancement, as a profession, as a sequence of jobs, or as a lifelong sequence of experiences.</td>
</tr>
<tr>
<td>Career ladder</td>
<td>A hierarchy of positions within an organisation.</td>
<td>Present teacher-promotion system unsatisfying. Intrinsic rewards are more significant. Teachers need scope for promotion within subject specialisations. Structure should provide for administrative positions. Guidelines required for participative management.</td>
</tr>
</tbody>
</table>
The purposes of this chapter are to examine the theoretical background of the curriculum and to review research into curriculum change. It is included in this study as it identifies concepts and variables which are important in understanding and explaining the relationship between teacher stress and curriculum change.

OVERVIEW

A curriculum is a plan in which intended learning experiences are defined. It is subject to continual change which may take the form of adaptation, development or replacement. Current research has tendered a more humanistic curriculum, placing the learner at the centre and emphasising learning experiences.

Change can create problems by subjecting those who are required to teach different material, in possibly new ways, to an increased workload. Those who believe that the most effective improvements arise from school based curriculum development, base their conviction on the resulting benefits of the professional freedom of staff and a closer liaison with the society in which the school is situated. Although a central authority may control the curriculum, school based curriculum
development offers the school the scope to develop the curriculum according to an interpretation of community requirements.

Three types of curriculum organisation are exhibited in the subject, core and activity curricula. Other educationally questionable "curricula" may also exist in the school.

The chapter concludes with a discussion of teaching - the task of transforming subject material into learning experiences. Communication, in its true sense of understanding and being understood, is of great importance. Time is a crucial factor for its effectiveness. Flexibility, classroom skill, capacity to participate, subject mastery and planning ability are ingredients of the art of teaching.

THE CURRICULUM

A curriculum is a plan for learning which prescribes, or at least anticipates, the results of instruction. "Historically and currently, the dominant concept of the curriculum is that of subjects and subject matter therein to be taught by teachers and learned by students" (Saylor and Alexander, 1974:2). Stenhouse (1975:4) described the curriculum as:

... an attempt to communicate the essential principles and features of an educational proposal in such a form that it is open to critical scrutiny, and capable of effective translation into practice.

The curriculum has grown from single subject disciplines to a highly complex structure. The current trend is to increase the autonomy and responsibility of teachers in
designing, forming or structuring the curriculum and to add to their participation in curriculum decision-making (Davis, 1980).

CURRICULUM CONTENT

There are many differing ideas and emphases on what should comprise content for a school curriculum. Three broad areas of life which are considered by most to be of greatest importance are the individual, his environment and his religious background.

The "Forms of Knowledge" Debate

There is considerable ambiguity about how and what children should be taught and the debate on forms of knowledge highlights that uncertainty (Hirst, 1974; Barrow, 1978; Pring, 1978; Barnes, 1982; Lawton, 1984). The debate centres on whether children should be taught through individual subjects or forms of knowledge and what comprises a form of knowledge.


The debate among researchers is often reflected in subject syllabuses. The teacher is placed in the difficult position of determining if direct instruction of basic skills is required or if students should be "initiated into forms of knowledge". A lack of inter-professional contact creates "... uncertainty, vulnerability, and isolation, particularly in boundary roles which can provide an introspective goal orientation amongst
4. CURRICULUM CHANGE

Ambiguity is a significant source of teacher stress (Tung and Koch, 1980) particularly when the scope and responsibilities of the job are not clear. The need for teachers to assume several roles is a major source of teacher stress (Blackie, 1972). Role ambiguity arising from an uncertainty of the match between teaching outcomes and the expectations of students, the central authority and the community is also a problem for teachers and administrators. Teachers "... find that they have a wide role ... and yet the limits of that role are not defined" (Hosking and Reid, 1985).

SCHOOL BASED CURRICULUM DEVELOPMENT

School based curriculum development occurs where staff make decisions concerning curriculum implementation in the school in which they are employed. It concerns the modification or improvement of a program at the school level. It may involve a unit of work, a part of a course, a subject syllabus or a complete school curriculum. The freedom to determine the curriculum is a necessary part this type of development. While complete control may not necessarily rest with the school, selection of teaching methods and structuring of curriculum content is a school responsibility. Such a development contrasts with a centralised practice where subject matter and methods of teaching are determined by an education authority.

Because teachers have become comfortable with their
classroom practices and tend to "cling to the models with which they are most familiar" (Goodlad, 1983), change imposed from outside the school environment requires a considerable adjustment on the part of the individual.

Where a teacher perceives a difference between current practice and the requirements of change, "significant emotional, attitudinal, or behavioral readjustments" are necessary (Blase, 1986:25). If change is to be an improvement, time must be available for staff to examine means of instituting the change. Wilkinson (1988:186) discussed the responsibilities of teachers and the time available for taking on additional loads:

Heavy workloads were widely reported and were frequently linked to a workload/time factor. Pressure situations arose during ... peaks of demand ... when staff attempted to do more in less time.

The movement towards decentralisation of curriculum development arose from:

. demands from teachers for more freedom in determining the curriculum (Musgrave 1974:4), and
. recommendations of the various Education Departments that programmes should be interpreted and organised in the schools (School in Society, 1968:42; The Radford Report, 1970:96).

Whilst school based curriculum development may involve selection from or adaptation of existing curricula, it may also involve a complete severing of the connections between a school and the central authority (Brady, 1983).
Factors which encourage school based curriculum development include:

. The freedom of staff to select learning experiences and to sequence subject matter.
. The scope of staff to analyse the aims and objectives of the subject.
. The advantage of a smaller number of staff meeting together which permits input from most or all participants.
. The provision of administrative support for school department curriculum meetings.
. The introduction of computer use in timetabling which permits greater flexibility in staff allocation.

A considerable advantage of school based curriculum development is that through staff participation in curriculum formulation, the sense of ownership is increased and the curriculum is seen less as something imposed from without. For staff who are involved in this type of development, there is a reduction in role ambiguity and powerlessness (Schwab et al, 1986).

Factors inhibiting this development were analysed by Barnes (1983:288) and include:

. Lack of relevant skills in the areas of test construction and objectives analysis. Work which is perceived as too difficult has been related to cognitive fatigue in which the individual's capacity for attention shrinks. Skills can be improved with the cooperation and assistance of staff, the
senior teacher's or subject coordinator's leadership, or guidance from universities and colleges of advanced education. Inadequate allocation of resources, particularly the lack of replacement staff when incumbents retire or transfer to other positions. This leads to frustration which is a considerable source of teacher stress (Wilkinson, 1988).

The feelings of inadequacy of some staff to cope with added pressures, particularly those of accountability. Feelings of inadequacy add to a perception of overload, a significant factor of stress (Kottkamp and Travlos, 1986; Schwab et al, 1986).

If schools are seen as unfriendly or uncaring, (Collins, 1980) it may be indicative of the degree of dissatisfaction which teachers have with their work. Although schools would deny a charge of negative attitudes towards students, the fact remains that "teachers cannot hide for long from their physical and emotional exhaustion" (Wilkinson, 1988).

External factors which need to be considered where school based curriculum development is to occur include the requirements of education authorities, expectations of parents, employers and the community, employment opportunities particularly in the local community, and equality of the sexes.

The internal factors which are of importance and should also be considered by subject department personnel encompass the abilities of and values held by teachers, felt and perceived problems, the needs of pupils, and the school
Among the problems which may be encountered with school-based curriculum development are:

- a lack of time. If time is not made available, the outcome of role overload is an ineffective implementation of misunderstood policies and procedures. "Time cannot be understood as independent of other sources of stress" (Blase, 1986:26).

- difficulties with assessing community requirements. Role ambiguity is a significant factor contributing to stress (Kottkamp and Travlos, 1986).

- a lack of administrative support. With the delegation of some of the central authority's decisions to school staffs, frustration and role conflict may arise if sufficient support is not provided by the authority. Wilkinson (1988:186) referred to the relevance of the concept of support:

  Senior staff ... in particular voiced concern over the degree of support given by external agencies. This was reported to have led to feelings of frustration, apathy and cynicism. Besides being a stressor in itself, the issue contributed to heavy workloads and a multiplicity of additional tasks.

The skill and participation of all members of staff are required for the efficient implementation of the curriculum. Lack of opportunities to participate leads to a stressful environment: "As is evident, organizationally based stressors were identified as occurring most frequently" (Blase, 1986:28).

The ability to influence change is determined by the
decision-making process and the management of policies. Both elements have important influences on the levels of teacher stress (Hosking and Reid, 1985). The intrinsic satisfying factors of Herzberg's theory are major elements. Achievement, interest, acceptance of responsibility, growth, and experience are personal factors crucial to effective development.

CHANGE IMPLICATIONS

Curriculum change involves a modification, alteration or difference. The value of change must be assessed and compared with the current programme before the change takes place. A change must be useful. It also has to improve that which already exists. This implies that for change to be effective, teachers must be actively involved.

Havelock (1978:4) saw change as being "... any significant alteration in the status quo". Six factors must be addressed when making an alteration from "what is" to "what should be:

\[
\begin{align*}
\text{WHAT IS} & \quad \text{WHAT SHOULD BE} \\
\text{Relaitonship} & \quad \text{Analysis} \\
\text{Diagnosis} & \quad \text{Acquisition} \\
\text{Acceptance} & \quad \text{Choosing} \\
\text{Self Renewal} & \quad \\
\end{align*}
\]

Figure 6. JUDGEMENTS INVOLVED IN CHANGE (Havelock, 1978)
Where change is to be made, it is vital to bear in mind that when something is added, something must also be removed. Most change is brought about through external pressure but it may also come from within the school if the need is seen.

Curriculum change creates an imbalance between the teacher's practices and the environment created by the new circumstances. This necessitates a modification of practice to balance the relationship. Such a modification subjects a teacher to an increased and more difficult workload despite its inevitability and the greater effectiveness which should be its outcome (Hosking and Reid, 1985). It has the further quality of placing greater responsibility on the shoulders of teachers and administrators (Schwab et al, 1986). Blase (1986:25) illuminated the issue: "Change refers to a situation in which stress results because the individual perceives that a stimulus requires significant emotional, attitudinal, or behavioral readjustments".

Conflict, that "great diverter of energies", requires a correct "ecology" for its solution. To overcome possible conflict between teachers' assessments of programme requirements and school or central office policies, an "... environment for collaborative interaction" (Wilkinson, 1988) must be encouraged. If change is seen to be a positive good and if teachers can perceive a "difference between what they are doing and what they desire to do", ownership becomes a more easily

STUDENT INVOLVEMENT IN CHANGE

One must continually bear in mind that it is the student who ultimately decides what will be learned. March (1988:111) added: "One point of view that is frequently advanced is that students do more than just 'receive' a curriculum - they become engaged with it, and they become active initiators and reactors to it".

Skilbeck (1984:244) felt that, as students possessed the need to express independence and individuality, "students as learners must be given the opportunity to be active, responsible and engaged with their learning tasks". The experiences of students are valuable and may provide information for those who plan curricula. This concept prompted Vallance (1981:10) to add: "Students are the only group who can portray the lived-in quality of schooling".

Students often take on leadership roles in out-of-class engagements which form part of the extracurricula activities. There is good reason to believe that these characteristics are developed mostly outside the "subject" curriculum. Skilbeck (1984) saw this as evidence for the necessity for student involvement in shaping the curriculum. Dynan (1980:4) took the stance that students as clients have certain rights and expectations with the "... right to evaluate the quality of the provision or service". They have the additional right to
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"negotiate certain aspects of their learning" (Curriculum Branch of Victoria 1986:9). Dunn (1986) pointed out that when students participate in the curriculum decision process, positive "collegiate relationships" are formed with their teachers. Marsh (1988:114) provided reasons why students should not participate in curricular decisions:

1. A curriculum is designed for students. They don't have the background or experience to be able to make useful inputs.
2. It is not desirable, and is even counter-productive for class discipline.
3. Due to their greater knowledge and skills, teachers only should be responsible.
4. Participation in curriculum decision making is not feasible in school systems in which students are externally examined.

While indicating further problems with support in terms of time allowances, resources and accreditation opportunities, Marsh (1988:128) felt that the resultant progress from student participation "... is indeed admirable and could well be exhilarating for all the participants".

THE PRINCIPAL'S INVOLVEMENT

The principal's behaviour is a determining factor in the development of the curriculum. "Stressors associated with indirect interference were related to administrative behaviour, most often principal behaviour" (Blase, 1986:29). Examples of stress-provoking administrative behaviours include inconsistency, unclear expectations, lack of follow-through, lack of opportunities for input, and failure to provide essential resources. A further responsibility was indicated by Print
4. CURRICULUM CHANGE

(1988:162):

As the rate of curriculum change accelerates, so those involved in developing and implementing curricula will need to know more about the nature of change and how to deal with it purposefully.

The principal's leadership is a crucial precondition to successful implementation of curriculum change (Miles, 1989).

SOURCES OF CHANGE

Change may be considered as emanating from two major areas - society and education policy with each source providing direct and indirect effects. The indirect effects of changes in society are reflected in the curriculum and include unemployment, family problems, the increasing age of the general population, and declining birth rates. Direct effects include attempts to "... encourage schools to show greater awareness of industry, or problems of peace and war" (Skilbeck, 1984:55). Print (1988: 165) cited other examples which include "... accommodation of goals such as literacy, numeracy, environmental studies and peace studies". Daily physical fitness, silent reading programmes, programmes for gifted and talented children, secondary college alternative courses and conference writing were cited by Print (1988) as changes which have been directly induced by education policy. Indirect effects which policy has had on change have arisen from recommendations of various government papers, the Beazley report, A Nation at Risk, the QERC report, Quality of Education in Australia and others. Organisational structural changes,
4. CURRICULUM CHANGE

particularly those in which finance is involved, also induce changes at the school level. Changes may be "... made or sought in curriculum policy and practice to promote certain ends or achieve particular goals in the education system" (Skilbeck, 1984:55).

Curriculum change may occur in the form of an adoption of a programme, a development of that which exists or the introduction of some original form.

TYPES OF CHANGE

Curriculum adoption is the substitution of an existing curriculum or unit with a curriculum of unit which is new to the school. It has been defined as "taking up and treating as one's own". It implies that the curriculum is already written or programmed and that the school adopting that curriculum has chosen to follow the course or curriculum as it stands.

Curriculum development infers the production of a plan for learning or the improvement of a curriculum already in operation. The word "development" is used in two senses - the original production of curriculum materials and processes, and the ongoing improvement of the curriculum (Lawton et al, 1978). The development of pupils' total comprehension and understanding the different forms and areas of knowledge should be central to curriculum development.

Curriculum innovation may be either small- or large-scale, involving any part of the curriculum from a unit of study in a subject department to a whole-school change. It is "a change
made in the established ways of doing things - something newly introduced". When used conversationally, the word often has other connotations. "To introduce novelties" describes some which have been disastrous because accurate, valid and reliable evaluations were not carried out prior to implementing the innovation. It is important that a two-way flow of information is in place. Identification of "formal nets" (Wilkinson, 1988) that is, the group of curriculum experts, and "informal nets", those who propose innovation, is of paramount importance if innovation is to be effective. Brady (1983) identified common reasons for the failure of some innovations:

. a lack of understanding of the innovation,

. an inability of the teacher to understand and accept a new role demanded by the innovation,

. a lack of the resources required for implementation of the innovation,

. lack of communication and opportunities for feedback within the school, or

. an incompatible school organisation.

THE CHANGE PROCESS

The change process can be seen as problem identification, adoption of an innovation, implementation, and institutionalisation (Print, 1988).

Should school programmes proceed unaltered? What processes do society place on school? What parts of programmes require change? In Print's opinion, these questions form a starting point for change. The adoption phase consists of seeking an
appropriate innovation from a number of possibilities. Fullan (1982) described factors which affect the rate of adoption by institutions and include access to information, alternative innovations, central administrative support, funding availability, the role of change agents, community pressures, and State government stands. Fullan may have overlooked the factor of the willingness of staff to proceed.

The manner in which change is implemented is a determinant of the success of the innovation (Print, 1988). The rate of change is determined by "... strategies for enhancing change, characteristics of the innovation, internal nature of the organisation, and characteristics of the broader social context." Print (1988:169) added: "Should the innovation be used continually over time and in the process become interwoven into an organisational structure, then institutionalisation will have occurred". An innovation can be considered to be institutionalised when support in the way of specific funding, consultants, and pointed administrative attention is removed without affecting the programme.

Print's model may be compared with the Caldwell and Spinks (1988) management model in which discrete yet interdependent processes were also identified - goal setting and need identification, policy-making with policies consisting of purposes and broad guidelines, planning, budgeting preparation and approval, implementing, and evaluating. Both models place
learning and teaching at the core of the school's business. The model proposed by Caldwell and Spinks - which has been successfully instituted - is similar to others. However, the addition of a policy group and program team(s) with clearly defined responsibilities enable greater clarification of the management process. Caldwell (1987:29) wrote of the particular characteristics of the model: "The policy group may be the principal alone, the principal and senior staff, or the principal and senior staff with advice from other teachers and members of the school community". The program teams comprise, in most instances, teachers who are responsible for preparing a plan for the implementation of policies and "for identifying the resources required to support the plan".

Endorsement of policy and program groups was provided by Miles during a workshop at the University of Tasmania (Feb., 1989): "The typical route to successful implementation is to possess a cross-roads steering group" within the school. The group, consisting of teachers, students, parents, or department heads, in any combination, would have the power to allocate the decision making process.

The necessity for administrators to possess the skill of participatory decision making was outlined by Hosking and Reid (1985:10): "In schools in which the senior administrators have the skills to carry out this new requirement, stress due to powerlessness or impotence has been markedly reduced". However, another source of stress, work overload, was aggravated.
4. CURRICULUM CHANGE

Communication between staff, support, cooperation, and fully collaborative decision making are all essential elements of staff cohesiveness which, in turn, leads to a reduction of stress among participants and enhances the implementation of the innovation.

Miles et al (1987) identified 15 factors which led to institutionalisation, many of which are overlapping:
(1) leadership, (2) school autonomy, (3) staff cohesiveness, (4) good program/fit, (these four are designated "preconditions") (5) power sharing, (6) rewards for staff, (7) "vision", (8) control over staffing, (9) control over resources, (10) staff willingness/initiative, (11) external networks, (12) coping, (13) evolutionary program development, (14) "good implementation", and (15) organisational change.

Observed causal relationships occur between 1 and 4, 5, 6, 7, 11, 12, and institutionalisation; 2 and 4, 8, 9; 3 and 7; 4 and 5, 6; 5 and 10; 6 and 10; 7 and 10, 13; 8 and 7, 10; 9 and 13; 10 and 13, 14; 11 and 10; 12 and 13, 14; 13 and 14, 15; 14 and institutionalisation; and 15 and institutionalisation.

Hypothesised causal relationships occur between 1 and 3; 5 and institutionalisation; and 12 and institutionalisation. Figure 21 (appendix) illustrates observed and hypothesised causal links between factors in the management of successful implementation.

Fullan and Pomfret (1977) pointed out that curriculum change requires a similar change in the organisation.
Implementation becomes the focus and a separate stage of the process of distinct measures, dimensions and determinants. It was suggested that the aim should be "mutual adaptation" rather than "adoption", that success of an innovation should be gauged on the manner in which the school is able to utilise the change rather than an exact transcription of the change, and that the school's individuality should be prominent in the process of innovation. According to Fullan and Pomfret (1977), consideration must be given to:

... the relationships of those who will be expected to change [and] to the process of how this is to be done. Moreover, this relationship should be directly and explicitly planned for as soon as a particular direction of change is being formulated.

Holt (1987:10) continued in a similar vein by pointing out that "although a systematic approach to the problem may be helpful, the solution is not merely a matter of procedure". Holt (1987:12) criticised the work of Fullan and Pomfret:

The notion that change can be better understood by isolating implementation from curriculum design and development is a piece of misplaced scientism ... [which] does not seem particularly relevant to activities which depend on seeing and judging a problem as a whole.

Having established what will be taught in the school, the form that the change will take, attention then turns to the matter of determining the most suitable type of curriculum organisation for teaching the material.
The curriculum may be organised as a group of subjects, as a core or as a set of activities. The organisation type may provide a source of stress which is related to its structure. Other curricula may also operate in the school.

**The Subject Curriculum**

The subject curriculum focuses on individual subject teaching and is the most common form of curriculum. It consists of a suitable collection of subjects which may be studied independently or in relation with each other (Barnes, 1982; Brady, 1983). The subject curriculum is mostly organised by a central authority in which individual teachers have little, if any, capacity to participate. It also tends to fracture the school into its component subject departments with little communication or coordination between departments. Teaching focuses on the individual subject. Where a teacher looks to other departments with a view to improving a student's programme, it may be viewed as an unwarranted intrusion. The frustration which may be experienced by teachers through the lack of opportunities to suggest improvement may lead to a consequent lack of enthusiasm to make further attempts. Additionally, an absence of input in deciding what and how subject matter is to be taught may result in an individual's perception of powerlessness which is linked negatively to job satisfaction (Kottkamp and Travlos, 1986).

The absence of satisfaction is particularly noticeable
after teachers have arrived at Fessler's (1983) fourth stage of a career. Having survived the period of induction and built up their teaching competencies, the teacher often requires stimulation to improve professional expertise. The impetus for professional growth decreases where the teacher's experience is not used to the school's advantage. Hosking and Reid (1985:9) wrote:

There is a great deal of evidence to show that when people are given the opportunity to participate in decision-making about important aspects of their work they are more satisfied and experience less stress. On the other hand, those who feel powerless to make any changes ... often feel a sense of frustration at not being able to achieve goals.

Where the challenge of participation in determining the curriculum is absent, McClelland's nAch factor cannot be accommodated. McGregor's Theory X becomes even more inappropriate for a teacher with considerable classroom experience. Vroom's theory of motivation arising from the satisfaction through participation is also negated. The perception of powerlessness and the inability to achieve the outcomes an individual seeks may lead to a lower quality of performance, lower self-esteem, and greater job dissatisfaction. Wilkinson (1988:187) stressed that role conflict is a product of the stress experienced because of a lack of power to alleviate stressors and that "conflict stress [is] significantly related to job satisfaction indicators". Blase (1986:24) also described the condition: "The inability to achieve job-related goals, considered central to an individual's organisational role,
tends to result in stress". While an optimal level of stress is essential to performance (Welford, 1973), "both positive and negative departures from optimal conditions will result in excessive stress and submaximal performance".

The rigidity of the subject curriculum may also be a source of stress for students. Where students are required to select optional subjects, difficulties are experienced particularly when the selection has to be made before a student's future career is decided.

The Core Curriculum

The core curriculum is considered not as a group of subjects studied on a compulsory basis by all students (Brady, 1983) but as an arrangement of subject-matter for study around current trends or social problems. Emphasis is placed on problem-solving activities. Greater integration of subjects is possible with a focus on forms of knowledge. The actual problems studied and the manner of their study are decided by joint planning between teacher and pupils. The present needs and interests of the pupils need to be carefully examined and constantly considered whilst the curriculum is in operation.

The advantages of the core curriculum were described by Barrow (1978:27):

Real life problems are often complex affairs involving many dimensions and teaching different subjects as totally distinct entities may militate against a comprehensive and multi-dimensional approach.

By removing distinct subjects from the curriculum, Sizer
(1984:160) felt that greater integration would occur: "As the major goal of schooling is developing the intellect, the very exercise of explaining ends and means and gaining agreement is itself educational. The essential word is why."

A teacher must have flexible teaching methods when working in a school with a core curriculum. Again, time is a crucial factor. Negative feelings are reflected in statements such as: "I feel overwhelmed, helpless, and angry because I don't have enough time to design individual curriculum" (Blase, 1986:26). Other facets of the core curriculum point to the necessity for teachers to have those facilities which Hosking and Reid (1985) described as close contacts with the community, a comprehensive knowledge of more than one discipline, flexibility in teaching methods, and a well-developed problem-solving ability.

The Activity Curriculum

The activity curriculum does not have set subject matter for study. It consists of things to be done rather than things to be known. It is expected that learning will arise from the activity through the pupil's participation. Brady (1983) explained that subjects do not exist per se and that there is a necessity for teachers to react to the "changing needs of pupils". The inability to plan ahead and coordinate sequential approaches to essential knowledge place considerable stress on the teacher and may, in fact, lead to a decrease of the teacher's confidence and self-esteem. Due to the forecasting difficulties and an inadequate time allocation, the
4. CURRICULUM CHANGE


Inexperienced staff were largely responsible for citing role ambiguity arising from uncertainty over responsibilities which, in turn, heightened a sense of insecurity, lack of confidence, irritation or anger.

The concept that students' interests are uniform at all stages of learning is questioned. Wilkinson reported findings of role conflict among staff members: "Senior management reported stress arising from having to act as intermediaries between differing interests which often required rapid adjustments to plans or routines". Similar feelings could also be expressed by teachers working in a school with an activity curriculum. A teacher would require an understanding of the concepts of Maslow's hierarchy, particularly the three lower orders of physical, safety and social needs. Sizer (1984:131) indicated a principle of planning by teaching children how to teach themselves: "It means providing fewer answers and insisting that students find the right (or at least defensible) answers themselves". Teaching strategies would need to change: "It means that teachers must focus on how kids think than on what they think".

The greatest problem with the activity curriculum organisation is a lack of organisation. Pupils' interests undergo dramatic changes during the years that they are at school. Due to the inability to accurately predict students' future interests, sequencing a course of study could prove to be
difficult. Role ambiguity and role conflict would not be easy to assuage.

The intrinsic satisfying factors of Herzberg's theory would dominate, especially when arriving at agreement between students and teacher. A supervisory behaviour of the type indicated by McGregor's Theory X may, at times, be necessary despite the emphasis laid on learning through students' interests. The need for achievement (McClelland's $n_{Ach}$) would be an outcome of action. Personal goals similar to those indicated in Vroom's expectancy theory provide a further impetus for learning.

Other Curricula

The extracurriculum, widely accepted as additional to the school curriculum, is often seen as anything but extra. It includes sports and other non-academic or avocational activities which, in some ways, may be thought of as an indispensable means to attach a number of students to something that makes them feel successful (Powell, 1985).

The services curriculum is organised to alleviate or remove social and emotional problems. While relief of these problems is a prerequisite to learning, it must be kept in perspective as only a stepping-stone to engagement.

A major responsibility of teachers and parents is to encourage students to be actively involved in their education. The aims of education are not being fully realised if a school is focused on the extracurriculum or the services curriculum to
4. CURRICULUM CHANGE

the detriment of the overall purposes of schools.

The illicit curriculum, while not being a legitimate curriculum, is taken by those in active rather than passive rebellion against school principles. For the few who are involved in it, the "topics" may include theft, drinking, smoking, drug-taking, or vandalism. For a somewhat larger number, it includes active efforts to avoid the legitimate curriculum without dropping out (Powell, 1985).

School based curriculum development, adoption or innovation requires collaborative interaction between staff, teacher and principal, and school and regional office. Well-established communication between the school and curriculum experts assists in effective implementation. The skill of all teachers is required with the support and assistance of Departmental administration. There is a degree of non-participation in structuring the subject curriculum. The core curriculum requires flexible teaching methods with participatory decision-making. An activity curriculum also requires flexible teaching methods but the inability to plan ahead may lead to frustration, role ambiguity, role conflict and job dissatisfaction.

TEACHING

The art of teaching involves an acceptance of the responsibility to educate all students as well as possible and according to the constraints of time, materials, accommodation, and ability. The development of a student's powers of thought,
taste and judgement is of highest importance (Sizer, 1984). Learning can be assisted by creating a supportive environment and involving parents in the child's education. However, the pursuit of friendly relationships should not predominate actual engagement in learning. Powell (1985:91) discussed this relationship and described the dilemma:

If he [the teacher] gave homework every night, put a lot of pressure [on students] they would naturally hate him. So he keeps things under control by being more personal with the kids, being more natural.

Treaties that accommodate lack of student motivation are among the easiest to negotiate as they provide incentives to prevent conflict. "High schools must respect adolescents more and patronise them less. The best respect is high expectations for them and a level of accountability more adult than childlike" (Sizer, 1984:34).

The student is the key worker in the school and the most important product of the school is the student's learning. The necessity to satisfy bureaucratic requirements may have become so critical that the individual student is overlooked. A successful school is one which adopts a "teaching approach which encourages curiosity, imagination and rationality". It would also employ "discussion and reflection to enlarge understanding" (Hughes, 1985:29).

Teachers need time - time to prepare lessons and mark assignments, time to provide individual instruction and assistance, time to discuss pupils with other staff and parents, and
time develop professional skills. The advantages of knowing how a student is faring in other areas of the school permits concentration on weaker points, reinforcement of strengths and fundamentally personalises the education process. However, personalisation should not be confused with a cloying sympathy for the full range of issues which teenagers face. A school is an ally of the family; it can never be a substitute for it (Sizer, 1984).

There are competencies that are basic to the art of teaching (Secondary Education - The Future, 1987:25):

- engaging the learner's imagination and curiosity,
- questioning and instructing,
- listening sympathetically,
- encouraging and praising,
- telling stories, anecdotes and histories,
- helping students to do things better, and
- using a variety of teaching styles and methods.

**SUMMARY**

This chapter has examined the theoretical background to the curriculum and has reviewed research of curriculum change. Concepts and variables which are important in understanding and explaining the relationship between teacher stress and curriculum change have been identified.

The curriculum is a plan or document which provides details of knowledge to be taught and skills to be learned. It has been suggested that the actual curriculum consists of all those
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experiences to which a student is exposed during his or her school life.

The curriculum may, or should, undergo continual modification and development. While change tends to increase role overload, a high degree of participation in the decision-making process can negate the effects of stress. Curricula or parts of a curriculum which have been developed externally can be adopted by the school or subject department. Innovation may be provided from within the school. Where curriculum determinations are decentralised, the capacity to evaluate community requirements and to shape the curriculum to those requirements is enlarged. School based curriculum development increases the individual teacher's perceptions of ownership, a strategy which assists in coping with problems of powerlessness. Teachers require specific abilities with an adequate supply of resources if school based curriculum development is to be effective.

The curriculum may be organised in the form of subjects to be taught, a core of subject material centred around social problems and improvement of community life, or learning derived from activities.

A major aspect of a student's learning is his or her involvement. Students and teachers are "exquisitely sensitive" of how relationships among them contribute to a relaxed and tolerable atmosphere. The relationships between pupils and teacher and how they affect engagement with learning are items
for negotiation. Time, relationships and intensity are factors of involvement. How much does school interrupt the social life of students? How do people get along with each other inside classrooms? How high do courses aim? How much do participants care? The prevention of conflict is a strong incentive in "negotiating treaties" (Powell, 1985).

The following table presents definitions and sample variables of the concepts which have been discussed in this chapter.

Figure 7. CONCEPTUAL FRAMEWORK: CURRICULUM CHANGE

<table>
<thead>
<tr>
<th>CONCEPT</th>
<th>DEFINITION</th>
<th>SAMPLE VARIABLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>School based</td>
<td>Staff make decisions about what will be taught.</td>
<td>Freedom to determine.</td>
</tr>
<tr>
<td>curriculum</td>
<td></td>
<td>School organises, community involved.</td>
</tr>
<tr>
<td>development</td>
<td></td>
<td>Analysis of objectives.</td>
</tr>
<tr>
<td>Curriculum</td>
<td>Substitution of existing curriculum or units with curriculum or units</td>
<td>Innovation, development and assessment.</td>
</tr>
<tr>
<td>adoption</td>
<td>developed elsewhere.</td>
<td></td>
</tr>
<tr>
<td>Innovation</td>
<td>Creation of a new unit or curriculum.</td>
<td>Small- or large-scale evaluation of current programmes.</td>
</tr>
<tr>
<td>Development</td>
<td>Original production of materials and improvement of the programme.</td>
<td>Assessment of change.</td>
</tr>
<tr>
<td>Subject curriculum</td>
<td>A number of topics of suitable quality and difficulty.</td>
<td>Logical order. Subjects determined in advance.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teacher-directed methods.</td>
</tr>
</tbody>
</table>

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### Figure 7 (contd). CONCEPTUAL FRAMEWORK: CURRICULUM CHANGE

<table>
<thead>
<tr>
<th>CONCEPT</th>
<th>DEFINITION</th>
<th>SAMPLE VARIABLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core curriculum</td>
<td>Study areas formed around sociometry.</td>
<td>Integration of subjects Emphasis on problem solving.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Study determined by teacher and students.</td>
</tr>
<tr>
<td>Activity curriculum</td>
<td>Based on learning by doing, not by studying subjects.</td>
<td>Interest of pupils. Assessment of pupils' interests.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skills taught as needed.</td>
</tr>
<tr>
<td>Teaching</td>
<td>The art of developing students' powers of thought, taste and judgement.</td>
<td>Focus must be on student's learning.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Time is necessary for individual assistance.</td>
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</tbody>
</table>
Chapter 5

FRAMEWORK FOR FURTHER RESEARCH

The purposes of this chapter are to establish a conceptual framework and to determine an appropriate methodology for further research on the relationship between teacher stress and curriculum change.

OVERVIEW

The concepts and variables which have been discussed in previous chapters are brought together to illustrate the relationships of stress with concepts of the curriculum, curriculum change, teachers' needs, theories of motivation and career structures.

In most instances, previous research methodologies have centred on gaining information from responses to questionnaires and analysing appropriate literature. Other techniques which may be used include observations, interviews, tests and group procedures. In recent years, research into teacher stress has been conducted in Canada, the United States and Great Britain. The research methodologies of these studies are described in this chapter.

Further research of stress experienced by teachers in Australian schools would add to the limited available
literature. A literature search has not revealed any previous studies which have focused on stress and curriculum change.

Elements for a questionnaire or interview schedule have been prepared for further research into teacher stress and curriculum change.

**CONCEPTUAL FRAMEWORK**

The concepts and variables which have been examined in this dissertation appear in the following tables with related questionnaire or interview items which could form part of the methodology for further research into the relationship between teacher stress and curriculum change.

**Figure 8. RESEARCH ELEMENTS: TEACHER STRESS**

<table>
<thead>
<tr>
<th>CONCEPT</th>
<th>VARIABLE</th>
<th>SAMPLE ELEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher stress</td>
<td>Organisational - physical resources:</td>
<td>Obtaining teaching materials</td>
</tr>
<tr>
<td></td>
<td>change:</td>
<td>Curriculum changes</td>
</tr>
<tr>
<td></td>
<td>standards:</td>
<td>Interruptions to teaching time</td>
</tr>
<tr>
<td></td>
<td>Group -</td>
<td></td>
</tr>
<tr>
<td></td>
<td>relationships with colleagues:</td>
<td>Cooperation among staff</td>
</tr>
<tr>
<td></td>
<td>relationships with superordinates:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Individual -</td>
<td></td>
</tr>
<tr>
<td></td>
<td>lack of respect:</td>
<td>The attitudes of superordinates towards you</td>
</tr>
<tr>
<td></td>
<td>job uncertainty:</td>
<td>The attitudes of students towards you</td>
</tr>
<tr>
<td>Burnout</td>
<td>Response to -</td>
<td></td>
</tr>
<tr>
<td></td>
<td>events:</td>
<td>Meeting deadlines</td>
</tr>
<tr>
<td></td>
<td>students:</td>
<td>Student discipline</td>
</tr>
<tr>
<td></td>
<td>teachers:</td>
<td>Your interactions with staff</td>
</tr>
<tr>
<td></td>
<td>Administrative</td>
<td></td>
</tr>
<tr>
<td></td>
<td>support:</td>
<td>Support from superordinates</td>
</tr>
</tbody>
</table>
5. RESEARCH FRAMEWORK

**Figure 8 (contd). RESEARCH ELEMENTS: TEACHER STRESS**

<table>
<thead>
<tr>
<th>CONCEPT</th>
<th>VARIABLE</th>
<th>SAMPLE ELEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Causes of stress</strong></td>
<td>Pupil problems: Time pressures:</td>
<td>Student attitudes Time to plan and organise</td>
</tr>
<tr>
<td><strong>Role</strong></td>
<td>Job dissatisfaction:</td>
<td>Consistency of demands made of you</td>
</tr>
<tr>
<td><strong>conflict</strong></td>
<td>Job-related tension:</td>
<td>Meeting deadlines</td>
</tr>
<tr>
<td></td>
<td>Lower self-esteem:</td>
<td>Attitudes of teachers</td>
</tr>
<tr>
<td></td>
<td>Sense of futility:</td>
<td>Attitudes of parents</td>
</tr>
<tr>
<td><strong>Role ambiguity</strong></td>
<td>Job dissatisfaction:</td>
<td>Expectations of pupils</td>
</tr>
<tr>
<td></td>
<td>Poor production:</td>
<td>Amount of work you have to do</td>
</tr>
<tr>
<td></td>
<td>Anxiety:</td>
<td>Conflict between the profession and personal needs</td>
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<td></td>
<td>Lower self-esteem:</td>
<td>Student attitudes</td>
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<tr>
<td></td>
<td>Life dissatisfaction:</td>
<td>Attitudes of others towards you</td>
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<tr>
<td><strong>Role overload</strong></td>
<td>Job dissatisfaction:</td>
<td>Recognition of others for the work you do</td>
</tr>
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<td></td>
<td>Poor interpersonal skills:</td>
<td>Communication with parents</td>
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<td></td>
<td>Absenteeism:</td>
<td>Questionnaire cover page</td>
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<tr>
<td></td>
<td>Low motivation:</td>
<td>Your ability to adapt to new teaching methods</td>
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<td>Low participation:</td>
<td>Your participation in the decision making process</td>
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<tr>
<td><strong>Powerlessness</strong></td>
<td>Job dissatisfaction:</td>
<td>Opportunities for expressing opinions</td>
</tr>
<tr>
<td></td>
<td>Poor production:</td>
<td>Amount of work you have to do</td>
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<td>Lower self-esteem:</td>
<td>Attitudes of others towards you</td>
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<td><strong>Emotional exhaustion</strong></td>
<td>Lack of any positive feeling:</td>
<td>Expectations of students</td>
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<td>Sense of physical exhaustion:</td>
<td>Keeping up with new developments.</td>
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<td><strong>Job satisfaction</strong></td>
<td>Absenteeism:</td>
<td>Staff absences</td>
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<td>High staff turnover:</td>
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<td>Grievances:</td>
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### 5. RESEARCH FRAMEWORK

#### Figure 9. RESEARCH ELEMENTS: CURRICULUM CHANGE

<table>
<thead>
<tr>
<th>CONCEPT</th>
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<td>Skill: Individual input:</td>
<td>Staff competence Your involvement in curriculum planning</td>
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<td>Support from administration:</td>
<td>Support from superordinates</td>
</tr>
<tr>
<td></td>
<td>Collaborative interaction:</td>
<td>Your interactions with staff</td>
</tr>
<tr>
<td></td>
<td>Communication with experts:</td>
<td>Knowledge of procedures</td>
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<td>Curriculum adoption</td>
<td>Freedom to innovate:</td>
<td>Your freedom to try out new ideas</td>
</tr>
<tr>
<td></td>
<td>Lack of involvement in structuring:</td>
<td>Opportunities for expressing opinions</td>
</tr>
<tr>
<td></td>
<td>Flexible teaching methods:</td>
<td>Your ability to adapt to new teaching methods</td>
</tr>
<tr>
<td>Subject curriculum</td>
<td>Lack of detailed planning may lead to role ambiguity: and role conflict:</td>
<td>Students' attitudes Conflicting demands from others</td>
</tr>
<tr>
<td>Core curriculum</td>
<td></td>
<td></td>
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<tr>
<td>Activity curriculum</td>
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## 5. RESEARCH FRAMEWORK

### Figure 10. RESEARCH ELEMENTS: ASSOCIATED CONCEPTS

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<td>theory</td>
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<td>Recognition for the work you do</td>
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<td></td>
<td>Interest in the</td>
<td>Your participation in the decision making process</td>
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<td></td>
<td>job:</td>
<td></td>
</tr>
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<td>Career advancement:</td>
<td>Your own career advancement</td>
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<td>Personal growth:</td>
<td>Opportunities for professional growth</td>
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<td>Responsibility:</td>
<td>The professionalism of staff</td>
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<td><strong>Extrinsic</strong></td>
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<td>Relations with</td>
<td>Conflicting demands from others</td>
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<td>others:</td>
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<td>Working conditions:</td>
<td>Amount of work you have to do</td>
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<td>Salary:</td>
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<td>Maslow's hierarchy</td>
<td><strong>Physiological</strong></td>
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<td>Physical surroundings</td>
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<td></td>
<td><strong>Esteem</strong></td>
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<td>Arguments between your values and those taught in school</td>
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<td>autonomy:</td>
<td>Your freedom to try out new ideas</td>
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<td></td>
<td>achievement:</td>
<td>Student participation</td>
</tr>
<tr>
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<td>status:</td>
<td>Your own career advancement</td>
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<td>recognition:</td>
<td>Recognition for the work you do</td>
</tr>
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<td></td>
<td>attention:</td>
<td>The attitudes of others towards you</td>
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<td><strong>Actualisation</strong></td>
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<td></td>
<td>growth:</td>
<td>Opportunities for professional growth</td>
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<td></td>
<td>potential:</td>
<td>Your own standard of teaching</td>
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### Figure 10 (contd). RESEARCH ELEMENTS: ASSOCIATED CONCEPTS

<table>
<thead>
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<th>CONCEPT</th>
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<td>Need for power:</td>
<td>Staff meetings</td>
</tr>
<tr>
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<td>Need for affiliation:</td>
<td>Staff sociability</td>
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<td>McGregor's theory</td>
<td>Theory X:</td>
<td>Expectations of superordinates</td>
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<td></td>
<td>Theory Y:</td>
<td>Your freedom to try out new ideas</td>
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<td>Argyris' theory</td>
<td>Change agent:</td>
<td>Commitment to accountability</td>
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<td></td>
<td>Generate information:</td>
<td>Time to plan and organise</td>
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<tr>
<td></td>
<td>Improve decision process:</td>
<td>Your participation in the decision making process</td>
</tr>
<tr>
<td></td>
<td>Gain commitment:</td>
<td>The professionalism of staff</td>
</tr>
<tr>
<td>Vroom's theory</td>
<td>Satisfaction from performance:</td>
<td>Your own standard of teaching</td>
</tr>
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<td></td>
<td>Increased performance leading to appropriate rewards:</td>
<td>Student achievement</td>
</tr>
<tr>
<td>Thrust</td>
<td>Teacher satisfaction:</td>
<td>interruptions to teaching time</td>
</tr>
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<td></td>
<td>Open school climate:</td>
<td>Opportunities for expressing opinions</td>
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<td>Work environment</td>
<td>Staff involvement:</td>
<td>Staff motivation</td>
</tr>
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<td>Peer cohesion:</td>
<td>Your interactions with staff</td>
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<td>Autonomy:</td>
<td>The professionalism of staff</td>
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<td>Task orientation:</td>
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<td>Opportunities for professional growth</td>
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<td>Clarity of objectives:</td>
<td>Parental pressure</td>
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<td>Physical comfort:</td>
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<td>Innovativeness:</td>
<td>Physical surroundings</td>
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<td>Your freedom to try out new ideas</td>
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**Figure 10 (contd). RESEARCH ELEMENTS: ASSOCIATED CONCEPTS**

<table>
<thead>
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<th>CONCEPT</th>
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<td>Intrinsic -</td>
<td>Your own standard of teaching</td>
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<td>workmanship:</td>
<td>Interpersonal relationships</td>
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<td>acceptance:</td>
<td>Arguments between your values and those taught in school</td>
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<td>agreement:</td>
<td></td>
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<tr>
<td>Career</td>
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<td></td>
<td>a sequence of jobs:</td>
<td>Your own career advancement</td>
</tr>
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<td>a sequence of experiences:</td>
<td>Conditions of your teaching</td>
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</tr>
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<td></td>
<td>Opportunities for professional growth</td>
</tr>
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<td>Career ladder</td>
<td>Present system:</td>
<td>Promotion opportunities</td>
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<td>Significance of intrinsic rewards:</td>
<td>Your own standard of teaching</td>
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<td>Promotion within subject field:</td>
<td>Promotion opportunities</td>
</tr>
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<td></td>
<td>Participative management:</td>
<td>Your participation in the decision making process</td>
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<tr>
<td></td>
<td>Assessment difficulties:</td>
<td>Evaluation of staff</td>
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</table>

**RESEARCH TECHNIQUES**

Research is primarily concerned with using information to advance knowledge. While it focuses on the acquisition of knowledge, it should have practical applications (Worthington, 1982). The various means of obtaining data for research include interviews, document analysis, case studies, observations, questionnaires and field diaries.
Interviews involve asking questions to individuals or small groups. This is, perhaps, one of the most valuable techniques. Document analysis involves gathering information from previous research, dividing it into its constituent parts and determining the relationship of the parts to discover meanings, other relationships and essential features. Document analysis may be a multiple division of parts with repeated examination of the data to arrive at further findings. Case studies concern examination of separate entities or elements which bear characteristics similar to a group. Observations relate to gathering information about what individuals or groups are doing. They are detailed examinations of phenomena prior to analysis or interpretation and may include classroom behaviour, small group interactions, individual behaviours or whole-school response. Questionnaires are capable of being administered to a large group, all of whom answer the same questions. The object of a field diary is to record information which focuses on a particular aspect of the research.

Teacher stress has been researched by Blase (U.S.A. - two studies), Hosking and Reid (Australia), Ratsoy and Friesen (Canada), Schwab et al (U.S.A.), Kottkamp and Travlos (U.S.A.), Seidman and Zager (U.S.A.), and Wilkinson (U.K.).
5. RESEARCH FRAMEWORK

OTHER STUDIES

Blase (1984)

Blase constructed a model of coping strategies employed by teachers which was drawn from content analysed data. "Grounded theory research focuses on the discovery of substantive categories, hypotheses, and relationships between and among categories" (1984:176). Definitive patterns in the data were revealed and continued cycles of analysis increased refinement. All categories were then fractured and reorganised which resulted in greater precision. Coping behaviours identified by university professors and doctoral students were matched with the taxonomy. Blase presented the Teacher Stress Coping Taxonomy to other researchers for "... testing from a variety of perspectives and through the use of different research methodologies."

Hosking and Reid (1985)

Hosking and Reid examined the available literature concerned with ways in which teachers cope with stress. As consultant psychologists to the Teachers Health Centre of the Victorian Teachers' Union, they related their experience to research data and also drew on material gathered in interviews of personnel with responsibilities in teacher welfare. Hosking and Reid examined organisational structures of schools and the Victorian Education Department with the aim of providing a "... useful starting point for those whose task it is to reduce stress in schools and Government departments" (1985:3).
Ratsoy and Friesen (1985)

Ratsoy and Friesen defined the terms "stress", "sources of stress", "magnitude of stress" and "consequences of organizational stress". The aims of the research were to obtain opinions, investigate frequency and intensity, compare the levels of stress of personnel, and to examine the organizational consequences of occupational stress. A 6-person advisory committee was formed from members of the Edmonton Public School Local of the Alberta Teachers' Association and the Edmonton Public School District. "Considerable theorizing and research on stress was received for the study" (1985:5). A diagnostic workshop involving a representative sample of educational personnel identified, ranked and discussed stress sources. Finally, questionnaires were distributed to all district personnel. The information obtained from questionnaire responses was computer-analysed.

The research has probably involved the greatest number of respondents in recent years - 2829 usable questionnaires were returned. All sectors of the Edmonton public school district were involved. In addition to classroom-based personnel, others who participated were district and school-based administrative personnel.

Blase (1986)

Blase focused on the question of what teachers mean when they identify work-related factors as sources of stress. His research was concerned with the design of a Teacher Stress
5. RESEARCH FRAMEWORK

Inventory using qualitative research guidelines. Blase received completed questionnaires from 392 teachers who were enrolled in graduate courses in education at four universities in north-western, south-eastern, mid-western and south-western regions of the United States during 1981-3. The average number of years of teaching in the group was ten. As most previous instruments were prescriptive, Blase produced an almost completely open-ended instrument for his analysis of sources of teacher stress. The major aim was to provide participants with opportunities to describe in detail their perspectives of work-related stress.

Schwab, Jackson and Schuler (1986)

Schwab et al based their research on a model drawn from "existing research on job burnout and related research from studies of organizational behavior". The Model of Teacher Burnout was used to determine the predictors of burnout. Seven hundred randomly selected teachers were requested to complete a 16-page questionnaire. Schwab et al received a usable return of 48 per cent. The 339 elementary and secondary school teachers were members of the National Education Association of New Hampshire. The research aimed to define the organisational and personal predictors of emotional exhaustion, depersonalisation and low accomplishment, and to define the most important consequences of each of the three components of burnout for the organisation and the individual.

Kottkamp and Travlos (1986)

The definitions which Kottkamp and Travlos formed — role
conflict, role ambiguity and role overload - were drawn from role theory. The fourth precursor of job stress, powerlessness, was conceptualised by Seeman (1959). The two affective responses - emotional exhaustion and job satisfaction - were also examined. "The literature indicated that the job stressors and affective responses ... have been related to various behavioral outcomes." Thrust was selected as a principal behaviour in an organisational setting to provide a positive contrast to the negative behavioural responses. Questionnaires were distributed to principals and teachers in 74 high schools in New Jersey. The research was designed to:

. add to the "... small stock of conceptually based empirical research" of stress among school principals,

. clarify the confusion arising from other research and studies of stress among school administrators, and to

. elucidate the quantity and intensity of stress inherent in the principal's position in a school.

Principals completed scales to measure job satisfaction and emotional exhaustion, the two affective responses to work, and the four stressors of role conflict, role overload, role ambiguity and powerlessness. Four independent teacher questionnaires were divided among teachers of which 90 percent were completed and usable. The first three teacher instruments were refined by Abdel-Halim (1978) from Beehr (1976) and Rizzo et al (1970). Powerlessness was measured by a questionnaire developed by Zeilinski and Hoy (1983). The principals'
questionnaire on emotional exhaustion was prepared by Maslach and Jackson (1978).

Seidman and Zager (1987)

Literature concerning the burnout syndrome was studied by Seidman and Zager. "There is a need to perfect an instrument that measures [teacher burnout] accurately, can aid educators in determining the magnitude of the problem, and targets people/organisations for intervention" (1987:29). Seidman and Zager initially administered a 65-item questionnaire to 217 elementary and secondary school teachers in southern Indiana in 1981. Subsequently, the instrument was refined and administered to 365 public school teachers in northern Texas in 1983 (see appendix, figure 20). The instrument was designed to measure the "relatively recent and unsubstantiated phenomenon" of teacher burnout. While the Maslach Burnout Inventory was designed to measure burnout in general, Seidman and Zager directed their attention to teachers in particular. Representatives of teachers' associations rated stressfulness and degrees of burnout within their schools.

Wilkinson (1988)

Data from three sources were analysed by Wilkinson. An inventory of stress causes, reactions and coping strategies provided the background for the "first stage of progressive focussing". A second instrument focusing on refined data gathered from a field diary and a further source provided by taped interviews provided material for a study of teacher
stress and coping strategies. Questionnaires were completed by 60 members of staff and interviews were conducted with a representative sample of 12 teachers from the North Tyneside school (U.K.).

The following table is a summary of the research designs which have been described in this chapter.

<table>
<thead>
<tr>
<th>RESEARCHER/S</th>
<th>METHODOLOGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hosking and Reid (1985)</td>
<td>Literature research and interviews.</td>
</tr>
<tr>
<td>Blase (1986)</td>
<td>Questionnaire.</td>
</tr>
<tr>
<td>Seidman and Zager (1987)</td>
<td>Literature research and questionnaire.</td>
</tr>
<tr>
<td>Wilkinson (1988)</td>
<td>Data analysis, field diary, interviews and questionnaire.</td>
</tr>
</tbody>
</table>

Figure 11. RESEARCH METHODOLOGIES

METHODOLOGY FOR FURTHER RESEARCH

THE SETTING

Teachers in Australian schools are experiencing considerable curriculum changes in response to social trends,
5. RESEARCH FRAMEWORK

recommendations from state education departments and for the purposes of accountability as education departments move towards instituting changes in student certification. Intensive examinations of organisational and educational policies are also occurring which involve many teachers within the system. Critical changes in subject syllabuses make additional demands of teachers. Time is crucial for staff to discuss new systems of student certification, to develop new subject syllabuses, to examine changes which would be required in schools and subject departments, and to formulate different approaches to teaching pedagogy, student profiling and assessment procedures.

Any changes or proposed changes to the promotion system appear to be either alterations to numbers and redistributions of administrative loads or, when suggested by education departments, appear to place additional responsibilities onto education personnel's shoulders. This does not assist them in coping with stressful conditions. Sizer (1984:187) remarked: "... The sameness of professional life for teachers gives little incentive for recognized excellence and influence, those powerful fuels for useful self-esteem".

PLANNING CONSIDERATIONS

Research is considered appropriate during a time of widespread curriculum change. Further research should reveal factors which teachers see as stressful and will assist in determining the relationships between curriculum change, teachers needs, motivation, the promotion structure, seniority,
5. RESEARCH FRAMEWORK

curriculum structure, and stress. The strategies which teachers use to cope with stress and the effectiveness of those strategies could also be analysed. Research findings should provide a framework for higher quality decision making in future curriculum change.

Worthington (1982) examined the strengths and weaknesses of various techniques of obtaining information. Interviews provide a wide range and depth of responses, allow flexibility, and comprehensive material can be collected. However, it is difficult to validate most data, only a small number of people can be involved, and the interviewer must have good interpersonal skills. Questionnaires are relatively easy to administer, the respondent may remain anonymous, and a large number of people can be involved. Disadvantages include the possibility of misinterpreting questions, a difficulty of analysing responses to open-ended questions and a restriction that closed questions place on responses. Observations can be useful in demonstrating subtle interactions which are impossible to detect in other instruments. Professional judgements of events are possible and immediate or short-term feedback is provided. However, the observer's reliability may be questioned, the observer's effect on the environment may be difficult to define, and categories tend to be either too complex or too simple. Group procedures provide rapid access to data, allow decision making by consensus and are simple to organise. On the other hand, the procedures require
interpersonal skills. They may promote conflict and, because of their convenience, are liable to be overused. It is considered that a questionnaire, interviews, observations and a field diary are appropriate means of obtaining data for further research into teacher stress and curriculum change.

SAMPLE QUESTIONNAIRE ELEMENTS

A sample of elements which may be included in a questionnaire for use in future research have been suggested. Drawing on the concepts and variables which have been discussed in previous chapters, they could be organised so that the respondent is able to indicate the frequency of stress arising from the various sources and the strategies used in coping with stress.

Stress may be categorised according to its sources. The questionnaire could therefore, be arranged into the categories of organisation, administration, students, teachers, parents, occupation, personal, and academic programme. Subcategories may include personal interactions, motivation, teaching strategies, appropriateness of school goals, extent to which school goals are being achieved, the pastoral care system, and reporting of students. Each section of the questionnaire could begin with a question similar to "Do you experience difficulties with ......?" It must be emphasised that a question may relate to other concepts and variables as well as those which have been presented in the table (figure 8). Similarly, different questions may relate to the one variable.
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Interviews with staff representatives would assist in establishing the reliability of total responses. Further information about teacher stress and curriculum change could also be obtained. A slight restructuring of the instrument would permit the inclusion of non-teaching staff.

The recording and extraction of information obtained from responses would be simplified by using a computer data base. Storage on disc would assist the portability of a large amount of data. Confidentiality of responses may be required which implies that they could not be stored on a network system.

If research involving a number of schools is carried out, the cooperation of all participants would be required. There is the further necessity for the school's administrative personnel to make time available for staff to answer questionnaires and for interviews to proceed.

SUMMARY

The relationships which exist between the concepts and variables of teacher stress and those of curriculum, curriculum change, needs, motivation, incentives and career structures have been examined in this chapter.

There are a number of methods of obtaining information for research. Document analysis was utilised by Blase (1984), Schwab et al, Kottkamp and Travlos, and Wilkinson. Seidman and Zager, Ratsoy and Friesen, and Hosking and Reid reviewed stress literature in their research. With the exception of Blase (1984) and Hosking and Reid, all other researchers used
questionnaires as part of their methodologies. Group procedures were also used by Ratsoy and Friesen. To provide further information, Kottkamp and Travlos, and Seidman and Zager interviewed teachers about stress sources and intensities. Wilkinson wrote a field diary which focused on particular aspects of his research. A questionnaire, interview schedule, observations and a field diary appear to be appropriate methods of obtaining information for further research into teacher stress and curriculum change. The sample items are drawn from the concepts and variable which have been discussed in Chapters 2, 3 and 4 of this dissertation.

There has been little study of the relationships between stress and change. A deficiency of research into teacher stress and its relationship with curriculum change would be countered by further study. While there are considerable changes occurring in the education systems, student enrolments, student assessments and career structures, research into teacher stress is deemed to be appropriate.
Chapter 6

SUMMARY

The purpose of this chapter is to provide a summary of the issues which have been examined in previous chapters. These issues are related to an investigation of the relationship between teacher stress and curriculum change. A discussion of the implications for further research concludes this study.

OVERVIEW

The main concepts and variables which are deemed to be important in understanding the relationship between teacher stress and curriculum change have been considered. The explanations of the relationships have been refined to provide further clarification of the association of teacher stress with curriculum change.

The stress which teachers experience has long-term effects on the organisation of education. The consequences of continued stress include the inability to achieve personal and organisational goals, lower morale, disinclination to participate and a decrease of collegiality.

Over the past few years, the curriculum has received the attention of many who may or may not be directly associated with events in the classroom. At the same time, there has been a change in the role of the teacher.
Deficiencies in planning, in the participation of those who are required to implement a change, in an examination of the needs of those who will be involved, and in value comparisons with that which already exists will cause stress which may become intolerable. It is, therefore, crucial that all teachers should possess a sense of ownership of those principles involved in certification procedures, reformulated policy statements and curriculum change.

The suggested methodology for further research provides a means to investigate implications emanating from the material which has been examined in this dissertation.

TEACHER STRESS

Stress has been defined as "an inability to cope positively with teaching problems" (Seidman and Zager, 1987: 26). It is related to feelings of low job satisfaction with expressions of the desire to leave the profession. Continued stress causes physical, emotional and psychological problems. The causes of stress are fundamental to working conditions, role behaviour, pupil problems and time pressures (Wilkinson, 1988: 186).

Burnout is considered by some as synonymous with stress (Schwab et al, 1986; Ratsoy et al, 1986; Hosking and Reid, 1985). Others view burnout as an outcome of continued stress which provides debilitative influences to the extent that an
individual who is thus affected is unable to work (Blase, 1984; Kottkamp and Travlos, 1986). Although definitions of burnout vary, the three concepts involved are emotional exhaustion, feelings of low accomplishment, and depersonalisation (Maslach, 1982).

Change has a significant influence on stress and burnout. Stress has, in turn, significant influences on the effectiveness of curriculum change.

**CURRICULUM CHANGE**

Curriculum change may involve innovation, adoption or development. School-level development is regarded as more successful than change which is prescribed by a central authority. "Curricula devised and produced at the central level without school or teacher participation, are likely to be rejected, or be inappropriately used" (Davis, 1980:4). While control of the curriculum is not necessarily delegated to schools, sequencing and teaching methods become a school responsibility.

The current trend of curriculum development is an integration of subject matter into fields or areas of knowledge. Experience of the 1950s and 1960s encourage caution over a complete abolition of subjects in the quest for a totally integrated curriculum. "Subjects may be artificial, but they provide a useful means to more important ends - so long as
the curriculum is not dominated by them" (Lawton, 1984:71). Organisational and individual flexibility, a knowledge of standards, conviction, clarity of thought, and a team approach are required for effective school-based curriculum development (Ravitch).

CHANGE/STRESS RELATIONSHIP

The attention which schools receive from community and political groups and a gradual change in the expectations of parents impose more responsibilities, a greater work load and increasing pressure on the teacher. Many tasks which were considered to be a part of the duty of raising a family are now passed on to the school.

Demographic trends, changing economic directions, mounting uncertainty about the future and increasing competition in the business world indicate a necessity for change in education (Secondary Education: The Future). Educational accountability has received closer scrutiny with a resultant introspection of teaching staff. There has been a general tendency for teachers to assume greater responsibility in curriculum decision-making, the physical care of children, and the preparation of students for future vocations (Tyler, 1983). Successive governments have called for schools to take on further and more diverse tasks but, disappointingly, there has not been any indication as to what could be removed from the curriculum. The curriculum has
been conceptualised as an ever-expanding balloon but the concept is questionable. The curriculum cannot expand as time cannot be enlarged. The time span which schools are apportioned has, with few exceptions, remained the same.

The tendency to increase curriculum complexity by introducing yet more subjects points to the need for rationality. Over the past decade, changes relating to the curriculum include the "... advocacy of student democracy, where less deference to the teaching staff and greater opportunities for choice reflect some erosion in traditional authorities" Davis (1980:5). It is in the quality, not the quantity, where curriculum changes can be made. The first task is to discuss the reasons for change. Lawton (1984:69) wrote: "No group of teachers who begin to look at their own school curriculum ... will continue for long to be satisfied with the status quo".

Change requires an adjustment of attitudes and is a basic human need. Too little change can be ossifying but too much in a brief time-span leads to a confusion of ideas, the outcome of which is a sense of futility. Dissatisfaction, lower standards of work, lower morale and higher states of anxiety arise from changes which are thrust upon people, which are ill-timed and for which implemental requirements are vague. Role overload is the perception of a work load which is in
6. SUMMARY

excess of the individual's ability to complete in a given time (Kottkamp and Travlos, 1986). Adequate information about task expectations is necessary to alleviate problems of role ambiguity.

A sense of ownership, of accepting the necessity for change and a willingness to participate, are important elements of the effectiveness of change implementation. Where goals are clearly defined, are attainable, and are perceived to be of value, a tension arises which then produces an incentive to relieve the tension. Antagonism arising from unsatisfied needs can become a destructive force within an organisation where the individual is subjected to further pressure from external sources of the kind described by McGregor's Theory X.

Incompatibility between work demands and an individual's desires and needs may intensify if the individual is compelled to carry out tasks which are contrary to those wishes or drives. Work demands are perceived to increase with the resultant dissatisfaction of both parties - the employer's concept of the quality of work, and the employee's reaction to demands. Role conflict can also be defined as different expectations occurring simultaneously (Schwab et al, 1986:16). As an example, parents' expectations that children should be taught specific vocational skills conflicts with the philosophy that education should be much more comprehensive in
the student's formative years.

The absence of opportunities to participate in the curriculum decision-making process and the perception that outcomes central to teaching cannot be controlled produces a feeling of powerlessness which leads to dissatisfaction with the profession, a lowering of expectations for student achievement, a decrease in self-esteem, and greater anxiety (Kottkamp and Travlos, 1986).

Emotional exhaustion is the result of a high degree of role ambiguity, role conflict, role overload, or powerlessness. It is manifested in the physical and psychological symptoms of a depletion of resources and an inability to contribute positively. Unalleviated pressure may result in burnout and, as a consequence, the individual will be unable to work (Kottkamp and Travlos, 1986).

RELATED CONCEPTS

NEEDS

A need is a lack of something that, if present, would further the welfare of the individual. Drives, impulses, goal sets, urges, motives, desires, wants and wishes are embraced by the term.

Teachers' needs are related to time - some needs are immediate whilst others relate to the future (Morant, 1981). In-service education should not be fixed in time to certain
phases during a teacher's working life but should be a continuous process which is focused on an improvement of an individual's capacities to work towards the achievement of higher school and individual standards.

**STRESS SOURCES**

The increasing extracurricular demands may prove to be incompatible to the extent that attention is turned from the traditional reason for the school's existence. The negative feelings towards personal accomplishment (Ratsoy and Friesen, 1985), the problems of a career structure which provides little extrinsic and intrinsic satisfaction, the multiplicity of expectations and goals for schools (Sizer, 1984) and the susceptibility of some teachers to be emotionally exhausted (Schwab et al, 1986) beg the question Should all the responsibility be placed on the teachers' shoulders?

The stress experienced by a school principal is also of concern as the consequences are felt not only by the principal but also by staff and students. The principal's leadership style influences the organisational climate and work environment of the school.

**STRESS MANAGEMENT**

The management of time is a theme which underlies the stress literature. The dissatisfaction of being unable to achieve goals because of improper management of time is a
6. SUMMARY

A crucial factor which works against effective curriculum change and development. The feelings of frustration caused by insufficiently achieved objectives adversely affect the school climate, weaken further attempts at development, and can become irritating to the point where anxiety overrides practical considerations (Wilkinson, 1988).

A second theme of stress management is the control of resources. Where student enrolments decrease, the amount of money available to a school for annual requisitions usually follows a similar trend as allocation is normally based on student numbers. Subjects which catered for smaller student numbers may become unviable. Staff transfers become limited and those who are transferred to other schools may not be replaced. Schools may find that they now have one or two senior staff members over quota. Promotion opportunities decrease and teachers find that they remain at the one school for longer periods of time. To counter the propensity for becoming "stale", "falling into a rut" or turning focus from achieving school goals, fluidity of communication, the contribution of fresh ideas, and freedom to innovate should be encouraged.

INCENTIVES

Despite criticisms of Herzberg's theory, the incentive of merit pay, based on extrinsic motivation, does not appear to have been successful. The concept assumes that a major
incentive for good teaching is extra money. The evidence is inconclusive but it appears that while monetary rewards may attract people to a profession, they do not provide a strong incentive for those who are in the profession. Others report that teachers receive greater reward from intrinsic sources and that performance-based payment is more likely to produce morale problems than quality teaching.

As they are presently constructed, career ladders appear to have one major drawback - promotion based on ability and experience progressively distances teachers from the classroom. Difficulties with assessment across the state, the significance of intrinsic/extrinsic rewards, the inequalities in work loads of administrative personnel and a lack of staff participation in the decision process have encouraged the advancement of a number of suggestions for improving the structure. Most have been concerned with changing numbers and responsibilities.

Further research into teacher stress and curriculum change would clarify the influences of incentive structures within the education system.

FURTHER RESEARCH

The collection of data from a number of schools would further the research into teacher stress and curriculum change. A questionnaire, drawing on the concepts and variables which have been discussed, should fulfil that task.
6. SUMMARY

Interviews with staff representatives would provide further depth of responses and should test reliability of questionnaire responses. Observations and a field diary would assist research into the school climate, achievement of goals, and ownership of change.

IMPLICATIONS FOR FURTHER RESEARCH

A number of implications for further research have been suggested in this dissertation. The following fields could be examined:

1. **The impact of major curriculum changes on levels of stress experienced in schools.**

   Many schools are working towards the implementation of new syllabuses and student assessment procedures. A number are also undergoing other forms of organisational change due to the requirements of external bodies. Research into teacher stress should assist the introduction of future changes to the school curriculum.

2. **The views of education personnel concerning the major sources of stress.**

   Before investigation of levels of stress or coping strategies, an examination of stress sources is required. It is possible, but not probable, that perceived sources of stress are quite different from those identified in other parts of the world. While role conflict, role ambiguity, role overload and
powerlessness are common threads, the underlying contributing factors may be at variance with previous research. The provision for respondents to identify alternative possibilities is an essential component of a questionnaire.

3. The intensities of stress experienced by personnel in schools.

It is anticipated that there may be differences in stress levels experienced by school-based personnel which are related to a number of variables, for example, the number of years in the job, or the location of the school. If this occurs, there is also the possibility that further examination of stress causes may lead to suggestions for an improvement of the job itself.

4. Coping strategies which teachers employ when encountering circumstances viewed by them as being stressful.

Identification of coping strategies will enable the determination of those which are marked by favourable outcomes and those which are unsuccessful. Findings may provide useful information for regional officers and professional associations in the development of stress management programmes, for school administrators concerning the forms of alleviating stress in school personnel so that they do not reach the burnout stage, and for all teachers about the most effective coping strategies.
5. The work environment of schools and the stress levels experienced by teachers who occupy positions within those schools.

An investigation of the work environment may provide examples of the relationships which exist between factors of the work environment and levels of stress. Aspects which could be examined include associations between Herzberg's environmental factors and stress levels, and motivation factors and stress intensities.

6. Levels of stress experienced in schools and the motivational styles which are exhibited with the schools.

Kottkamp and Travlos concluded that a principal's thrust behaviour did not bear a direct relationship with perceived role stressors and affective responses. "Most existing studies probe role perception - affective response relationships rather than role perception - behavioral response relationships (1986:246). A questionnaire should provide opportunities for examining the latter aspect which is dependent upon the significance of the factors identified by respondents.

7. The organisational consequences of stress.

The immediate and long-term effects of stress require attention. Research has indicated that immediate effects include anger, frustration, disappointment, fatigue, job dissatisfaction, inefficient work habits, and little peer
interaction. Reported long-term consequences include failure to achieve personal and organisational goals, health problems resulting in absenteeism and the loss of collegiality (Ratsoy et al, 1986; Hosking and Reid, 1985; Schwab and Schuler, 1986; Seidman and Zager, 1987). A questionnaire should provide the opportunity for respondents to express their views of the organisational aspects of curriculum change.

8. The levels of stress experienced in schools and levels identified in comparable studies in other countries.

A comparison with other studies may provide useful information when examining those positions in which a high degree of stress is experienced. It could indicate the actions to be taken in the identification of stressed personnel and provide information about direct-action coping strategies, the sources of stress and perceptions of personnel regarding their ability to handle stress-inducing situations.

CONCLUSION

Changes in the business world, social mores, school organisation, and community and student expectations have required a reciprocal change in aspects of education and curriculum organisation.

Skill, knowledge and experience are required of teachers in their involvement with the curriculum decision process. Time is of paramount importance. Clarity of objectives, compre-
6. SUMMARY

Comprehensive communication networks and the fostering of an environment which encourages freedom of ideas and expression are necessary for the effective implementation of change.

This dissertation has investigated the relationship between teacher stress and curriculum change. Concepts and variables which are important in understanding and explaining the relationship between teacher stress and curriculum change have also been identified.

The relationship between teacher stress and curriculum change has been examined, a conceptual framework has been built and a methodology for further research has been explored. Possible issues for this further research have also been identified.

I want this world better taught. Everyone is to have the best chance of being his best self. Everyone is to be living in the light of the acutest self-examination and the clearest mutual self-criticism. (H.G. Wells "The Undying Fire")
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133
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<td>Green D.</td>
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<td>Holt M.</td>
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APPENDICES
Appendix 1

The following questions appeared in an instrument designed by Maslach. Respondents were asked to rate how often they had those feelings and how strong the feelings were.

I feel emotionally drained from my work.
I feel used up at the end of the day.
I feel fatigued when I get up in the morning and have to face another day.
I can easily understand how my students or subordinates feel about things.
I feel I treat some people as if they were impersonal objects.
Working with people all day is really a strain for me.
I deal very effectively with the problems of others.
I feel burned out from my work.
I feel I'm positively influencing other people's lives through my work.
I've become more callous towards people since I took this job.
I worry that this job is hardening me emotionally.
I feel very energetic.
I feel frustrated by my job.
I feel I'm working too hard on my job.
I don't really care what happens to other people.
Working with people directly puts too much stress on me.
I can easily create a relaxed atmosphere.
I feel exhilarated after working closely with other people.
I have accomplished many worthwhile things in this job.
I feel like I'm at the end of my tether.
In my work, I deal with emotional problems very calmly.
I feel others blame me for some of their problems.

Figure 12. THE MASLACH BURNOUT INVENTORY
(Maslach and Jackson, 1978)
Appendix 1

This questionnaire is designed to determine what is stressful for you in your work in school. On the following pages you will be asked to identify and describe several factors that are stressful for you, the approaches you use to deal with stress, and the effectiveness of such approaches. Please describe only one major stress factor on each of the following pages. (It is very important that you include enough description for each of the questions asked to present a clear picture of what you mean.) You will be asked to describe one work factor that are very stressful for you. Before going on, please respond to the questions below.

Present teaching level
- elementary
- junior
- middle
- high sch

Male
- Urban
- Suburban
- Rural

Female
- Urban
- Suburban
- Rural

Subject/specialization

Number of years in teaching

FACTOR
1. Identify stress factor:
   Describe fully what the stress factor means to you. Give an example to illustrate what the stress factor means to you:

2. Explain why the stress factor you identified causes you stress:

APPROACHES
3. List and describe the most important typical approaches (if any) you use to deal with stress factor identified above indicate the degree of effectiveness (or ineffectiveness) of each approach. (Do not exclude approaches you may feel are socially unacceptable.)

   Not very effective
   - 1
   - 2
   - 3
   - 4
   - 5

   Very effective
   - 1
   - 2
   - 3
   - 4
   - 5

a.
b.
c.
d.

FEELINGS
4. Describe your typical feelings associated with the stress factor.
APPRAOCHES

5. List and describe the most important approaches (if any) you use to deal with your feelings identified in number 4 and indicate the degree of effectiveness (or ineffectiveness) of each approach. (Do not exclude approaches you may feel are socially unacceptable.)

<table>
<thead>
<tr>
<th></th>
<th>Not very effective</th>
<th>Very effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>c</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>

Figure 13. THE TEACHER STRESS INVENTORY QUESTIONNAIRE (Blase, 1986)
APPENDIX 2
<table>
<thead>
<tr>
<th>Empirical knowledge in the physical and social sciences.</th>
<th>Physical and biological sciences.</th>
<th>Health, physical education and recreation. The social sciences including history and geography, and studies of economics, politics, cultures and religions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religious knowledge</td>
<td>Humanities and social sciences - history, geography, classical studies, religious studies.</td>
<td>The study of work and daily life (including studies of family life, child care and personal relationships). (Being concerned about values and beliefs. This includes how ideas and actions reflect beliefs, making moral judgments and appreciating the values, rights and obligations of ourselves and others)</td>
</tr>
<tr>
<td>Mental or personal knowledge involving explanations of human behaviour in terms of intentions, will, hopes, belief.</td>
<td>Interdisciplinary work.</td>
<td>The study of work and daily life (including studies of family life, child care and personal relationships). (Being concerned about values and beliefs. This includes how ideas and actions reflect beliefs, making moral judgments and appreciating the values, rights and obligations of ourselves and others)</td>
</tr>
<tr>
<td>Aesthetic knowledge.</td>
<td>Literature, film and television. Expressive and creative arts.</td>
<td>The arts - including literature, music, art, drama, the media and other expressive and practical arts.</td>
</tr>
<tr>
<td>Mathematical knowledge.</td>
<td>Mathematics.</td>
<td>The sciences and mathematics - including their applications. Languages - using and studying the English language and other languages.</td>
</tr>
</tbody>
</table>

Figure 14. FORMS AND FIELDS OF KNOWLEDGE
immediate professional needs (require short-term satisfaction)

induction and refreshment

the teacher working on his own

the teacher as a member of a functional group

refreshment, extension and conversion

less-immediate professional needs (require longer-term satisfaction)

the teacher as a member of a whole staff

Figure 15. Professional Needs and their Relationships with Time (after Morant 1981:12)
APPENDIX 4
Appendix 4

**BAND 1**
(Main responsibilities in classroom)

**Level 1**  
Classroom teachers
Resource teachers - Appointed by school  
One year in office  
Reduced teaching time  
Replaces seniors if desired

**Level 2**  
Senior Teachers - Salary of classroom teacher plus  
3- or 5-year term  
Appointed by school to be approved by Regional officer.

**Level 3**  
Assistant Principal - Fixed term of office

**BAND 2**
(For Principals and Deputy Principals)

Deputy Principal - Permanent or 5-year term  
1-2 years probation  
One deputy per school

Principal - 5- or 7-year appointment  
Salary dependent upon school size  
Parents to be represented on selection panel

Figure 16. THE TASMANIAN TEACHERS' FEDERATION Model 1
<table>
<thead>
<tr>
<th>GROUP A</th>
<th>GROUP B</th>
<th>GROUP C</th>
<th>GROUP D</th>
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<tbody>
<tr>
<td>Classroom teachers</td>
<td>Senior classroom teachers</td>
<td>Administration positions</td>
<td>Principal</td>
</tr>
<tr>
<td>Annual salary levels</td>
<td>Annual salary levels</td>
<td>3-year appointments</td>
<td>Senior administrative staff</td>
</tr>
</tbody>
</table>

1. Annual increments stop at 8. Teacher is now in Group B and is eligible to apply for Group C.
2. On gaining promotion, a teacher enters Group C one level above present salary level and returns to Group B on that same level. Therefore, salary is not lost on return to Group B.
3. If applications are unsuccessful or the teacher does not apply, the teacher remains at increment 8.
4. If another Group C position is gained after returning to Group B, it will be on level 10. The teacher returns to level 10 Group B. This continues until level 13.
5. If a person gains a Group D position, the position is again offered at a level above the person's present level (with a consequent increase in salary).

Figure 17. THE TASMANIAN TEACHERS' FEDERATION Model 2
FOR 1990 SCHOOL POPULATION

<table>
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<tr>
<th>New Classification</th>
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<th>Number of Schools</th>
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<tbody>
<tr>
<td>A</td>
<td>Less than 400</td>
<td>31</td>
</tr>
<tr>
<td>B</td>
<td>401 to 550</td>
<td>15</td>
</tr>
<tr>
<td>C</td>
<td>551+</td>
<td>14</td>
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</tbody>
</table>

Comprising 25 District high and 35 high schools

Each school receives a per capita grant for senior staff payments after State appointments from which to offer payment for Posts of Responsibility.

Figure 18. THE TASMANIAN TEACHERS' FEDERATION Model 3
### Figure 19. THE PRICE PROPOSAL

<table>
<thead>
<tr>
<th>No. of Students</th>
<th>No. of positions</th>
<th>No. of positions</th>
<th>No. of positions</th>
</tr>
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<tbody>
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<td>School</td>
<td>College</td>
<td>School</td>
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<tr>
<td>300-399</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>400-499</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>500-599</td>
<td>2</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>600-699</td>
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<td>3</td>
<td>6</td>
</tr>
<tr>
<td>700-799</td>
<td></td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>

Head Teacher

1 per 50 pupils

1 per 45 pupils
Appendix 5

I. CAREER SATISFACTION

1. I look forward to teaching in the future.
5. I am glad I selected teaching as a career.
10. Teaching is more fulfilling than I had expected.
12. If I had to do it all over again, I would not become a schoolteacher.
19. I look forward to each teaching day.

II. PERCEIVED ADMINISTRATIVE SUPPORT

3. I get adequate praise from my supervisors for a job well done.
8. I feel that the administrators are willing to help me with my classroom problems, should they arise.
11. I believe that my efforts in the classroom are unappreciated by the administrators.
15. My supervisors give me more criticism than praise.
18. I feel that the administrators will not help me with classroom difficulties.
20. The administration blames me for classroom problems.

III. COPING WITH JOB-RELATED STRESS

2. I feel depressed because of my teaching experiences.
4. The teaching day seems to drag on and on.
7. My physical illnesses may be related to the stress in this job.
9. I find it difficult to calm down after a day of teaching.
13. I feel that I could do a much better job of teaching if only the problems confronting me were not so great.
14. The stresses in this job are more than I can bear.

IV. ATTITUDES TOWARDS STUDENTS

6. The students act like a bunch of animals.
16. Most of my students are decent people.
17. Most students come to school ready to learn.
21. Students come to school with bad attitudes.

(Numbers indicate the placement of the item when the instrument is administered.)

Figure 20. THE TEACHER BURNOUT SCALE
(Seidman and Zager, 1987)
APPENDIX 6
Figure 21. FACTORS LEADING TO SUCCESSFUL IMPLEMENTATION
(After Miles, 1987)