

DOCUMENT RESUME

ED 460 105

SP 040 455

AUTHOR Hutchinson, William
TITLE An Investigation of Teacher Stress and Efficacy.
PUB DATE 1998-00-00
NOTE 25p.
PUB TYPE Reports - Research (143)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Coping; *Educational Environment; Foreign Countries; High Schools; Job Satisfaction; *Self Efficacy; Self Evaluation (Individuals); *Stress Management; *Teacher Attitudes; *Teacher Effectiveness; *Teaching Conditions
IDENTIFIERS Australia (Perth)

ABSTRACT

This study, which comprises part of a larger Western Australian research project on the relationships among teacher stress, perceptions of the school organizational climate, and beliefs in teacher efficacy, involves interviews with six secondary school teachers. The study focuses upon four major variables which may impact upon teachers' ability to manage their stress levels. These four variables are the coping strategies employed by teachers; the magnitude of teacher efficacy beliefs; the sources of self-evaluation data upon which the teacher efficacy beliefs are based; and the teacher's perceptions of satisfaction with teaching as a career. The overall findings of the study suggest that the teachers employed primarily short-term, relatively unsuccessful coping strategies for dealing with stress. In addition, they tended to base their evaluations of the environment and their own levels of teacher efficacy on restricted sources of data. The results indicate that the application of teacher efficacy principles may be useful in the reduction of teacher stress by influencing the ways in which individual teachers construct and interpret the school organizational climates in which they work. (Contains 33 references.) (SM)

AN INVESTIGATION OF TEACHER STRESS AND EFFICACY

William Hutchinson
The Hong Kong Sea School
Stanley
Hong Kong.

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS
BEEN GRANTED BY

W.G. Hutchinson

Running Head: Teacher stress, efficacy

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Abstract

Teacher stress studies, prompted by concerns with rising levels of teacher stress, have identified a large number of potential stressors within school environments. This study, which comprises part of a larger Western Australian research project into the relationships among teacher stress, perceptions of the school organisational climate and beliefs in teacher efficacy, involves interviews with six serving secondary school teachers. The study focuses upon four major variables which may impact upon teachers' ability to manage their stress levels (Bandura 1997). These four variables are the coping strategies employed by teachers; the magnitude of teacher efficacy beliefs; the sources of self-evaluation data upon which the teacher efficacy beliefs are based; and the teacher's perceptions of satisfaction with teaching as a career. The overall findings of the study suggest that the teachers interviewed employed primarily short-term, relatively unsuccessful, coping strategies for dealing with stress. In addition, they tended to base their evaluations of the environment and their own levels of teacher efficacy on restricted sources of data. The results indicate that the application of teacher efficacy principles may be useful in the reduction of teacher stress by influencing the ways in which individual teachers construct and interpret the school organizational climates in which they work.

AN INVESTIGATION OF TEACHER STRESS AND EFFICACY

The high levels of work-related stress experienced by workers in human service occupations, especially teaching, have attracted considerable educational research interest. The nature, causes and symptoms of teachers' work-related stress have been well chronicled (e.g., Kyriacou & Sutcliffe, 1978a, 1978b; Laughlin, 1984; Louden, 1987; Otto, 1982, 1989; Tuetteman, 1988), and prime sources of teacher stress have been identified within the school organizational climate. Lock (1993), writing in an Australian context, argued that changes to the organizational structures of government secondary schools have been instituted mindful of the quality of working life for teachers and referred to a variety of government policy statements to that effect. However, despite government awareness of the problem (Louden, 1987), teachers' work-related stress does not appear to have lessened (Lock, 1993). Because of the individual nature of work-related stress, one reason for the continued increases in stress may be the coping strategies employed by individual teachers. These strategies are important. They impinge upon the ability of the various stress management policies to be effectively implemented by the individuals. This study reports the results of interviews with six practising secondary school teachers in Perth, Western Australia in which the teachers were asked to respond to questions related to their levels of work-related or occupational stress, their levels of teacher efficacy and the coping strategies they employed.

If stress occurs as a result of misfit between the demands placed upon individuals by the environments in which they operate and the abilities of those individual to meet those demands (e.g., Leach, 1984), one approach by which the effects of teachers' work-related stress may be ameliorated would be to enhance the abilities of teachers to meet the environmental demands. Such a procedure may be developed from the self-efficacy construct that was proposed by Bandura (1977a, b, 1986). By using self-efficacy principles to enhance teachers' perceptions of their self-efficacy in tasks related to teaching, that is their teacher efficacy, schools may be better placed to provide them with more effective strategies to meet demands of teaching and lower levels of stress.

Self-efficacy beliefs have been linked with resistance to stress (Bandura, 1997) and the approach has been lauded as a potential organizational focus for teacher education programs (Ashton et al., 1984). In the context of the present study, teacher efficacy beliefs have relevance for not only the perceptions of stress but also the coping strategies available to and chosen by teachers.

Method

Interviews

Each interview consisted of an 18-question format in three sections. Seven questions related to stressful situations in the school and the methods of dealing with those stresses. Nine questions targeted the teachers' efficacy beliefs and the individual sources of those self-evaluations and two questions sought information related to the teachers' levels of satisfaction with a variety of aspects of teaching.

Subjects

The subjects for the interviews that are reported in this study comprised six teachers in government secondary schools in metropolitan Perth, Western Australia.

All teachers were serving employees of the Ministry of Education at the time of the interviews. The schools at which these people taught were suburban senior high schools.

Teacher One.

Subject One is a female, 26 years old. Her qualifications are B.A., Diploma of Education. She has recently changed from teaching in the subject area of English to Mathematics. This person is in her second year of teaching. She had not undertaken university studies leading to teaching directly from school. After completing year 12 studies Subject One had worked in a bank prior to beginning teacher training. Her father is a serving teacher in a senior college and she has some relief experience in that setting prior to being employed by the Ministry of Education as a secondary school teacher. Subject One believes that she is fair, open-minded and understanding, but regards her high beliefs of herself and others as a potential personal weakness.

Teacher Two.

Subject Two is female, 24 years of age, married, and in her second year of teaching. She has taught at two schools, the present school being her second, and she was relatively happy teaching in her first school. She regarded the students' behavior in that school and the support that she received from colleagues, especially her head of department and the deputy principal, as better. In her present school she is experiencing acute stress and, rather than receiving support from her head of department and one of the deputy principals, she regards those people as being actively critical of her teaching abilities. At the end of the first term of service in her present school, Subject Two seriously considered leaving teaching. She expressed the opinion that she was a good teacher and gave as evidence the fact that she had been given control over coordination of the work program for TEE Geography. She says that her problems are not widespread but associated with only a few classes and teachers.

However, the only person to whom she feels that she can turn is her husband and "he tries to help but doesn't really understand". Subject Two did not know of the existence of the Teachers' Union sponsored support agencies and had not been given that information by her superiors in the school. Subject Two regards her personal strengths as thoughtfulness, honesty and cleanliness. She is especially proud of her housekeeping abilities. However, as personal weaknesses, she lists not putting herself first and being relatively powerless because she doesn't like confrontations.

Teacher Three.

Subject Three is female, a mathematics teacher, and married with two children and is 39 years of age. She returned to full-time teaching six years ago after a 12-year break. During the break from teaching she worked in a variety of occupations including manageress of a coffee lounge, nursing assistant in "C" class hospital, retail store owner, travel agent, and international representative for a multi-national building construction company. Prior to returning to teaching, she was awarded a degree in computing but has opted to teach mathematics exclusively. Since returning to teaching she has taught in the same school. She has refused to apply for a transfer to a school closer to her home because she likes "most of the kids" and her colleagues in the Mathematics department of the school are "great people to work with". In the term prior to the interview this teacher was involved in a disagreement with members of the executive in her school. She sought assistance from a psychiatrist, was diagnosed as suffering a nervous breakdown and was hospitalized. The matter has not been resolved completely but sufficiently to allow her "to get on with my job". Subject Three lists as her main personal strengths that she is quick-witted, sympathetic, forthright and honest. However, she admits to being "too gullible" and "too sensitive". She has high expectations of herself and others and tends "to stew over things too much".

Teacher Four.

Subject Four is male, 30 years of age and unmarried. He holds a Bachelor of Education degree. He has taught in only two schools during his teaching service. Subject Four has received two criticisms against his teaching during his time of service. Both complaints have come from parents of students who performed badly in examinations. In both cases, Subject Four was not made aware of these complaints by his principal or head of department until much later. He regards that type of action as unprofessional and expressed a low level of confidence in his present head of department and principal for that reason. Subject Four tries to encourage in his students a willingness to take responsibility for their own learning especially in the final two years of secondary school. Subject Four is presently studying part-time towards his post-graduate Diploma in Educational Administration. He would like to teach in the independent school system and hopefully, after the conclusion of his study, aim for promotion. Subject Four admits to suffering acute stress in the past year but that stress

was associated with personal relationships and not teaching. As his personal strengths, Subject Four lists caring, loyal and trustworthy and being a fairly good judge of character. He admits to being selfish and arrogant especially about his teaching. He is especially cynical of his ideas "being knocked back by those who don't match my abilities or beliefs".

Teacher Five.

Subject Five is a teacher of mathematics, female, unmarried, and 32 years of age. She has taught in both city and country secondary schools. Subject Five is financially secure. She owns her own apartment and car and has a large number of investments. She likes teaching mathematics and considers herself a very good teacher of the subject. She regards herself as loyal to her friends and she tries to see the best in people. She tries to avoid confrontation but admits to being impatient with some people. She is not a very social person and avoids relationships with people out of shyness. She does not regard teaching as a very stressful occupation.

Teacher Six.

Subject Six is a male, 46 years old who teaches English and social studies. His qualifications are a Bachelor of Arts and Diploma of Education. He has been teaching for his entire working life. This person actually dislikes teaching in the city and has an application for transfer to a country school pending. The teacher was divorced four years previously and, therefore, considers that he has no ties which are keeping him in the city. His only child graduated last year and has entered university. He lists as his personal strengths as compassion and a zest for living and his personal weaknesses as gullibility, vulnerability and emotional instability.

Results

Bandura (1977a, b, 1992) has proposed that an important influence on an individual's perceptions of their ability to control the environmental demands placed upon them and, hence, reduce stress was the individual's self-efficacy beliefs. The teachers were interviewed on matters relating to their levels of teaching efficacy beliefs so as to confirm the application of Bandura's (1977a, b) theory to the present context.

What do you regard as your main strengths as a teacher?

Teacher efficacy beliefs are those which pertain to the teacher's perceived abilities in teaching-related tasks. They were conceptualized as perceived strengths and the first question related to efficacy asked teachers to identify their main strengths as teachers.

The predominant response from four of the five teachers was knowledge of subject matter in their teaching area. This was followed by an ability to relate well to the students "relate well to kids" and preparation. Other teaching strengths included: "well organized"; being a "creative teacher"; "adaptability"; a "love of the subject matter";

"persistence"; resourcefulness; "delivery of information at the kids' level"; and "giving kids responsibility for their own learning". The clear trend was towards the identification of a small number of core teaching skills in association with a wide range of other strengths.

Interviewer: What are your main strengths as a teacher?

Teacher One: I relate well to kids. Therefore, I probably spend more time than most would persisting with "problem" kids and I don't have major discipline difficulties. I know my subject pretty well and I am very organized. What else? Probably I am a creative teacher.

Teacher Two: Preparation and knowledge of my subject. As I've said before, I pride myself on being well prepared for all my classes, especially those where I expect problems. In addition, to preparation, I rate myself highly on how I relate to most kids. This may seem strange but the source of my stress is concentrated on just a few classes. Most kids, I get on really well with.

Teacher Three: My best points are the rapport that I have with the kids (at a personal level). I make an effort to teach the kids in terms they understand. I persist until they understand on important things, especially. I am able to laugh with and at the kids (without hurting their feelings) and myself.

Teacher Four: My main strengths would be my preparation of my lessons, and my knowledge of the subject matter that I teach. Also, I try to get the kids involved in their own learning and to clearly give them the responsibility for their own success and/or failure.

Teacher Five: My main strengths as a teacher are my command of the subject matter and the vicarious successes that I get from the kids' performances. I teach a high level of mathematics, I know my subject and I like mathematics. I am really a mathematician first.

Teacher Six: My main strengths as a teacher would be my adaptability and my ability to deliver information and lessons in general at the kids' level. I am also resourceful in working out how to deal with problems that I run into with kids trying to understand the topics I teach. But, in the main, I would say my major strength would be my delivery of information at the kids' levels.

What are perceived by teachers as their main weaknesses as teachers?

The second question related to teacher efficacy sought information concerning those tasks which the teachers thought constituted professional weaknesses. The responses to this question were less variable than were those related to the identification of teaching strengths. The major weakness that was supported by the teachers involved time management. Whether this time management problem was associated with course coverage, simply talking too much in class, or allocating time for marking, the similarity of response was interesting; teachers considered that they were poor time managers.

The teachers also identified "being too familiar with kids", "discipline", "pitching language at the class level", and "lack of patience" as other teaching-related weaknesses.

Interviewer: What are your main weaknesses as a teacher?

Teacher One: Going back to the previous question, I relate well to kids but I can have problems with being too familiar with them. Consequently, I have the problem of losing track of time in class. Come to think of it, I just said that I am very well organized. But, I suppose that as I keep to time in teaching, I can't be too bad at time management. As well as these, I have recently changed to mathematics full-time, from English, so I do have some difficulty in pitching the level of the lesson to the class. Sometimes they don't understand the language that I use.

Teacher Two: Discipline, I think. But that is my own assessment mainly. It is hard to judge. I think that I've gotten some rotten classes. I would say, now that I come to think of it, that other teachers, including those who criticize me or who regard themselves as good teachers have as much trouble with these problem classes as I do. For example, the noise. Regardless of who teaches them the classes are noisy.

Teacher Three: Getting marking done! I always meet deadlines but I leave things till the last minute. I also put up with the shit too long before I explode. High tolerance followed by a big explosion.

Teacher Four: I talk too much. I am trying to change, based upon the principle that the less you say the better. That is not quite true, I know, but I do tend to talk too much and I get off the topic many times when I know that I should stick to the lesson. I am worried that I waste too much time. But I still cover the course, and it is on a very tight time schedule, so, maybe I exaggerate the problem to myself.

Teacher Five: My major weakness would probably be my lack of patience. This is especially true of kids who have low motivation but not with regards to kids with low ability. I love maths so I suppose that I might expect that others do too. So when I am faced with kids who just don't try and can't be persuaded to try, I lose it, far more easily than I do when I am dealing with kids who are having troubles understanding.

Teacher Six: My greatest weakness would be the problems that I seem to have covering all the required content. I don't know if that is me or the subject that I teach but I find that it is a real struggle, sometimes, to cover the material and I put it down to me.

How do teachers rate themselves in relation to their colleagues and by which sources of information do they make those evaluations?

Ashton et al. (1984) investigated whether teacher efficacy was a criterion- or norm-referenced phenomenon. They found that teachers rate their abilities comparatively with those that they perceive other teachers possess. However, Ashton et al. (1983) had also reported that school-level influences make it difficult for teachers to maintain and

develop an accurate sense of teacher efficacy. These two aspects of teacher efficacy research were investigated by two questions: the first dealt with teachers' self-ratings; and, the second, which asked for teachers to identify the sources of the information upon which they based those self-evaluations.

Four teachers rated their teaching abilities better than most teachers whom they knew. The fifth teacher rated herself as "about 50/50". One teacher, who only rated herself as "better than some and worse than others", said that her discipline was worse than other teachers but also reported that no one had ever told her that. She based her self-criticism upon her own perceptions.

Teachers based their evaluations on a variety of cues, although the primary cue appeared to involve some form of feedback from students. This feedback may have taken the form of "no great discipline problems", "based upon kids' marks", or that "kids and parents say I'm a good teacher" or the more general "kids' reactions". Another related cue was the perception that an orderly class was typical of a good teacher.

However, the data upon which the teachers based their evaluations was limited and most of it was limited within the classroom. None of the teachers interviewed reported the existence of corroborating evidence from colleagues or superiors. One teacher admitted that he felt that he was a better teacher than most but that the evaluation may not have been accurate. In addition, he would "like support to back up that opinion" but the support which he sought was not forthcoming in the school environment in which he taught.

Interviewer: Do you consider that you are better/worse than most teachers? How do you make that evaluation? i.e., how do you know?

Teacher One: I am better than most teachers that I know. I make that decision based upon kids' responses to my lessons. I also don't have discipline problems but many of my colleagues say they have more problems with the same groups of kids. I also get good grades with my classes, but, in general, I don't worry too much about them during the term, only when grades are awarded at the end of term.

Teacher Two: In some ways I am better than other teachers, but, in some ways, not as good. My control of my classes and my discipline are worse. But, come to think of it, no one has ever told me this. It's more of a feeling that you get from teacher training and listening to others talk about what they do in the classroom. I know that I have high expectations of myself. Could these expectations be too high? I don't know. That is one of the difficulties of teaching: trying to learn what is expected of you as you change schools. I am also very good at reporting and meeting deadlines. For example, I pride myself on the value of my reports both at the formal level as well as comments that I put on kids' work. Also, at the start of the year I was very organized, far more organized on the day before we started than many people.

Teacher Three: Better than most, worse than others. Top 20 percent. If I don't think I am good no one else will! I'm better at my style of teaching than anyone else. How do I know? The kids and the parents say that I am a good teacher. Students request to have me as their teacher never NOT to have me - never to get out of my classes.

Teacher Four: On a par with most. Some times I teach very well - I am very good. Other times my performances are bad. How do I know? Well, mainly on gut feeling. I mean, you get to know yourself what is good and what is bad, so you continually rate yourself based on your own gut feelings, and the way the kids react to you. It is especially true that the way kids react after they have had another teacher gives you feedback on your performance. The problem is that feedback from the kids can be deceptive. As I said before, the kids are not constant in their expectations or their opinions. Often they will rate you as a good teacher simply because they get good marks in a recent test and bad because they did poorly. The marks can be manipulated and deceptive and therefore, so can the kids' evaluations of you as a teacher. You can't be sure of the kids' ideas, so it really comes back to gut feeling.

Teacher Five: Better. I run a tight ship. I don't allow things to get out of hand and to just "happen". I make things happen. I am well organized and disciplined and I am able to keep my classes on-task for longer periods of time than most people that I know. I seem to have less trouble with behavioral problems than other teachers on an on-going basis. When I have difficulties, they usually blow up and then we get back to normal again.

How do I know? Well, I rely on my own feelings of the classes, and I talk about my classes with other teachers and I seem to have fewer troubles. But, also, the marks obtained my classes and the general neatness and standard of work submitted is as good as, or, usually, better than those consistently obtained by other teachers in other classes.

Teacher Six: I am better than most other teachers. I know that I have some problems with content but that aside, I believe that I am better. I tend to be hard on myself and the problem is that I have no opportunity for feedback. No one else ever comes near my room, so it is very difficult to get any real idea from my colleagues. That leads to what could probably be called "low academic self-esteem" on my part. I know that I have said that I am better than others but I would still like some one to support me on that matter.

What do teachers do when they encounter a problem at school? Why do they choose that course of action?

A clear indication from research discussing the characteristics of teachers who possess different levels of teacher efficacy is that they adopt different coping strategies when confronted with environmental demands. In this question, the coping strategies employed by the small group of teachers who were interviewed were ascertained.

The teachers were asked what they did when they encountered a problem at school and why they choose that course of action. A common approach seemed to involve

some attempt to stand back from the problem and think about the issue. Within that framework, coping behaviors differed. Some teachers may attempt to discuss the problem with other staff "talk it over with senior staff", "seek help from others" or "seek assurance that I am right". However, one teacher in particular did not really want those confidantes to disagree with her own views and another teacher agreed, "I seek assurance that I am right". Therefore, some teachers seek help only to confirm that their approach was a 'correct one'.

Other teachers differentiated between student-related and other sources of stress. Whereas some teachers replied that they had a ready pattern of response to environmental stressors, other teachers tended to give the impression that they reacted to each stressor as an individual event "depends on the problem". One interviewee specifically mentioned that she relied upon herself and another tried to ignore minor problems. However, the major coping strategy employed involved some attempts at collegial action and peer support.

Interviewer: When you encounter a problem at school what do you do? Why do you choose to do that?

Teacher One: As I said before, when I encounter a problem at school, I usually think about the problem before doing anything about it. I may talk it over with someone if I am really stressed out or worried about the matter. The person I talk to will usually be someone who is more senior than I am. For example, my head of department and I will act on his/her advice.

One example which comes to mind was at a recent student leaders' camp. I was in a difficult situation but was unable to ask for help as I was literally on my own. My advice to myself was to stop over-reacting.

Talking to others gives a better perspective on the problem and on me. But I may not act on all advice that I am given. That is I don't follow others' advice blindly but with my head of department I usually do because I respect her.

Teacher Two: It depends on the problem. If it is with a student then I try to follow the MSB (Managing Student Behaviour) policy of the school. The problem is that there are many grey areas and the policy does not cover everything. So I have to set classroom rules of my own and therefore I spend a good deal of my own time detaining kids. The school rules don't go far enough and I believe my own approaches are more successful. If the problem were with a staff member, I would probably try to talk to the person to get something settled. But they rarely are. Usually, I will back off and be no better off than before. However, one of the deputies has been very helpful. I have absolute confidence in his ability to do his job and, if I ask him, he is often a great help.

Teacher Three: *I seek reassurance that I am right. That not only makes me feel better, it also helps me decide on how I should act. But I usually ask people who are going to agree with me anyway. In other words, I know that I am right anyway and just seek assurance. However, simply by having other people say that I am right, reinforces my confidence in my own abilities.*

Teacher Four: *I try to weigh up the options. I try to deal with the problem myself. But I will seek outside help if need be - usually from the people that I work with. But not just anyone. The people I would turn to are those whose ideas I respect and who have helped me in the past.*

Teacher Five: *I rely on myself. As you have probably guessed, I would rate myself as fairly self-sufficient. I know what I am doing, and I do it well. Therefore, any decision I come to as to ways to solve my problems must work for me. I may ask other people's advice but rarely do I just go ahead and try what they suggest without applying it to me and my peculiar situation first. Therefore, I suppose that you could say that I resolve my problems myself.*

Teacher Six: *If it is a minor problem, I try to ignore it and hope it will go away. However, my response differs according to whether the problem is associated with students or the other aspects of the school. If the problem is a bit more serious and something I can do something about, I really don't do anything differently. I just try to give it time to settle (maybe up to 48 hours) then make a decision based upon my (hopefully cooler) evaluation of the problem. If the problem relates to the administration of the school, then it really is not up to me to make a decision - I just have to wear what ever they say.*

How responsible do teachers feel for their students' success and failure?

Research into teacher efficacy (e.g., Ashton, 1984; Gibson & Dembo, 1984) has differentiated between high and low efficacy teachers on the basis of the level of personal responsibility that they accept for the success and failure of their students. Ashton (1984) identified a range of eight dimensions which may be included within the construct of teacher efficacy. One such dimension involved personal responsibility for student learning. Higher efficacy teachers believed that it was their responsibility that children learn and, when their students failed, this group of teachers examined their own performance for ways in which they might have been more helpful. Low efficacy teachers laid the responsibility for student failure and success with the students, their ability, family background, motivation and attitudes. This question "How responsible do you feel that you should be for students' progress and failure in your classes?" sought to confirm those traits in the present sample.

The responses indicated that most teachers were willing to accept some of the responsibility for student performance. Of the four teachers who regarded their teaching performance as better than other teachers, all were willing to attribute student success in part to their teaching performance. None was willing to accept complete responsibility for student failures: "not my fault", "depends on the day of the week",

"only one part of the overall picture, about 25/75". Of the lower efficacy teachers, one reported that she accepted "responsibility for failures but rarely successes, especially for Years 11 and 12". The other teacher who regarded his performance as average only accepted 25 percent of the responsibility for students' success and failure.

Interviewer: How responsible do you feel that you should be for students' progress and failure in your classes?

Teacher One: Fifty-fifty. With success or failure, I rationalize that I will put in the time but they must put in the effort. With failures, I usually follow-up and advise if at risk. So I don't really accept responsibility for failures especially but I do try to resolve problems and support students by maintaining good communication with them.

Teacher Two: I feel very responsible for my students' failures but rarely responsible for their successes. I am becoming realistic about my influence on their failures, however. Especially for the year 11s and 12s. I genuinely feel that I am not responsible for the successes of my students but it can differ with individuals. I tend to credit it to the kids doing the work. Certainly, I set the work but, really, it comes down to them. If they succeed, they would probably succeed anyway. The mere fact that I set the work etc. really probably only makes it easier for them.

Teacher Three: About 50/50 in terms of kids' successes. If they are motivated then they will, or, at least, can, progress no matter what I do. I feel that it is very important for students in my classes to do well but, when you get down to the nitty-gritty, no matter what the teacher does if the kid doesn't work then he/she won't succeed to the best of their ability. For example, in one of my Year 11 classes is a girl who hasn't even bought the textbook. She does no work except that which is done in class and yet she tops the year in mathematics. In her case, my teaching is important, perhaps, because it is the only time that she goes through the work but, realistically, she is succeeding because of her own very special abilities. So about 50/50, would be right.

Kids' failure? It is not much my fault. I know that. My results, in general, speak for themselves. Kids in my classes who pay attention to what I say, and do the work, do well. Even when I tutor students from other schools who have had other teachers, I have never not been able to improve their marks very quickly. Certainly, I know that the one on one situation in itself will be a factor in the improvement, but often these kids come to me after being tutored by other people without success. But I do feel somewhat responsible for the kids who fail. I wonder if I could have done more or done it differently, somehow, to get them to work harder and to pass. I don't know if it is pride in my work or abilities or I am worried that the failures will stuff up my records and make me look bad. But I don't worry about it as much now as I used to.

Teacher Four: In terms of success, I regard my teaching as one part of the overall picture. Probably about 25/75. Content is irrelevant. You are teaching kids how to learn so when it comes to passing exams, the real effort comes from them.

Failure? About the same as the above, but I still feel guilty. However, if I feel myself getting worked up, I try to rationalize the situation. After all, the other kids in the class had the same chance as the one's who did poorly so it wasn't really my fault.

Teacher Five: *It really depends on the day of the week - how I feel. Sometimes, I will take the blame, other times not. If I am feeling a bit off-color and problems arise, or the kids don't understand the topic we have just gone through, then I am quite prepared to say that it may have been my fault. But I don't agonize over it. Next time round, I will try hard to remedy the situation and to fix things. Other times, as I have said, I will just say "Blow it.". If I feel that I did my best then it can't be my fault, or even if it was there isn't much that I can do about it. So I don't tend to dwell on problems when I feel like that. It really just depends on my moods.*

Teacher Six: *In terms of my contribution to the success of my students, I am only one part of the overall picture. The content that I teach is mainly irrelevant. I try to teach the kids how to learn rather than what to learn. So I would say that only about 25 percent of my students' success lies with me. If I teach them correctly, then they should be doing most of the work themselves. With regards to failures by my students, essentially the same applies. But I still feel guilty if the kids do badly on a test or exam after we have covered the material. I tend to rationalize that all the students had the same chance and some or most passed so it cannot be my fault, primarily, if some didn't.*

What levels of satisfaction do teachers associate with teaching as a job?

Ashton (1984) noted that high efficacy teachers should be expected to have a sense of personal experience and positive affects in relation to teaching. In relation to the interviewees, this aspect of efficacy was investigated by asking "How satisfied are you with teaching as a job?"

Only one of the six teachers expressed complete dissatisfaction with teaching "I'm not satisfied. The money is abysmal and when this is linked with apathy from other teachers and the administration procedures that you have to put up with, it's hard to be satisfied". The other interviewees all expressed some level of satisfaction with teaching. These opinions ranged from "I am very satisfied with teaching. I love kids and the teaching aspects" to

"I was very satisfied until recently. However, things just got too much for me and now I am not satisfied. If I could find a job with similar pay and less work, I would snap it up right away. I am tempted to apply for a public service position; I am just looking for the right one. I really cannot see anything improving in education in the foreseeable future and I don't want to keep going the way I am at the moment. I want to feel that I have some control over my life and I can't say that while I am a teacher".

Interviewer: How satisfied are you with teaching as a job?

Teacher One: I am very satisfied with teaching. I love kids and the teaching aspects but I don't like the increasing administration load which has become an integral part of the job.

Teacher Two: About average. I like, or rather liked, teaching but I am not enjoying it at the moment. I enjoyed my last school, my first. At that school, I enjoyed the classes I taught and got on well with the staff. There was a real sense of helping each other there.

Teacher Three: About 75% satisfied. I actually like teaching kids, but I don't like dealing with the stupidity of my superiors and I don't like the pay. I should be paid more for the work that I do; teachers compare badly with other occupations. And I would like more flexibility in the system. There are too many rules and regulations which serve only to treat the teachers like kids themselves.

Teacher Four: Quite satisfied. Some things could change and improve but overall, I am quite satisfied.

Teacher Five: It fluctuates. I was very satisfied until recently. However, things just got too much for me and now I am not satisfied. If I could find a job with similar pay and less work, I would snap it up right away. I am tempted to apply for a public service position; I am just looking for the right one. I really cannot see anything improving in education in the foreseeable future and I don't want to keep going the way I am at the moment. I want to feel that I have some control over my life and I can't say that while I am a teacher.

Teacher Six: I'm not satisfied. The money is abysmal and when this is linked with apathy from other teachers and the administration procedures that you have to put up with, it's hard to be satisfied.

What are the main areas of teacher satisfaction and dissatisfaction with regards to teaching?

Previous studies of teacher satisfaction and dissatisfaction had identified specific aspects of teachers' working lives that contributed to dysfunctional behavior outcomes such as stress. Herzberg (1966) classified these factors as hygiene and motivator factors. In simple terms, hygiene factors are those which fulfil more basic needs while motivators are those factors which are more likely to fulfil the higher-order needs of teachers.

The identification of these hygiene and motivators as sources of teacher stress has been noted in the literature relating to teacher stress. In this set of questions, the teacher were asked to rate the hygiene and motivator factors which were identified by Herzberg (1966) as either sources of satisfaction or dissatisfaction.

The major sources of dissatisfaction rated by the interview responses were administration and education policy, supervision by supervisors, recognition for achievement, interpersonal relationships and working conditions. Of these, only

education policy could not be located within the school organizational climate. Major sources of job-related satisfaction were interpersonal relationships, salary, status, a sense of achievement and opportunities for professional growth. Once again a major context for satisfaction is the school.

Table 1 Teaching dissatisfiers and satisfiers.

Factor	Dissatisfier (Number of times mentioned)	Satisfier
<i>Administration and education policy</i>	6	
<i>Interpersonal relationships</i>	4	5
<i>Supervision by superior.</i>	6	
<i>Salary</i>	1	5
<i>Security</i>	3	3
<i>Status</i>	1	5
<i>Working conditions</i>	4	2
<i>A sense of achievement</i>	3	5
<i>Recognition for achievement</i>	5	4
<i>Work itself</i>	3	3
<i>Responsibility required of teachers</i>	3	3
<i>Opportunity for advancement</i>	1	5
<i>Opportunities for professional growth</i>	2	5

Interviewer: What are your main areas of satisfaction/dissatisfaction?

Teacher One: Dissatisfaction	Satisfaction
<i>Administration and education policy</i>	<i>Interpersonal relationships</i>
<i>Supervision by superiors</i>	<i>Salary</i>
<i>Working conditions</i>	<i>A sense of achievement</i>
<i>Recognition for achievement</i>	<i>Work itself</i>
<i>Responsibility required of teachers</i>	<i>Opportunity for advancement</i>
<i>Opportunities for professional growth</i>	<i>Status and security</i>
Teacher Two: Dissatisfaction	Satisfaction
<i>Administration and education policy</i>	<i>Interpersonal relationships</i>
<i>Supervision by superiors</i>	<i>Salary</i>
<i>Interpersonal relationships</i>	<i>Working conditions</i>
<i>Recognition for achievement (upper school)</i>	<i>A sense of achievement</i>
<i>A sense of achievement (upper school)</i>	<i>Opportunity for advancement</i>
<i>Work itself</i>	<i>Status</i>

<i>Responsibility(for the kids and their results)</i>	<i>Security</i>
	<i>Recognition for achievement</i>
	<i>Opportunity for growth</i>
Teacher Three:Dissatisfaction	Satisfaction
<i>School policies and administration</i>	<i>achievement (upper school)</i>
<i>Achievement (lower school)</i>	<i>Interpersonal relationships</i>
<i>Supervision</i>	<i>Recognition for achievement</i>
<i>Interpersonal relationships</i>	<i>Status</i>
<i>Recognition for achievement (lower school)</i>	<i>Responsibility</i>
<i>Working conditions</i>	<i>Salary</i>
<i>Security</i>	<i>Opportunities for growth</i>
<i>The work itself</i>	<i>Opportunities for advancement</i>
Teacher Four:Dissatisfaction	Satisfaction
<i>School policies and administration</i>	<i>achievement (upper school)</i>
<i>Achievement (lower school)</i>	<i>Interpersonal relationships</i>
<i>Supervision</i>	<i>Recognition for achievement</i>
<i>Interpersonal relationships</i>	<i>Status</i>
<i>Recognition for achievement (lower school)</i>	<i>Responsibility</i>
<i>Working conditions</i>	<i>Salary</i>
<i>Security</i>	<i>Opportunities for growth</i>
<i>The work itself</i>	<i>Opportunities for advancement</i>
Teacher Five: Dissatisfaction	Satisfaction
<i>School policy and administration</i>	<i>Achievement</i>
<i>Supervision</i>	<i>Status and security</i>
<i>Advancement</i>	<i>The work itself</i>
<i>Recognition for achievement</i>	<i>Interpersonal relationships</i>
<i>Responsibility</i>	<i>Working conditions</i>
<i>Growth</i>	<i>Growth</i>
	<i>Salary</i>
Teacher Six: Dissatisfaction	Satisfaction
<i>School policy and administration</i>	<i>Achievement</i>
<i>Supervision</i>	<i>Recognition for achievement</i>
<i>Interpersonal relationships</i>	<i>The work itself</i>
<i>Working conditions</i>	<i>Responsibility</i>
<i>Salary</i>	<i>Growth</i>
<i>Status and security</i>	<i>Advancement</i>

Amount of control in classroom and school matters.

A major dimension of teacher efficacy is a sense of control (Ashton, 1984). However, that sense of control was related to what Fuller, Wood, Rapport & Dornbusch (1982) termed performance efficacy. In relation to teacher efficacy beliefs, performance efficacy refers to beliefs regarding abilities in classroom activities, those teaching tasks directly related to student learning. However, Fuller et al. (1982) compared those tasks with organizational efficacies, those work-related tasks which teachers are required to perform but which involve duties other than classroom teaching.

Earlier questions relating to stress sought to identify organizational tasks as sources of teacher stress. Consequently, two questions which specifically addressed the teachers' perceptions of control, in classroom and school-level matters were included as followup. The first question asked "How much control do you have in matters relating to the classroom?" and the second question asked "How much control do you have in matters relating to the school, in general?"

The teachers perceived that they possessed considerable control in matters relating to the classroom and teaching "On a scale of 5 about 4 out of 5", "Everything but content and school climate", "Quite a large degree of freedom in what I do on a day-to-day basis". The only teacher who specified areas within the classroom over which she had no control mentioned "syllabus matters and the kids in the class". However, the teachers perceived that they possessed very little control in school-level decision-making "No control in matters relating to the school at all".

Interviewer: *How much control do you have in matters relating to the classroom?*

Teacher One: *Control in the classroom? On a scale of 5 about 4 out of 5.*

Teacher Two: *In syllabus matters and the kids in the class, no control whatsoever. In other areas, almost total control.*

Teacher Three: *Lots, except for assessment time - that's my evaluation. Usually, I do what I think the administration wants.*

Teacher Four: *Everything but content and school climate.*

Teacher Five: *Plenty*

Teacher Six: *Quite a large degree of freedom in what I do on a day-to-day basis.*

Interviewer: *How much control do you have in matters relating to the school, in general?*

Teacher One: *Almost none! These decisions are made by the people who are not in the front line of teaching. Many have been out of the classroom for a long time and are out of touch.*

Teacher Two: *Not much, if any.*

Teacher Three: *No control in matters relating to the school at all.*

Teacher Four: *Very, very little.*

Teacher Five: *Not as much as I would like.*

Teacher Six: *Almost none.*

Discussion

The aim of this study was to investigate the teacher stress and teacher efficacy beliefs experienced by a small group of secondary school teachers. The study was an exploratory precursor to a larger study of the relationships among teacher stress, teacher efficacy and person-environment fit. The evidence obtained from the interviews confirmed previous results in the area (e.g., Kyriacou & Sutcliffe, 1978a, 1978b; Laughlin, 1984; Lock, 1993; Louden, 1987; Otto, 1982, 1989; Tuetteman, 1988) in that the teachers believed they experienced high levels of work-related stress. Student- and administration-related incidents were most commonly mentioned as sources of acute school-level stress. Most of the stressful incidents mentioned by the teachers involved some combination of student factors and action or inaction on the part of the administration. This was reinforced when teachers were asked to rate common stressors and indicate areas of satisfaction and dissatisfaction with teaching. Administration and supervision by superiors were both rated as sources of dissatisfaction and all teachers rated relationships with superiors as a medium to very important source of stress. These comments are especially similar to the results reported by Louden (1987) for a larger sample of teachers a decade earlier. Given the organisational changes since 1987 designed to enhance the efficiency and effectiveness of Western Australian government schools and reduce teacher stress (Lock, 1993), it would seem that teachers might not have received the benefits of this action. The fact that none of the teachers was aware of the existence of a body set up to provide support in a range of work-related matters including stress, would seem to support that conclusion.

The teachers relied on a variety of cues to recognize when they were highly stressed and most related acute stress to specific physiological or behavioral signs. The teachers appeared quite receptive to such cues and enacted stress control or coping strategies on the basis of those physiological or behavioral cues. However, they did not engage long term coping strategies to overcome that stress. The nature of those coping strategies appear to be limited by four main factors: the perceptions of powerlessness at school levels; the tendency of teachers to adopt a coping style which involved withdrawal from the problem; the introduction of stress reduction activities which promoted stress of a different type; and, the failure of some teachers to seek assistance and support in the resolution of the stress.

These limitations were evident when the teachers were asked to identify normally stressful situations when stress was not as great or how they dealt with stress. Control was mentioned as important, as was preparation and withdrawal. Withdrawal, especially, was widely used but research (Bandura, 1992) has shown that withdrawal is ineffective because it inhibits the development of self-efficacy and prevents the

development of success experiences. Preparation appears to represent a form of control by the teachers but it may well involve additional stress. This fact was mentioned in the interviews but the stress arising from being well-prepared was considered potentially less damaging than stress from other sources.

Teachers' opinions differed over the extent to which acute stress affected the quality of their teaching performances. However, the teachers interviewed indicated that they were making self-evaluations concerning teaching strengths and weaknesses on extremely limited and perhaps unreliable sources of data. Most based their perceptions of teaching performance on student marks, anecdotal evidence from parents and students, and the level of order or preparation the class involved. No teachers highlighted the existence of widespread collegial support as an avenue for stress reduction although individual support was present. However, for teachers to take only limited responsibility for students' success and failure and then base their self-evaluations on the level of success and failure of their students seems contradictory and stress-inducing because of the absence of control of all factors involved.

This study indicates the existence of relationships between stress and the ability to control the situation. However, all teachers reported little evidence of that control in non-classroom matters. The dichotomy proposed by Fuller et al. (1982) between performance and organizational efficacies seems applicable: teachers reported high levels of stress related to those variables they were unable to control and one such area is the decision-making process within the school. Given the expansion of teachers' work-roles in organizational areas associated with the widening of school-based decision-making groups has been in existence for almost two decades, the teachers attitudes that they possessed little real decision-making power would seem to indicate that these innovations are not being felt at the level of some classroom teachers. If this feeling of impotence expressed by these teachers is widespread then there is a clear need for teachers to be given the opportunities to develop their perceptions of control and efficacy in these areas.

The need for continued interest in the cognitive processes used by teachers to evaluate teaching competence and the importance that organizational climate or school variables can play in providing data upon which that cognitive appraisal operates. Further research is needed to determine the relationships between individual sources of stress and perceptions of efficacy in related areas. There was little evidence of school organizational climates which were conducive to the provision of comprehensive sources for the development of teacher efficacy beliefs. This is despite a variety of system-level initiatives specifically designed to alter school organizational climates. The present results, if found to be transferable to a greater cross-section of teachers, indicate that a review of the implementation of these policy initiatives is warranted. The results of the present small-scale investigation would seem also to support ongoing

investigation of the effects upon the stress-efficacy relationships of differing organizational climate conditions and for different levels of person-environment fit.

References

- Ashton, P. (1984). Teacher efficacy: A motivational paradigm for effective teacher education. Journal of Teacher Education, 35, 5, 28-32.
- Ashton, P.T., Webb, R.B., & Doda, N. (1982). A study of teachers' sense of self efficacy: Final report. Volume 2, Appendices. ERIC 231 835..
- Ashton, P.T., Webb, R.B., & Doda, N. (1983). A study of teachers' sense of self efficacy: Final report. Executive summary. ERIC 231 833.
- Ashton, P., Buhr, D., & Crocker, L. (1984). Teachers' sense of efficacy: A self- or norm-referenced construct? Florida Journal of Educational Research, 26 (1), 29-41.
- Bandura, A. (1977a). Self-efficacy: Towards a unifying theory of behavioral change. Psychological Review, 84, 2, 191-215.
- Bandura, A. (1977b). Social learning theory. Englewood Cliffs, N.J.: Prentice-Hall Inc.
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, N.J.: Prentice-Hall Inc
- Bandura, A. (1992). Perceived self-efficacy in cognitive development and functioning. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, April.
- Bandura, A. (1997). Self-efficacy: The exercise of control. New York: W. H. Freeman and Co.
- Bandura, A. & Adams, N.E. (1977). Analysis of self-efficacy theory of behavioral change. Cognitive Theory and Research, 1, 4, 287-310.
- Bandura, A. & Adams, N.E., Hardy, A.B., & Howells, G.N. (1980). Test of the generality of self-efficacy theory. Cognitive Therapy and Research, 4, 1, 39-66.
- Bandura, A. & Wood, R. (1989). Effect of perceived controllability and performance standards on self-regulation of complex decision making. Journal of Personality and Social Psychology, 56, 5, 805-814.

- Fuller, B., Wood, K., Rapport, T., & Dornbush, S.M. (1982). The organisational context of individual efficacy. Review of Educational Research, 52(1), 7-30.
- Gibson, S. and Dembo, M.H. (1984). Teacher efficacy: A construct validation. Journal of Educational Psychology, 76(4), 569-582.
- Herzberg, F. (1966). Work and the nature of man. Cleveland: World Publishing Co.
- Kyriacou, C. (1987). Teacher stress and burnout: an international review. Educational Research, 29(2), 146-152.
- Kyriacou, C. (1989). The nature and prevalence of teacher stress. In M. Cole & S. Walker (Eds). Teaching and Stress. Milton Keynes: Open University Press.
- Kyriacou, C. & Sutcliffe, J. (1977a). The prevalence of stress among teachers in medium-sized mixed comprehensive schools. Research in Education, 18, 75-79.
- Kyriacou, C. & Sutcliffe, J. (1977b). Teacher stress: a review. Educational Review, 29(4), 299-306.
- Kyriacou, C. & Sutcliffe, J. (1978a). A model of teacher stress. Educational Studies, 4, 1-6.
- Kyriacou, C. & Sutcliffe, J. (1978b). Teacher stress: prevalence, sources and symptoms. British Journal of Educational Psychology, 48(2), 89-96.
- Kyriacou, C. & Sutcliffe, J. (1979a). Teacher stress and satisfaction. Educational Research, 21(2), 89-96.
- Laughlin, A. (1984). Teacher stress in an Australian setting: the role of biographical mediators. Educational Studies, 10(1), 7-22.
- Leach, D.J. (1984). A model of teacher stress and its implications for management. Journal of Educational Administration, 22, 157-172.
- Lock, G. (1993). The prevalence and sources of perceived occupational stress among teachers in Western Australian government metropolitan primary schools. Unpublished PhD thesis: Edith Cowan University.

Louden, L.W. (1987). Teacher Stress: Summary Report of the Joint Committee of Inquiry Appointed by the Minister of Education and Planning in Western Australia and Chaired by Dr. L.W. Loudon. Perth.

Otto,R. (1982). Structural sources of teacher stress in state high schools. La Trobe University: Sociology Paper Number 12. La Trobe University.

Otto,R. (1985a). Health damage through work stress: is 'stress management' the answer? New Doctor, 35, 13-15.

Otto,R. (1985b). Responding to stress: a study of coping modes among secondary school teachers and the relationship of coping styles to stress, powerlessness and social support. La Trobe University: Sociology Paper Number 69. La Trobe University.

Otto, R. (1986). Teachers Under Stress: Health Hazards in a Work Role and Modes of Response. Melbourne: Hill of Content.

Otto, R. (1989). Teacher stress. In P. Langford (Ed.). Educational Psychology: An Australian Perspective. Melbourne: Longman Cheshire.

Parkay, F.W., Greenwood, G., Olejnik, S. & Proller, N. (1988). A study of the relationships among teacher efficacy, locus of control, and stress. Journal of Research and Development in Education, 21(4), 13-22.

Tuetteman, E. (1988). Stress and its amelioration among secondary teachers: effects of basic needs satisfaction. Unpublished Master of Education thesis, University of Western Australia.



U.S. Department of Education
Office of Educational Research and Improvement
 (OERI)
National Library of Education (NLE)
Educational Resources Information Center
 (ERIC)



Reproduction Release

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: <i>AN INVESTIGATION OF TEACHER STRESS AND EFFICACY</i>	
Author(s): <i>WILLIAM HUTCHINSON</i>	
Corporate Source: <i>THE HONG KONG SEA SCHOOL</i>	Publication Date:

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign in the indicated space following.

The sample sticker shown below will be affixed to all Level 1 documents	The sample sticker shown below will be affixed to all Level 2A documents	The sample sticker shown below will be affixed to Level 2B documents
PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY <hr/> <hr/> TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY <hr/> <hr/> TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED <hr/> <hr/> TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
Level 1	Level 2A	Level 2B
Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g. electronic) and paper copy.	Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only	Check here for Level 2B release, permitting reproduction and dissemination in microfiche only
Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.		

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche, or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature: <i>W.G. Hutchinson</i>	Printed Name/Position/Title: W. G. HUTCHINSON / TEACHER	
Organization/Address: THE HONG KONG SEA SCHOOL 13-15 TUNG TAU WAN RD STANLEY HONG KONG	Telephone: (852) 2899 0864	Fax: (852) 2899 0864
	E-mail Address: billhu53@netvigator.com	Date: 11 October 2001

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

the document being contributed) to:

ERIC Processing and Reference Facility
4483-A Forbes Boulevard
Lanham, Maryland 20706
Telephone: 301-552-4200
Toll Free: 800-799-3742
e-mail: ericfac@inet.ed.gov
WWW: <http://ericfac.piccard.csc.com>

EFF-088 (Rev. 9/97)