

An Analysis of a Relaxation/Stress Control Program
in an Alternative Elementary School

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Abstract

The purpose of this study was to implement and assess the effectiveness of Orlick's (1993) mental skills/life skills training program in an alternative elementary school. Four teachers of 85 students in multi-aged classes were instructed to modify the program however they saw fit, in order to have it meet the needs of their students. The alternative school classes were divided into multi-aged groupings of grade 1/2, 2/3, 4/5, and 6. The primary objectives of the study were to investigate a) how teachers would make adaptations to the intervention program to suit their classroom environments, b) how the teachers felt they were affected through their participation in the program, and c) whether the students would increase their ability to relax themselves and improve their ability to identify and control stress. The results of this study showed the teachers made modifications to the intervention program on session and global levels, and reported personal gain from their participation. The students showed significant and positive results in their ability to relax, as indicated in pre- and post-intervention heart rate test scores using the HR monitor DT 1000, and in their ability to identify and control stress as indicated by logbook analysis. The teacher results will be used as a blueprint for further refinement to the Orlick (1993) intervention program curriculum and delivery.

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Dedication

It is my privilege to be surrounded by wonderful parents. To my parents, David Taylor and Judy Taylor-Kotopski, I dedicate this masters' research. Your unconditional love and support has always made me feel I could achieve anything. Thank you for these precious gifts.

A special word of thanks to my step-parents, Andrea Taylor and Arnie Kotopski, for your unique and important contributions to my life. You are two very special people.

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An Analysis of a Relaxation/Stress Control Program
in an Alternative Elementary School

Recent studies have shown that a wide variety of performers and practitioners benefit from well-refined mental skills. Initially, elite athletes served as the primary focus for most of the research linking mental skills with performance excellence (McCaffrey & Orlick, 1989; Orlick & Partington, 1988; Rotella, Gansneder, Ojala & Billing, 1980). Skills such as maintaining focus during competition, rehearsing performance through mental imagery, and using relaxation strategies to cope with stress and anxiety associated with competition are some of the mental skills which top athletes have been found to possess and practice.

Recently, a new focus on mental skills training with children has arisen in child development and sport psychology research (Cox & Orlick, 1996; Orlick & McCaffrey, 1991; St. Denis, Orlick & McCaffrey, in press). While the literature does not contain many studies on the assessment of mental skills programs for children, some applied field work dealing with mental training in school, sport and health care suggested that children were capable of learning and applying these mental skills (Solin, 1991, Zhang, Ma, Orlick & Zitzelsberger, 1992).

Orlick's mental skills program for elementary school children was initially delivered by researchers and achieved significant results in improving the children's mental skills in situations where the regular classroom teacher was present and/or when there was good classroom control (Cox & Orlick, 1996; St. Denis, Orlick & McCaffrey, in press). The researcher was an outsider to the classroom environment and the rapport and control in the class was not always sufficient to ensure the best delivery of the program. Initial studies introduced by student researchers under

these conditions did not yield significant results (Donohue, 1994) or a combination of significant and non-significant results (Howlett, 1994). In a subsequent study, it was correctly hypothesized that the regular classroom teachers might be the best choice for successfully delivering the mental skills program themselves, as the classroom discipline and the rapport and trust of the children was already well-established (Bonadie & Orlick, in press).

Prior to the present study, Orlick's mental skills program had not been delivered in an alternative school environment, nor had the adaptations made by the teachers implementing the program been examined in great depth. In this investigation, it was hoped that not only students benefit from the relaxation and stress control exercises, but that teachers provide creative ways of delivering the program in this unique school setting, in which alternative methods of teaching and evaluation were fostered.

The purpose of this study was: a) to investigate how teachers would make adaptations to the intervention program to suit their own unique classroom environments, b) how they felt they were affected through their participation in the program, and c) whether the students would increase their ability to relax and improve their ability to identify and control stress.

The main goal behind Orlick's mental skills program for school children implemented by teachers was to teach or enhance children's positive life skills. "Positive life skills allow children to strengthen their confidence, maintain a positive perspective, deal constructively with conflicts or setbacks, safeguard their health and enhance their quality of living" (Orlick, 1993, p. 9). The program was designed specifically for children and was accompanied by a detailed curriculum

guide for teachers and a series of relaxation cassette tapes. Past studies have indicated that after participating in Orlick's program, most children improved their ability to relax themselves at will, increased the frequency of their daily "highlights" and augmented their positive feelings about themselves. Children also enjoyed participating in the activities (Cox & Orlick, 1996; St. Denis, Orlick & McCaffrey, in press; Bonadie & Orlick, in press).

In the Cox and Orlick's (1996) study, a post-intervention evaluation indicated that six out of seven teachers said that they had tried some of the program's techniques themselves and expressed their intention to continue using many of the techniques both in and outside the classroom. In this aforementioned study, however, the teachers attended each intervention session but were not involved in the preparation or delivery of the mental skills program.

In previous studies, when researchers with experience working with children administered the program in the children's regular classrooms (Cox & Orlick, 1996; St. Denis, Orlick & McCaffrey, in press), and when the regular school teachers delivered the program themselves (Bonadie & Orlick, in press), significant positive results were found. When the program was delivered by graduate student researchers outside the regular classroom they found either non-significant (Donohue, 1994) or partially significant effects (Howlett, 1994). These aforementioned results suggest that the context of an intervention program's delivery plays a role in a program's degree of success or failure.

The present study investigated the effect of the mental skills training program on both the students and teachers, but had a primary goal of investigating how alternative teachers would modify or adapt the program in order to have it best suit

their individual classroom environments. A further innovation of this study was the fact that these teachers were practitioners of an alternative school philosophy. The previous studies in this area were conducted in regular Ottawa Board of Education schools and focused only on the effects on the children participating in the program. The practitioners within this open and flexible alternative learning environment consistently adapted their own curricula to suit their students as part of the "child-centred" philosophy. Therefore, it was expected that the teachers would make valuable adjustments to the program to meet their own students' requirements. The results of the program on children's relaxation and stress control abilities combined with the alternative teachers' feedback could provide useful suggestions for improving the overall program and its delivery.

Review of Literature

Top performers in many domains have been found to possess excellent mental skills (Orlick & Lee-Gartner, 1993; Partington, 1995). Recently, researchers have applied programs teaching these same mental skills to children, and have met with success (Bonadie & Orlick, in press; Cox & Orlick, 1996; Orlick & McCaffrey, 1991; St. Denis, Orlick & McCaffrey, in press), while others were not as successful (Donohue, 1994; Howlett, 1994). These studies indicated that many children could significantly improve their mental skills.

The intervention program used in this study focused on two areas of mental skills training: stress control and relaxation. Relevant studies illustrating the effectiveness of teaching these mental skills to children are discussed. Other studies illustrating the effects of teaching "highlights" and positive thinking were included to provide a comprehensive view of mental skills training in schools. As the children and teachers participating in this study were members of an alternative school environment, relevant literature and past studies in this educational environment are presented.

Stress and Relaxation Studies with Children

Stress in children has become a major concern for teachers, parents and child psychologists. One study indicated that the intensity and frequency of childhood stressors has greatly increased from the 1970's to the 1980's (Brenner, 1984). Single parent homes are becoming quite common, abuse and neglect of children is on the rise due to dramatic financial and social changes, and the trend to push children to excel at a younger age has caused a considerable amount of stress in today's child (Elkind, 1988).

Studies have been conducted with the goal to identify stressors in young school children and to find out what coping strategies were commonly used by the children to deal with these stressors (Dickey & Henderson, 1989; Ryan, 1989). These studies indicated that children felt stress from a wide variety of sources but unfortunately did not possess adequate coping skills. According to Chandler (1985), the lack of effective coping strategies for stress would have profoundly negative physical, psychological, social and behavioural effects on children and adults. Another study concluded that many children acted out on others as a response to stress. In classroom situations, for example, acting out almost always inhibited the learning process for the other children and precipitated a stressful atmosphere in the class (Blom, Cheney & Snoddy, 1986).

Various attempts have been made to educate children about the importance of identifying stress and developing effective coping strategies through relaxation, but most of these interventions were not designed in a "child-like" or "playful" manner, and were not specifically created for children (Kraft & McNeil, 1987; Marley, 1984; Martin, 1988; Smith & Womack, 1987; Stroebel, Stroebel & Holland, 1980).

In an attempt to rectify this problem, Orlick (1993) created a relaxation/stress control program for children which utilized play and fun as key elements to keep the children interested and motivated. Imagination and creativity were encouraged, with the goal of the program being to teach children valuable coping and life skills which could be used in real-world situations both in and outside the classroom. In a study testing the program's effectiveness for teaching relaxation and stress control skills to elementary school children (Cox & Orlick, 1996), the children were found to

have successfully implemented the relaxation/stress control strategies in a variety of real world situations, and had learned how to relax.

Positive Perspectives and Highlights

Another approach to dealing with stress has been the strategy of teaching of positive thinking or positive perspectives. Athletes have been found to draw upon a positive perspective to counteract negative effects on their confidence. Zeigler (1987) outlined this phenomenon in a study using athletes and developed a plan to change the negative perspective to a positive one.

The successful use of highlights as an approach to teaching positive perspectives was discussed by Orlick and McCaffrey (1991), Orlick (1992a, 1993), and Siccone and Canfield (1993). Highlights have been defined as simple pleasures, joys, positive feelings, meaningful contact or anything that improves the quality of that day for that person (Orlick, 1993). Orlick suggested that if children can be taught to search for and identify their daily highlights, they will be more likely to experience them more often.

Siccone and Canfield (1993) discussed highlights as a method of improving self-esteem in children. They defined highlights as past experiences that created feelings of happiness or success; these feelings served as a base for future joy and success. They also maintained that the acknowledgment of past and present positive experiences and feelings will increase self-esteem.

In another study focussing on highlights (St. Denis, Orlick & McCaffrey, in press), children were encouraged to discuss and record their highlights in a special highlight logbook. The results of the study showed that children could be taught to look for and identify their highlights, and that the frequency of their highlights

increased significantly as was illustrated in the analysis of their logbooks. The recording of these events in a highlight book appeared to help children focus on the positive elements of the day. A subsequent study by Bonadie and Orlick (in press) supported the positive and significant results of teaching highlights to children.

Mental Skills Training for School Children

One of Orlick and McCaffrey's philosophies underlying the Feeling Great Mental Skills Training Program for Children was the belief that if children were taught these mental skills at an early age, they would benefit from the opportunity to refine and practice these skills as they matured and grew into adults. Selye (1956) in a study on children and stress, had the same philosophy and wrote that it was vital that children start to learn coping strategies for their stressors at an early age because "all codes of behavior sink in best if a tradition is established" (p. 5).

The Swedish school system has incorporated mental skills training into the daily curriculum (Setterlind, 1983; Solin, 1991; Unestahl, 1993). One study which provided support for the notion that children would benefit from mental skills training was conducted by Setterlind and Patriksson (1982). Eighty percent of the children aged 12 to 18 who took part in the six week intervention program found it easy to relax, and 90% felt more confident, relaxed and happy following the intervention sessions. Other longer term effects were also recorded, such as a decrease in sleep difficulties and headaches.

Zaichkowsky and Zaichkowsky (1984) evaluated the effects of a six week mental skills intervention with fourth grade children. They also concluded that the children increased their stress control and relaxation capabilities and that they could influence both their physiological and psychological dimensions in the classroom

while taking part in the intervention. Some of the physiological states assessed in this study included heart rate, skin temperature and respiration rate.

The most recent study testing the effectiveness of Orlick's Mental Skills Training Program for Children was a study by Bonadie and Orlick (in press), in which the regular classroom teachers delivered the intervention program. The post-test results indicated that the children who took part in the intervention increased their ability to reduce their heart rates at will, increased the frequency of their highlights, and were able to employ stress control strategies in a wide variety of real world situations.

At this point in time, mental skills training programs have not been tested in alternative or special needs environments and further refinement and testing in these unique situations is needed. In the following section, an explanation of the underlying philosophies behind the resurgence of the alternative school is presented, concluding with a discussion on why this environment was perceived as a beneficial place to test mental skills training programs for children.

The Alternative School Approach

Alternative or "open" educational systems have tried to place emphasis on the individuality and personal growth of every student. Though no work on mental training with children has been studied in any depth in alternative schools to date, a thorough explanation of the philosophy and rationale behind the alternative school approach was necessary for the justification of this study.

Alternative or open schools are organized so that the students of many different ages and backgrounds may learn and play together. Unlike the traditional public school system, where children are grouped according to age, alternative

schools use multi-aged groupings and encourage the participation of family and friends in the classroom learning process (Crichton, 1994).

In the alternative school environment, teachers plan individual programs based on their understanding of the child's intellectual, emotional, social and physical development. Children are placed in flexible multi-aged groupings to allow each child to advance at a pace appropriate for them, and evaluation of students is done through observation, standardized testing and informal testing specific to student needs. Students are not passed or failed; they continue on from where they left off the previous year. They are promoted to the next grade in order to remain with their peers, to avoid the demoralizing concept of failure. Children ready to work on more advanced material are provided with acceleration and enrichment (Crichton, 1994).

Early beginnings of the open learning philosophy may be traced back to Rousseau, in the 18th century. Rousseau proposed that the child is inherently and naturally good and that adults should encourage this goodness and spontaneity (Rousseau, 1911). Froebel, the father of today's kindergarten, believed that a child only learns through the process of creating: "The purpose of teaching is to bring evermore out of man, rather than to put more and more into man" (Froebel, 1892).

Montessori shared parts of Froebel's philosophy. Her optimistic view of people's nature complemented the belief that all children must be treated individually. However, unlike Froebel, she felt that children needed to be more directed in their learning, as she felt that the teacher's primary task is to provide this direction without using external rewards or punishment. This learning process was then to be fostered within a special environment made just for children, which was exemplified in the first Montessori schools of the early 1900's (Montessori, 1974).

Today's alternative schools have evolved considerably from their earlier versions in the 1960's. Two main purposes behind the alternative school system have been identified since their early development. The first is the purpose of providing a learning environment for those students who cannot or will not function in the regular school system. The second purpose was to integrate innovation and creativity in practice and organization of the alternative school (Raywid, 1994). The latter is the purpose behind the alternative school selected in this study.

Three types of alternative schools have been identified by the academic community (Raywid, 1994). Type I alternatives strived to make school challenging and fulfilling for both the staff and the students. They were seen as the clearest examples of "restructured" schools (Hawley, 1991). These schools were open to anyone, and are the most popular of the three types. Creativity and child-centred learning are of prime importance. The school which participated in this study was classified as a Type I alternative school.

The Type II alternative schools were also known as "last chance schools" where students were sent upon expulsion from the regular school system, and focused primarily on behaviour modification, as opposed to modification of curriculum or pedagogy (Raywid, 1994). Type III schools have a remedial focus for students who need special rehabilitation or remedial work, and focus on social and emotional growth (Fowley & Crull, 1984).

Research has indicated that of the three types of alternative schools, Type I had by far the most successful record. They tended to be less expensive to operate because they are conducted with the same teacher/student ratio as other mainstream schools (Raywid, 1982). Most importantly, the successes of Type I schools were

more pronounced and longer lasting, where students benefitted from an environment that reached out to the children and where individual transformations are often seen in the students (Wehlage, Rutter, Smith, Lesko & Fernandez, 1989; Wood, 1989). These transformations not only take place in the students of the Type I alternative school, but also in the school itself. Dropout rates have been found to be lower, and scholarship rates higher.

Wehlage et al. (1989) and Raywid (1994) found that three different factors seemed to account for the alternative schools' success. "First, these schools generate and sustain community within them. Second, they make learning engaging. And third, they provide the school organization and structure needed to sustain the first two" (Raywid, 1994). In an early 1980's survey, it was found that alternative schools identify teacher-student interaction and rapport as their greatest distinguishing factor as compared to conventional schools (Raywid, 1982).

Of special interest to the study at hand were the teachers in the alternative school as compared to mainstream practitioners and the unique contributions they could potentially make to the mental training program for children. The comparatively small percentage of teachers who chose and are chosen to work as practitioners in an alternative education environment are as unique as the system itself. In this environment, much attention was paid towards developing a strong connection among the students and between the students and their teachers. Creativity and experiential learning were common factors in the alternative classroom, with active contributions on the part of teachers and students (Clark, Lotto & Astuto, 1984; Katz, 1967; Raywid, 1990). When compared with other systems, it can be seen that the alternative or open school concept has both the

teacher and child participating in a two-way flow of sharing information and ideas about how the day's curriculum will proceed. Bussis and Chittenden developed a classification system based on the extent to which the individual child and the individual teacher are active contributors to decisions regarding the content and process of learning in four basic modes of schooling (Bussis & Chittenden, 1976).

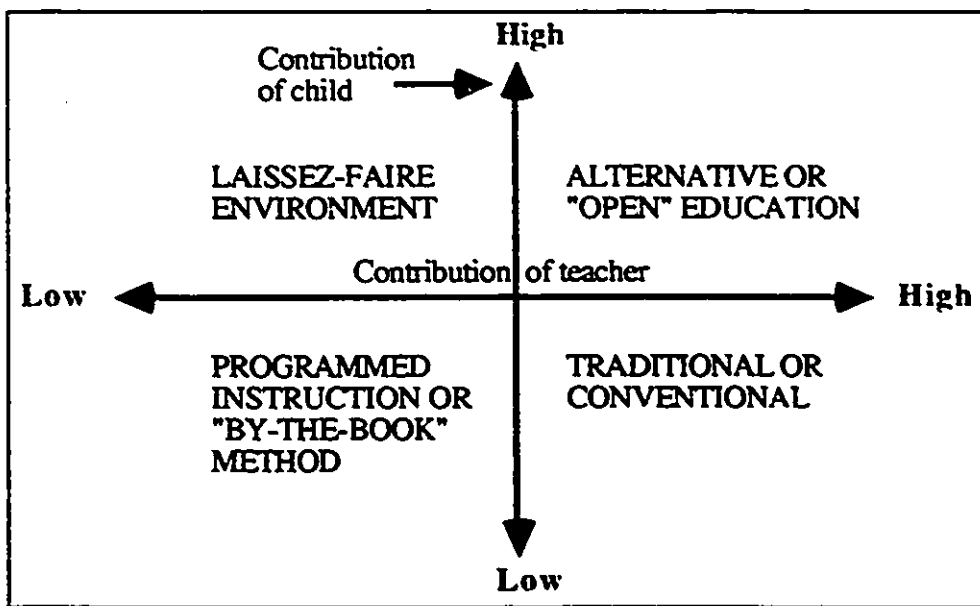


Figure 1. Double classification scheme based on extent to which (1) the individual teacher and (2) the individual child were active contributors to decisions regarding the content and process of learning.

The selected school in this study was classified as using the method in the top right quadrant of Figure 1. Teachers in the alternative school environment make considerable adaptations to conventional curricula, in order for it to "fit" their particular student population. Children were encouraged to express what "works" for them and what did not work. It is precisely for this reason that it was expected that the alternative school teachers and students participating in this study would

provide valuable feedback and recommendations for further improvements to the intervention program.

Method

Participants

Four elementary school teachers from the same alternative elementary school in the Ottawa Board of Education served as participants for the study, along with their students, averaging 25 students per class. Each teacher participant taught a different grade level, ranging from grades 1 through six, with 3 out of 4 classes being classes of two grades combined: 1/2 split, 2/3 split, 4/5 split and 6 (See Table 1).

Table 1

Distribution of Student Participants by Grade

Grade	Total
1/2	19
2/3	21
4/5	29
6	16
Total:	85

The students in each class served as student participants. The main goal of this study was to learn from each of these teachers and their students. This goal, combined with the fact that no teachers were willing to serve as control groups, resulted in all participants serving as experimental groups. Informed consent was

received from all participant children's parents prior to the implementation of the intervention program (See Appendix A).

Mental Skills

This study was the third stage of a larger study examining mental skills training and children. The first stage in the study involved a group of researchers from the University of Ottawa who implemented an earlier version of this mental skills program in Ottawa Board of Education elementary schools in grades kindergarten through grade six. In the second stage, the regular classroom teachers implemented the program, rather than the student researchers. Both of these interventions were aimed at improving the children's mental skills, namely their ability to relax, control stress, improve mental imagery, focus and refocus, and to develop and maintain a positive perspective.

The three most relevant studies influencing the present study were the study by Cox and Orlick (1996) which found positive effects on stress control and relaxing, the study by St. Denis, Orlick and McCaffrey (in press) which showed positive effects on highlights and feelings about oneself and Bonadie and Orlick's study (in press) with the regular classroom teachers delivering the intervention program which found that children improved their abilities to relax themselves at will, implement stress control strategies, and to identify and increase the frequency of their highlights. The suggestions and recommendations from these researchers were used as a foundation for the mental skills training program delivered in this study. The present study also used the most useful qualitative and quantitative research methods employed in the previous studies as a methodological base.

Instruments

Relaxation/stress control. The Heart Rate Monitor (DT 1000) was used to measure the extent to which the children learned to relax. The DT 1000 has a reliability rate of 97%, when validated against the Vantage XL - Polar sport tester (Cox & Orlick, 1996). Prior to the intervention pre-testing, the researchers conducted a reliability check on a separate class of children. Two researchers recorded the same child's heart rate at the same time (i.e. 20 secs) prior to the relaxation attempt. The same procedure was carried out after the child was instructed to relax, and 60 secs had passed. The inter-recorder reliability rate was 99%.

The researchers found a quiet spot in the classroom, away from the rest of the class to conduct the testing. Each child was then fitted with a heart rate monitor and a baseline heart rate was established. Twenty secs after a heart rate appeared, the researcher recorded the child's heart rate. This 20 sec delay ensured that the heart rate had stabilized, in order to provide an accurate heart rate measure. A team of three researchers conducted the pre-and post-testing, all of whom had had training in using the heart rate monitors, thus ensuring reliable recordings.

The researcher then gave the following instructions to the children: "I'd like you to try to relax the best way that you know how for one minute". After exactly one minute, the researcher recorded the heart rate monitor's measure, while the children were still trying to relax. (See Appendix B).

Student logbooks. Each child participating in the intervention was given his/her own logbook. Logbooks were used to identify and record: (1) stressful experiences, (2) coping or relaxation techniques attempted, (3) how the student felt

both before and after the stressful experience (see Appendix C), and (4) heart rates before and after relaxation attempts (see Appendix D).

At the conclusion of the intervention program, the logbooks were collected and analyzed. A content analysis was performed to assess the extent to which the children had applied the relaxation and stress control activities that they had learned to their daily lives.

Teacher curriculum guides. Each teacher subject was given a comprehensive curriculum guide which gave session by session instructions on how to conduct the intervention program. All teachers were instructed to make notes in their curriculum guides after each intervention session. Any problems or positive feedback pertaining to each individual session could be recorded here, as well as specific adaptations and suggestions (See Appendix E).

At the conclusion of the intervention program, the curriculum guides were collected and a content analysis of all session notes and program changes was conducted.

Interviews. Both structured and unstructured interviews were used in this study. From the onset of the program, the researcher met with the teacher subjects on a weekly basis for casual and unstructured interview sessions. Any concerns, suggestions or insights the teachers had were discussed during these sessions and the researcher kept a logbook and recorded all key points. Structured interviews were held with each of the teachers at the end of the study. These interviews were audio-taped and later transcribed for analysis (See Appendix F).

Towards the end of the program, the researcher also attended a relaxation session in each of the classes as a non-participant observer, keeping field notes of her observations.

All student participants were interviewed at the conclusion of the intervention program. They were asked to honestly express their feelings about the program. They were asked whether or not they had learned anything from the intervention, whether or not they had used any of the strategies, whether or not they felt that they would continue to practice the program's activities on their own and whether or not they enjoyed taking part in the program (See Appendix G).

Qualitative methods were used to explore the teacher and student feedback. The research design was constructed to suit the unique constraints and parameters of the study, using quantitative and qualitative methods. The teachers' perceptions of the program changes made were taken directly from the teachers' logbooks, notes, questionnaires and interview transcripts. The teachers were given free rein to be as flexible and creative in their delivery of the intervention program as they deemed necessary and beneficial. The primary researcher recorded the teachers' reflections, consulted extensively with the teachers, and after many hours of "deliberate reading," wrote their stories as in Partington's (1995) study.

The present study used a combination of the evaluation interview and topical oral history, mixing topical and cultural interview approaches (Rubin & Rubin, 1995). It was vital to attempt to capture the overall meaning and values underlying the questionnaire and conversational responses with the teachers, to learn from their expertise. A flexible and consultative methodology was the result, as triangulation methods (Denzin, 1978) were used to cross-validate all data. The teachers were

consulted on a weekly basis throughout the intervention. All notes, observations, questionnaires, and narratives were cross-checked for accuracy and understanding by the researcher and the teachers. It should be noted that candid and precise feedback from the teachers was crucial to the study's findings.

Questionnaires. After the first week and mid-way point of the intervention program, a questionnaire was given to the teachers to assess their perceptions of the program. They were asked if they felt that they were affected in any way by the program, what adaptations they might have made to the program contents and how they perceived the program's effects on their students (See Appendices H & I). Teachers were also asked to provide recommendations for improving the program for the future. All of the teacher interviews and questionnaires were administered by the primary researcher.

Final feedback session. Once all the data had been collected and a preliminary analysis had been completed, the researchers presented these findings to the school. The audience consisted of a group of teachers, student-teachers, parents and the principal. A question and answer session took place at the end of the session, giving parents and teachers a chance to give feedback. The alternative school principal concluded the session with an overview of how the program was perceived by the school administration. Notes on feedback were taken by the researcher and is presented in the results section.

Procedure

Before the intervention began, the teachers participated in a workshop conducted by the researchers and the originators of the mental training program. The workshop illustrated the rationale behind the program, how to run the activities

and explained how to use the logbook and audio-taped exercises. During the course of the study, the researcher met with the teachers on a weekly basis to answer any questions or concerns.

All students participated in pre- and post-testing as well as weekly intervention sessions for 10 consecutive weeks. The duration of each session varied from class to class, as teachers were all recommended to administer the program three or four times weekly for approximately 15 mins per session, but were given license to adapt this time frame however they saw fit.

The intervention program consisted of activities from Orlick and McCaffrey's Feeling Great mental skills training program (Orlick & McCaffrey, 1995; Orlick, 1996), which were taught through the use of standardized audio-tapes (Appendix J). The students were taught a series of relaxation and stress control activities, as well as the basic concepts of stress and relaxation. They were also taught what highlights were and how to recognize them. A typical intervention session would begin with an introduction by the teacher, a relaxation audio-taped activity or a highlight activity and a short discussion about the activity and/or mental skill being used or taught that session. The session would end with a logbook activity pertaining to the mental skill being discussed, if time allowed.

All of the intervention sessions were conducted by the classroom teacher, through the aid of Orlick and McCaffrey's (1995) "Feeling Great Curriculum Guide" and the "Free to Feel Great" audio-tapes (Orlick & McCaffrey, 1993). Each teacher was instructed to follow the curriculum guide in whatever way they felt would best serve their class. This could either vary from following the guide

completely, to making minor or major modifications in the areas of content and/or frequency of the exercises.

Results

The results from this study were presented as follows: (1) analysis of the extent to which the teachers modified the intervention program from its original format as indicated by their comments in the curriculum guides, along with their responses to questionnaires and interviews, (2) analysis of the extent to which the students were able to successfully implement relaxation and stress control strategies in their daily lives as indicated by the student logbook data and student interviews, (3) multivariate analysis of variance (MANOVA) assessing the extent to which the children learned to relax themselves at will as indicated by the heart rate scores on pre- and post-tests.

Intervention Program Modifications

The main goal of the present study was to examine whether alternative school teachers could modify the intervention program to meet their students' needs and furthermore, whether this modified program would have comparable significant results on the children's ability to relax and cope positively with stress (Cox & Orlick, 1996; Bonadie & Orlick, in press).

Through a qualitative analysis of session notes kept by each of the four teachers, the weekly field notes taken by the researcher and the final post-intervention interviews, it was found that each teacher had indeed made unique modifications to the intervention program. Final analysis of the teachers' feedback was grouped into three main research questions: a) what modifications, if any, did the teachers make to the intervention program and what were the reasons behind these changes, b) what were the teachers' dispositions towards the program at the

start of the intervention and at the end of the intervention, and c) did the teachers feel that they were personally affected by the program in any way?

Global and Session Changes

Through analysis of the final interviews, combined with session notes and the mid-way questionnaire, it was found that all teachers made changes to the intervention program to have it suit their own students' requirements. These changes ranged from those of a global nature, which affected the program on a daily basis, to changes which were more isolated in nature, which affected the program for only one session. Each teacher made her own unique changes to the program curriculum and the following results illustrate the creative approach which each teacher gave to the program.

Before the final analysis was conducted, the primary researcher held a meeting with each teacher to go over their respective curriculum guides in order to have a clear understanding of all notes and comments made by the teachers. The global changes have been listed separately for each teacher, with a quote or example illustrating the reasons behind the modification. Session changes are listed for each teacher in Appendix K.

Based on the logbook and interview data, a final narrative summary was written for each teacher, which was then personally given to each teacher for validation with an accompanying letter of authenticity. (See Appendix L).

Global Changes to Intervention Curriculum

Teacher 1 - grade 6.

This teacher played several taped exercises, one after the other, at least once a week, as compared to one prescribed taped exercised in the curriculum guide. She feels that this really gets the children immersed in the relaxation process.

I really like to play one whole tape side for twenty minutes, let them sit at their desks or lie down and just do it and relax, get into it. Instead of having this very structured thing at the start, so they could get to know it. This is not a written program where they have a little card and they say, "Okay I'm going to change channels now". They have to have this really internalized and know what they're doing. Which is why I like to actually just do a couple, and review. Do a few, and review. Because sometimes I get down there with them and for 20 minutes it is total silence and I have to wake them up. The tapes are excellent.

She has found that splitting up the boys and girls during relaxation sessions on the carpet has eliminated fidgeting and lack of focus on the exercises.

Being down there on the carpet can get to be like one big sleepover, (in grade six) they're much more hormonal than the one's, two's, three's and four's...This environment is for learning and relaxation here, we have girl days on the carpet and boy days, carpets and non-carpet days in here.

In the question period, she tried to let the children lead the discussion, as she feels that they are entering a time in their development when it is very awkward to share very personal information.

Not too much probing if they seem shy or embarrassed. That's in their heads, it's really their business. It's awkward in grade six. They're really trying to grow up and be individuals. But I think for relaxation it has really worked.

She has cut down on the times she does the logbooks and has put an emphasis on the exercises and relaxation (testing the pulse every session).

Do the exercises, and complement with the logbooks every so often. Let the kids lead you. Then they'll enjoy it. They know what they want,

what they like, what works for them. I let them do the exercises. I see them relaxing. They tell me it works.

Teacher 2 - grade 4/5.

This teacher added more "physical" exercises to illustrate the concrete physical differences between a relaxed vs. tense state. She added some of her own martial arts inspired exercises and stretching exercises to the intervention sessions.

I think there should be more of a physical component to it. A physically active component to it. Not necessarily all the time, but at different points ... I concentrated on incorporating something new. I also combine a physical or breathing exercise with the taped exercises.

Instead of the recommended 15 minute sessions, at a frequency of 3 or 4 times a week, she conducted a 45 to 55 minute session, once or twice a week.

I also think that there is room for making the sessions longer. I know some might argue that for the grade one's and two's the shorter sessions go with shorter attention spans but I think that the longer sessions for the older kids at a lower frequency per week allows them to really get into it.

I understand that everything at this point is kept really short, 15 to 20 minutes, to introduce it. But I think to really be effective, each and every one of those exercises can be expanded a lot longer. I think the children should be able to go beyond a 2-3 minute taped exercise to up to 15 minutes of relaxation. That's only if it's balanced with the physical side and feedback, as well ... I have really lengthened my sessions to one or two per week for the better part of the afternoon each time.

Because she had done some relaxation exercises with her class prior to the intervention, she tried to let the children do demonstrations and lead in exercises as much as possible.

I really tried to share with the kids but more importantly I tried to stress that they should really be the demonstrators, so that they are learning from each other as well.

She tried to tie in school health campaigns into the lessons, whenever she could.

I tied in the breathing exercises and relaxation with the no smoking campaign. The kids came up with their own visualizations of breathing - a visualization story of how the lungs were working for them. There are so many things you can do with it. Next year I will continue and I hope to do even more.

Teacher 3 - grade 2/3.

Like Teacher #4, this teacher alternated logbook and taped exercise sessions, so that the children could spend more time on each.

To start, I took them out of the classroom for every session. Every day, that was the routine, to go out of the class into the auditorium. It was very time consuming though. By the time I would get them there, do the tape or exercise, re-group, post-discussion, logbook, back to class, it was very time-consuming. I spoke to Lee and Jill, and Jill was doing one or the other, tape/discussion, or logbook/discussion. That was what I started doing as well. I understand that for the first 5 lessons or so, it is important that the kids get a holistic look at the whole thing, how it all fits in, but after, I was able to break it up a bit into more manageable sessions.

She let her class use the intermediate logbooks, even though many of the children in her class fit into the junior logbook age group.

It's a huge gap. There are up to three years difference between some of the kids in my class. There is a huge range of abilities at times in the kids. It (the split class alternative approach) is very nice and very kind, because everyone can fit in somewhere without sticking out. It is much more forgiving of this range. Now, when I suggested the junior logbooks to my class, they said "Absolutely not! We're these grown-up kids and that's for little kids!" They loved drawing their special place. But the mentality that they were no longer the youngest in the school (meant) they decided that drawing was not going to be the main way they recorded things. I offered the logbooks as an option, but ... even if they had to struggle, they wouldn't use the junior logbooks.

In the beginning of the program, she kept the discussion questions more general in nature and tended to not probe for specific examples, unless the children gave them on their own.

I was kind of divided on "the (probe) for details" section in the teachers' guide, because on the one hand, I really wanted to respect the things that happened at home. It really isn't any of my business and at the same time I know how it is important to see if there is any carry-over into home. But I just found it difficult to do, because I didn't want to be in there digging for every little detail. I sensed hesitation on the children's part as well. So I would give some examples from my own life, say what my brothers did growing up and there was more of a consensus-type feedback sometimes. It was easier for them that way. Or just to speak in more general terms. I know my kids very well ... there would be more general discussion, rather than a specific public discussion "My mother said, my sister did this, kind of thing."

I felt that asking for specifics in class was too much for them. Over the course of time they would open up in more specifics. As it went along, I was getting spontaneous answers like, "I used it for this, at this time, etc." One common thing though, was when I would ask, "Does anyone have trouble falling asleep" Oh yes yes. Those kinds of things the kids really opened up to. The kids would point out favourite techniques they did use that worked for them, floating on clouds, special place.

Teacher 4 - grade 1/2. This teacher stopped including both a taped activity and a logbook activity in one session (as recommended in the Curriculum Guide), because she felt it was taking too much time for the children to do both. It was her opinion that the children enjoyed both components so much that they preferred taking their time with either 1) a taped activity and discussion or 2) a logbook activity and discussion.

They have difficulty writing and it takes an awfully long time to get the logbook activities organized. They always want to come up to me and show me everything and they always want to finish everything. Twenty minutes turns into an hour and it's really just too much for a grade 1/2 day to get it all in... We're taking it much more slowly. I'm only doing one-half a lesson at a time ... That's really working out.

Initially, Teacher 4 (Grade 1/2) did not use the audio-tapes. Instead, she read from the script in the Feeling Great book, in order to have a familiar voice administering the instructions and explanations. After the children felt comfortable with the new exercises, she began using the tapes.

Initially, I didn't use the tapes. Instead, I read the text so that it could be paced and they would have a familiar voice on which to focus. Until they had the routine down, I introduced the tape with the "male voice" and the "accent voice!" I felt this was a worthwhile transition.

If a session did not go well, she would repeat the session or discuss it in the next session. As per the teacher's notes in the curriculum guide and final interviews, certain exercises were repeated if the teacher felt that the children had not been able to get as much out of an exercise as usual (for example, due to a disruption in class).

I had them sit at their desks and open their books to the day they were supposed to do. I made a little game of it. I asked them to set their heads on the logbooks so all those thoughts from the last day would flow back into their heads. When they get up from imagining their special place, they will pick up their heads and the special place will be right there on the page, ready for them to trace it out. It worked out really well and by doing it at their desks we had saved time, so we were able to do the relaxation and the logbook that day. It was nice.

She began using a highlight jar at any time of the day, not just the prescribed intervention time. The highlight jar became a regular fixture in the class, and was used whenever the teacher or students felt someone needed it.

We also are using a highlight jar a lot. They are often asking if they can go and pull out a highlight! It will happen at any time of the day, not just relaxation time.

She tried to be more spontaneous in the discussion questions and let the children lead the discussion.

In the discussion questions, a lot of them are repetitive. I've stopped asking the prescribed questions, because it's become really rehearsed. The kids all chime in together with the same answer(s) over and over again without really thinking. They're tired of the questions ... so I tend not to do that anymore.

She played "old favourites" more often or on request by the end of the

intervention.

We took a class vote, and spaghetti toes and jelly belly were the first two favourites. They were also the favourites from the onset of the program near the beginning. They still really like them. And Star Track, too.

She felt that it was beneficial to limit the taped exercises to no more than 10 distinctly different exercises as there were simply too many different exercises for the children to remember.

It would be nice to have 10 solid ones that would be very different from one another and that they could really get to know. I really believe that if we had 10 very distinct relaxations to work on, rather than having more, that they will learn them and they can become part of them, rather than have 20 or more that they don't know all that well. Like they're saying "what one's that again... did we do this...?" type of thing.

While the teachers made some common global changes, all four approaches to the intervention program were different and unique. Differences were also uncovered when comparing the teachers' preconceptions about the program with their opinions that came out in the post-intervention interviews. The early and mid-way questionnaires, weekly notes and final interviews were analyzed for references to the dispositions of the teachers towards the program and how they felt by the end of the intervention. This data was also examined for references to what the teachers gained personally from taking part in the program.

Descriptive narratives for each teacher were written after the researcher had examined all the data that had been grouped into these areas. Combined with the major modifications and overall views of the intervention program, these narratives served as a personal synopsis of what each teacher gained and gave to the program. All narratives were verified by the teachers themselves, and they all concurred that

they were accurate descriptions of their views and experiences with the intervention program (See Appendix M).

Post-study Feedback Session

The principal of the alternative school participating in this study was very supportive of the program and expressed to the group gathered at the post-study feedback session that she "wholeheartedly advocates the inclusion of the (mental skills training) program in the regular curriculum of (her) alternative school". She stated that the relaxation program was the third school-wide initiative that the school had undertaken in an attempt to create a positive school climate. The first two initiatives were a peer-based mediation program and conflict resolution training for children. "If there are all sorts of extra things .. feelings like anger ... coming into the school, it will adversely affect school climate. Children who have not yet developed self-discipline will behave appropriately because their teacher is present. We want the kids to be in control not because (the teacher) is in the room, but because they want to be in control".

Parents of the participating children were invited to an information session offered prior to the intervention program and were also invited to the post-intervention session. Many parents had positive comments regarding the impact the program has had on their children, as they had witnessed concrete incidents and examples that the program was being used by their children at home. However, one parent indicated that she felt the parents should be more involved in the program, suggesting that the design of the program be modified to more actively include the parents and the home environment more.

One Year Follow-up

The researcher contacted the teachers and principal one year after the study took place. All four teachers were continuing to use the program, in varying capacities, and were using their own modified versions of the program. Because the alternative school system uses multi-aged groupings, some of the students remained with the same teachers in the following year. These "old timers", as Teacher 4 referred to them, were very helpful in demonstrating and teaching the activities and concepts to their new classmates:

The old timers treated (the intervention exercises) like old friends. "Oh, I remember this one, I like it!" The new timers tended to fidget but slowly got the idea from the old timers' good modelling.

Teachers 2 and 4 regularly used the program, whereas Teachers 1 and 3 implemented it several times a month, or when a situation arose where they felt it would be beneficial:

I've used the program incidentally ... I use the tapes periodically as a cool down in the gym. For sick tummies, red measles needles etc., I give them suggestions like Jelly Belly, or a Super Breath. I also tell them when I'm using some of the techniques. We often tell highlights at the end of the day as a "ticket out the door".

Teacher 3 also planned to do a "refresher course" of the main intervention program concepts later in the year, as part of the school-wide personal safety program. The principal also expressed her continued support of the program, and felt that it was a valuable tool for her teachers and students.

Learning to Relax

Pre- and post-test scores. Heart rate (HR) difference scores were used to assess the extent to which children learned to relax themselves at will during the intervention program. The mean heart rate difference scores were calculated by subtracting the students' heart rate after relaxing from their mean heart rates before relaxing. Therefore, if the mean heart rate difference score was positive, this meant they decreased their HR after relaxation. If the value was negative, the students' increased their HR. The heart rate difference scores of the four different groups on the pre-test and post-test are presented in Table 2 and Figure 2.

Table 2.

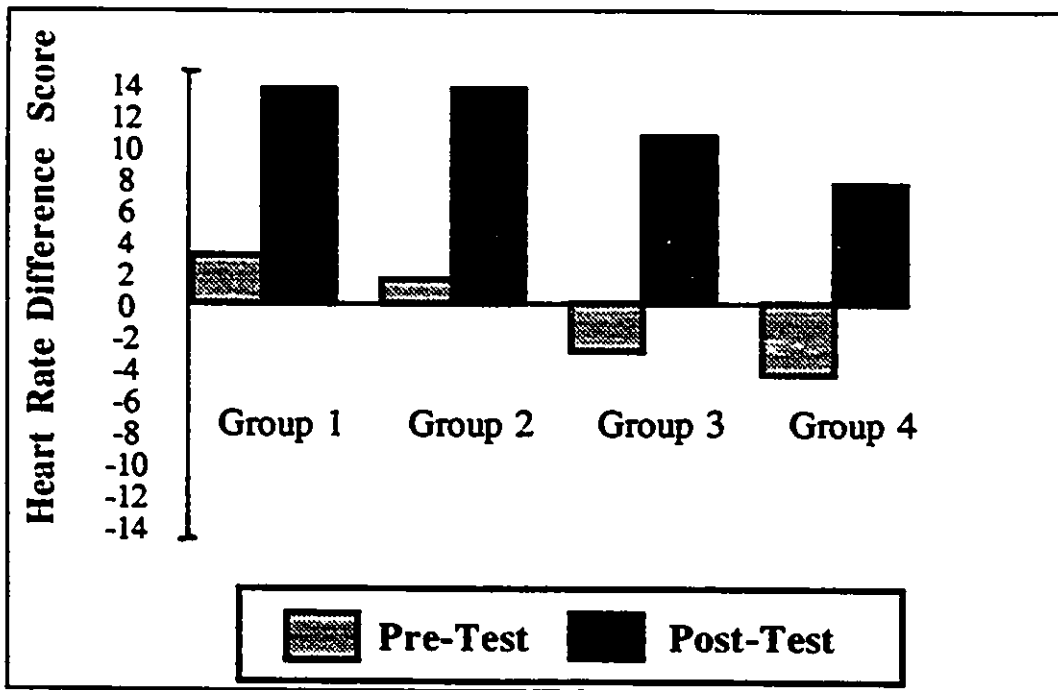
Pre and Post Mean Heart Rate Difference Scores

Group	Grade	Test	Minimum HR Difference Score	Maximum HR Difference Score	Mean HR Difference Score	SD
1	Gr. 6		-7.0	15.0	2.6	5.4
2	Gr. 4/5	Pre	-11.0	23.0	1.7	9.0
3	Gr. 2/3		-11.0	18.0	-2.1	6.9
4	Gr. 1/2		-9.0	6.0	-3.7	4.2
1	Gr. 6		-4.0	24.0	12.6	7.2
2	Gr. 4/5	Post	0.0	40.0	13.2	9.1
3	Gr. 2/3		-9.0	28.0	9.9	10.5
4	Gr. 1/2		-12.0	19.0	7.7	8.1

Results in Table 2 indicate that every group was able to decrease their heart rate after the intervention program, with Group 3 having the highest decrease. The standard deviations were relatively high. This can be explained by the fact that within each group there were large differences in the students' abilities to decrease their HR after relaxation. This is quite evident in the minimum and maximum HR difference scores. For example, at post-test, some students in Group 4 (grade 1/2) were able to decrease their HR by 24 beats, whereas others increased their HR by 4 beats. These large differences in ability resulted in large SD scores.

Figure 2

Pre and Post-Test Heart Rate Difference Scores



The pre- and post mean heart rate difference scores were analyzed using a multivariate analysis of variance (MANOVA) design. Results of the MANOVA are presented in Table 3.

Table 3

Multivariate Analysis of Variance

Source of Variation	Sum of Squares	DF	Mean Square	F	Sig of F
Main Effects	5979.523	4	1494.881	23.274	.000
CLASS	932.761	3	310.920	4.841	.003
TEST	5063.174	1	5063.174	78.829	.000
2-way Interactions					
CLASS TEST	20.369	3	6.790	.106	.957
Explained	6308.159	7	901.166	14.030	.000
Residual	10340.941	161	64.229		
TOTAL	16649.101	168	99.102		

There was a main effect of group, thus an overall difference between groups 1, 2, 3 and 4, $F(3, 165) = 4.84, p < .003$. There was also a main effect of test, therefore a significant difference between the pre- and post-test scores, $F(1, 167) = 78.83, p < .000$. There were no interactions between group and test scores, $F(3, 165) = .12, p < .957$.

Because there was an overall significant difference between groups, a Tukey-HSD test was conducted with an alpha level of .05, to determine where the

differences were. Results indicated that there was only a significant difference in the mean HR difference scores between groups 2 and 4 (grades 4/5 and 1/2).

Logbook Analysis of Relaxation/Stress Control Strategies

An attempt was made to assess the extent to which the children applied the intervention program's relaxation and stress control strategies in their daily lives, both in and outside the classroom. This was done through a qualitative analysis of the children's logbooks, and was further verified through interviews with the children and their respective teachers.

The analysis of the children's logbooks and interviews showed that 81 out of the 85 children (95%) who took part in the study, had successfully used the relaxation/stress control strategies they had learned through the intervention program outside of the designated intervention sessions. Some commonly cited circumstances for using the stress control strategies were: various stresses in the home, when they had difficulty falling asleep, when they had conflicts with siblings or friends, when playing games or sports, when doing schoolwork and when they were scared or hurt.

Table 4

Utilization of Relaxation/Stress Control Skills in Daily Life

<u>Grade</u>	Child Confirmation*	Teacher Confirmation**
Grade 1/2	19/19 100%	1/1
Grade 2/3	19/21 90%	1/1
Grade 4/5	28/29 97%	1/1
Grade 6 1	15/16 94%	1/1

* Child confirmation represents the number and percentage of students who reported successfully utilizing the relaxation/stress control skills in their daily lives.

** Teacher confirmation represents the number of teachers who reported that they had witnessed the children successfully using or reporting to be using the relaxation/stress control skills in their daily lives.

Children were instructed to answer the following questions in their logbooks:

(1) Did anything stressful happen yesterday or today? If so, what happened?

How did you feel when this happened?

(2) Did you do anything to feel less stressed? If so, what did you do? How did you feel after doing this?

The students rated their level of stress using the pictorial "cat scale", which was first developed for the Cox and Orlick (1996) study. The scale consisted of a five-point scale ranging from very stressed (5), to very relaxed (1). (See Appendix M). They rated how they felt initially when faced with the stressful situation or

event and then how they felt after using a stress control strategy from the intervention program. The following examples of the children's responses were taken directly from the logbooks and the children's spelling has been retained.

Example #1 (Girl, Grade 4/5)

Q. Did anything stressful happen? If so, what happened?

A. I was mad at a player on my ringete (sic) team.

Q. How did you feel when this happened?

A. Rating = 1, very stressed.

Q. Did you do anything to feel less stressed? If so, what did you do?

A. 1 Breeth (sic) Relaxation.

Q. How did you feel after doing this?

A. Rating = 5, very relaxed.

Example #2 (Boy, Grade 2/3)

Q. Did anything stressful happen? If so, what happened?

A. When I cand (sic) sleep, sometimes.

Q. How did you feel when this happened?

A. Rating = 2, a little stressed.

Q. Did you do anything to feel less stressed? If so, what did you do?

A. Spechial (sic) Place Relaxation (Special Place Relaxation).

Q. How did you feel after doing this?

A. Rating = 5, very relaxed.

Example #3 (Girl, Grade 6)

Q. Did anything stressful happen? If so, what happened?

A. I was tired and worried because (sic) my book report was due the next day!

- Q. How did you feel when this happened?
- A. Rating = 1, very stressed.
- Q. Did you do anything to feel less stressed? If so, what did you do?
- A. Tree-it, so I would get to work! (on my book report).
- Q. How did you feel after doing this?
- A. Rating = 5, very relaxed.

Example #4 (Boy, Grade 1/2)

- Q. Did anything stressful happen? If so, what happened?
- A. Morgan (my brother) was teasing (sic) me.
- Q. How did you feel when this happened?
- A. Rating = 1, very stressed.
- Q. Did you do anything to feel less stressed? If so, what did you do?
- A. 1 Breth Relaxshum (sic) and Change Channels (One Breath Relaxation and Changing Channels).
- Q. How did you feel after doing this?
- A. Rating = 5, very relaxed.

The preceding four examples demonstrated the successful implementation of the relaxation/stress control strategies learned in the intervention program as they were applied to the children's "real life" stressful situations. As previously noted, almost all children recorded successfully using the intervention program's strategies in their daily lives to relax and relieve stress. A non-parametric sign test (Siegel, 1956) was conducted on the cat scale data in order to assess to what extent the children were able to increase their feelings of relaxation following an attempt to implement a stress control strategy.

As in Cox and Orlick (1996) and Bonadie and Orlick's (in press) studies, a stress control strategy was deemed to have been "successful" if the student's feelings and ratings on the five-point cat scale moved from stressed to relaxed after implementing the strategy. The analysis indicated that a significant number of children (100%) decreased their feelings of stress following a stress control strategy. This finding was significant at the .001 level. The children's teachers also confirmed that a very large percentage of children discussed, recorded in their logbooks and reported applying these strategies outside of the intervention sessions.

Student Post-Intervention Interviews

An interview was conducted with each child participating in the study (n=85) following the intervention period. The purpose behind these interviews was to assess the extent to which the children were using the relaxation/stress control program in "real life" situations, and to gain insight into their views and opinions regarding the intervention program. The interviews were conducted by a team of researchers possessing experience in interviewing and knowledge in the area of mental skills training and children.

When asked how they felt about the intervention program, 97% of the children reported that they liked it. Some examples of these responses were as follows: "It was good and pretty fun", "It made me feel better", and "I liked it!" Only two children expressed a lack of enthusiasm for the program. When answering the question "Did you like the program or not?", their responses were "Not really," and "Not very much".

When asked whether or not they learned anything from the program, 97% of the students answered that they had learned the following strategies or concepts: (1) to relax (e.g., "to calm down when I'm hyper", "I learned how to relax on my own"), (2) to feel better (e.g., "When I'm not feeling good, it helps me feel okay", "When I'm mad, I can change channels to feeling happier"), and (3) to cope with stress (e.g., "When I got the wind knocked out of me, I practiced my breathing to feel normal", "It helps me feel better when I'm nervous about things").

When asked whether they had told or taught anything they learned from program to anyone else, 61% (n=51) of the students said "yes". The people that they told or taught ranged from family members, such as parents, siblings and cousins, to their friends who had not participated in the program.

When asked whether they would continue to use the skills or concepts they had learned in the program, 89.4% said they would use what they had learned in their daily lives. Many situations where could continue to use the program strategies were cited, such as falling asleep at night, when they are being bothered by others, when playing sports, or when they felt "bad" (e.g., scared, sad, embarrassed or nervous). This last response is particularly promising, as it showed that the children intended to use the program on their own.

The context of the delivery of the Feeling Great program by their regular teachers and the general acceptance of the program by their peers may be two reasons why the alternative school children achieved such a high level of success and enjoyment from the program in the present study. In addition, this current version of the intervention program was the most refined and comprehensive to

date, after going through three years of modifications to make it as effective and easy to implement as possible.

The results pertaining to relaxation and stress control for the students in this study were both positive and significant. They were more substantial than those found in the study by Bonadie and Orlick (in press). It is believed that the current curriculum is stronger than it has ever been before because it has gone through considerable evolution and refinement over three years of application. It is also believed that the suggestions from this study will make the delivery system even more powerful. The global suggestions and modifications made by the four teachers participating in the study are invaluable blueprints for practitioners who will follow.

Discussion

The purpose of this study was: a) to investigate how teachers in an alternative school environment would make adaptations to Orlick and McCaffrey's (1996) mental skills/life skills program for children to suit their own unique classroom environments, b) how they felt they were affected through their participation in the program, and c) whether the students would increase their ability to relax and improve their ability to identify and control stress. It was hoped that the results of the intervention program on children's relaxation and stress control abilities combined with the alternative teachers' feedback would provide useful suggestions for improving the overall program and its delivery.

The results of this study clearly indicated teacher participants: (1) made modifications to the program curriculum and delivery, on session and global levels, in order to meet the needs of their students, and (2) were positively affected through their participation in the program. The findings also showed the student participants: (1) learned to relax themselves at will, and (2) successfully implemented stress control strategies in various situations. The results indicated that teachers in an alternative school setting made modifications to the mental skills training program, and in turn, that their students learned important life skills when the program was delivered by their usual classroom teacher.

Program Modifications

One of the primary research objectives of this study was to learn from each teacher participant by enabling them to adapt the intervention program as they deemed necessary. All four teacher participants made changes to the intervention program, and provided reasons why these changes were beneficial. These

modifications will be taken as recommendations to teachers using the program in the future.

Few empirical studies have assessed alternative school teacher modifications to lifeskills programs for children. However, studies assessing the alternative school approach to open and adaptive curricula and environment have been carried out over the last 20 years, as well as studies examining mental training with children. The Type I alternative school setting has been identified by the academic community as an environment where change and challenges are welcomed, and creativity and child-centered learning are of prime importance. Type I alternative schools are characterized as being the clearest examples of "restructured" schools, where multi-aged groupings, parental involvement in the class, and anecdotal report cards are some of the features which set them apart from traditional schools (Hawley, 1991; Raywid, 1990, 1994).

The Type I alternative school used in the present study has proven to be an excellent environment in which to test the effectiveness and adaptability of the intervention program. The teachers and administration were supportive of the exploration into new lifeskills programs for children. In the alternative school environment, teachers plan individual and group programs based on their understanding of the intellectual, emotional, social and physical development of each child (Crichton, 1994). An emphasis is placed on developing a strong connection among students, and between students and their teachers (Clark, Lotto & Astuto, 1984; Raywid, 1994; Wehlage, Rutter, Smith, Lesko & Fernandez, 1989). Experiential learning and a two-way flow of sharing information and ideas

between teachers and students formed a strong foundation on which to make personalized and effective intervention program modifications.

The teacher participants made considerable adaptations to most conventional curricula on a daily basis in order to meet the needs of their classroom populations, and the intervention program curriculum was no exception. The teachers encouraged their students to express their opinions towards the intervention program, as a means of ascertaining what did and did not work best for the children. Open dialogue and a predisposition to welcoming change meant the teachers and students could consult one another in order to shape and refine the intervention program.

The teacher curriculum guides, interviews and weekly meetings proved to be useful assessment tools. Upon analysis, they provided a balanced and candid program review by providing the welcomed support, "The kids love doing the highlight charades. They really get into it." and the essential criticism, "The Laughing tape gets them (the students) too hyper". The teacher's recorded notes, anecdotes, and transcribed interviews were grouped into global and session changes, providing both descriptive and prescriptive feedback for future teachers.

Global Changes

Global changes were made to the intervention program by all four teachers. These changes have been considered by the researchers as recommendations to future implementers of the mental skills program within their own classroom setting. A recommendation for both the Junior and Intermediate programs was that the sessions be divided in half, so that children would get more out of the sessions

if allowed to concentrate on either a logbook or a taped activity. All four teachers noted that doing both activities in one session was too time-consuming.

The second recommendation for both the Junior and Intermediate programs was to allow the children to lead the discussions whenever possible. This modification was consistent with a previous survey conducted in the alternative school environment which indicated high success and satisfaction levels of children who were active contributors to decisions regarding the content and process of learning in their classrooms (Raywid, 1982). In a study by Bussis and Chittenden (1976), it was found that schools using an open approach to education invited the students to become more involved in every process in the classroom, thus empowering the students and increasing the likelihood that they would enjoy and retain what they were learning. All four teachers recorded allowing the students to lead the session discussions, and reported a higher participation rate in the discussions as well as an increase in the quality of the discussion (i.e., original thoughts, moderate debate, and more pertinent questions).

For the Junior Program, it was recommended that teachers choose the taped exercises to suit the needs and tastes of their students; the children may have benefitted more from fewer exercises with which they are familiar, as opposed to many unfamiliar exercises. It was also recommended that for the first few sessions, the teachers should consider reading the audio tape "scripts" instead of playing the tapes, so the students have a familiar pace and voice on which to focus. The main goal for the teacher participants in this study was to have the program fit the needs of their students, not the contrary. Teachers made the transition into the new

program less overwhelming for their young students by adapting strange voices and cutting down on new activities.

Two additional global changes were made specifically for Junior grades. The teachers recommended that sessions that appeared to have been disrupted due to extraneous circumstances should be repeated, to ensure the children had the greatest opportunity to learn the concept presented that day. Teachers also recommended using the program concepts or exercises at any time of the day to show their applicability to "real life". In a study comparing alternative schools with mainstream schools, experiential learning was identified as an integral part of alternative school learning (Clark, Lotto & Astuto, 1984). This was governed by the guiding pedagogical principle that most children learn best by "experiencing" new concepts or ideas, as active participants in the learning process (Montessori, 1974). Therefore, giving students a "second chance" to learn new concepts, and the suggestion that these concepts would be part of everyday life should be essential components to the intervention program.

Three key global changes emerged for the Intermediate Program. The teachers recommended the following adaptations: a) increase the frequency or duration of the intervention session whenever possible or deemed of value by the teachers, b) consider adding physical activities or other positive lifeskills strategies that complemented the concepts in the relaxation/stress control program, c) consider separating boys and girls at certain ages from close contact during relaxation sessions to eliminate focus problems. Teachers 1 and 2 noted that the Intermediate students required more sophisticated and engaging exercises geared to a higher maturity level than the Junior students. Teacher 1 expressed that it is also in this

stage of their emotional and physical development that natural hormonal changes occur, and the students become more easily distracted by members of the opposite sex. The teachers felt that the program had a higher chance of appealing to the more critical intermediate students by increasing or decreasing frequency of activities, trying in external but related exercises and school campaigns, and attempting to control distractions.

Session Changes

The teachers also documented the more specific or "session" changes in their curriculum guides. These session changes were isolated in nature, affecting only one specific session activity and did not carry over into the overall program. These changes were primarily aesthetic or highly personalized changes. For example, Teacher 3 had a longer logbook session on the first day after Spring Break, as the children had an abundance of experiences they wanted to record. Teacher 4 had the children whisper their highlights after the taped exercises were over, as her class liked sharing secrets. These creative and thoughtful adaptations served as a useful guide for future teachers and a testament to the flexibility of the program.

Personal Gain of Teachers

The teachers kept track of how the program had affected them, in addition to reporting and documenting changes made to the intervention program curriculum. No previous studies have assessed teacher involvement in the mental training programs, as the primary focus has been the effect of such programs on student participants. This study is the first of its kind, examining both student and teacher effects.

All four teachers came into the program with varying levels of skepticism and left with the same diversity of opinion. They were interested in seeing how their students would respond to the intervention program, prior to its commencement. However, Teacher 1 also expressed being anxious to "get the program over with", as she was feeling overwhelmed, with an already heavy workload.

The teachers had independently tried some form of relaxation program, prior to the intervention. Teacher 3 was the only teacher who reported limited success with such programs and felt that more passive forms of relaxation are not the best methods for her. She noted that she had found more success with aerobic activity as a method of stress control.

All four teachers tried to take part in the intervention exercises when circumstances allowed. They reported using the intervention sessions as a break for themselves, as well as their students, though Teacher 4 reported that at times "the intervention program was just one more thing to juggle in a hectic day". Teacher 3 expressed that while she enjoyed taking part in the exercises with her students, she continued to find aerobic activity to be the most effective stress control method for her. She acknowledged that her students and family did benefit from the intervention program. For example, her children like to use the taped activities before they go to bed. Teacher 2 indicated being part of this study has rekindled her interest in relaxation techniques and had inspired her to become more involved in stress control with her class, family and on her own.

All four teachers reported being pleased with the positive results they witnessed in their students. More specifically, the teachers reported seeing an increase in the children's abilities to focus on tasks, an increased awareness of what

stresses them vs. what makes them happiest, and what works best for them at dealing with stress. Previous studies have examined the extent to which the teachers liked or disliked the program, and how they perceived the results in their students.

In the Bonadie and Orlick (in press) study, the grade 2 teacher delivering the program reported that she felt the children had learned to be more positive, their focus appeared to have improved and they were better at looking for the "good things" in life. These results are very similar to those found in the present study, though Teachers 1 and 3 reported that at times the "highlight" exercises were not as successful as has been reported in previous studies.

In Cox and Orlick's 1996 study, the teachers (kindergarten to grade 6) were present during the intervention sessions, but did not deliver the program. All of the teachers completed a post-intervention questionnaire (n=7), and responded positively. The teachers noted specific examples where they witnessed the children successfully using the program elements: "They (the students) learned to use visualization and their imagination," "the children learned how to relax facing tests," and "they demonstrated more control in difficult situations." As previously noted, similar observations were reported by the teachers in the present study.

In a study by St. Denis, Orlick and McCaffrey (in press), children were taught to develop and maintain a more positive perspective through the concepts of "highlights" and positive thinking. A grade 4 teacher was present for the intervention program but did not deliver the exercises. She responded very positively to the program: "It was very helpful to have the children think about the small pleasures in life, things that they take for granted. Students learned to focus on the bright side. Overall, the children seem to have more positive attitudes, especially

those who were at a low level to begin with". In the present study however, Teacher 2 reported that the concept of highlights did not "catch on" for some children, and it is her view that some children prefer to "wallow in their own misery" as opposed to taking a positive perspective. Teacher 1 also noted that it was very difficult to get her grade 6 class to find highlights other than "material things". One explanation for this lack of success might be the fact that the children in the present study spent less time on positive perspectives, as the primary focus of the program was on relaxation and stress control. Further research into the attitude of the teachers towards the program elements might also provide more answers, such as in the case of Teacher 3, who questioned the effectiveness and necessity of a positive perspective in certain situations.

Another promising finding was the fact that all four teachers continued to use the program on their own volition over the past year. No previous studies have looked at the sustainability of this intervention program on a long-term or post-intervention basis, and these findings suggested that a longitudinal study examining participation in such intervention programs for a longer time period would be of worth.

Learning to Relax

The findings in this study were in agreement with former studies in the area of relaxation training with children. The study by Setterlind and Patriksson's (1982) showed 12 to 18 year old children learned to relax through an intervention program, and learned to identify and control stress in a positive way.

Zaichkowsky and Zaichkowsky (1984) investigated whether or not a group of Grade 4 children could be taught to relax themselves by learning how to lower their

heart rates, and met with positive significant results. A recent study by Cox and Orlick (1996) used an earlier version of the Feeling Great Program (Orlick & McCaffrey, 1994) in an elementary school to test its effectiveness at teaching children from kindergarten to grade 6 to relax themselves at will. Student researchers administered the program in a regular public elementary school. Positive significant results were found in the children's ability to relax by lowering their heart rates.

As illustrated in the present study (see Table 2), every group was able to significantly decrease their HR after the intervention. The fact that there were no interactions indicates that the significant difference found between pre- and post-test results did not depend on what class the children were in.

While the standard deviations in the present study were high, this may be explained by the fact that the children's abilities to relax within each class were extremely varied, as illustrated in Table 2, by the minimum and maximum heart rate difference scores. The positive effect obtained by the current study may be due to a more refined and effective program and delivery of the intervention program.

A subsequent study by Bonadie and Orlick (in press) used an updated version of the mental skills training program. The program was administered by the regular teachers of two intact grade two classes. The children were able to significantly increase their ability to relax, however, the heart rate difference results were not as substantial as those found by Cox and Orlick (1996) or in the present study.

It was believed that these differences may have been due to the fact that there was less contact time with each of the program elements, as positive perspectives and highlights were examined in the Bonadie and Orlick study, but not in Cox and

Orlick (1996) or the present study. Another factor to take into consideration is that the Feeling Great (1996) program has gone through considerable evolution over the past few years, and the highly adaptive approach of the alternative school teachers may also have played a part in the successful relaxation results in the present study.

Implementation of Relaxation/Stress Control Strategies

This study showed that when children were taught relaxation techniques and stress control strategies they could successfully apply them both in the classroom and in their daily lives. Some of the most commonly cited circumstances for using the stress control strategies were: dealing with various stresses in the home, when they had difficulty falling asleep, when they had conflicts with siblings or friends, when playing games or sports, when doing schoolwork and when they were scared or hurt. The same key stresses were identified in Bonadie and Orlick (in press), Cox and Orlick (1996) and Setterlind and Patriksson (1982), and will be discussed in more detail.

Setterlind and Patriksson (1982) tested a lifeskills intervention program with children aged 12 to 18, and found the children used their relaxation and stress control strategies in similar situations, for school-related stress and to make themselves feel better. Cox and Orlick (1996) also reached the same conclusions when they tested a stress control/relaxation program with elementary school students in grades kindergarten through grade six. Bonadie and Orlick (in press) had similar results when Orlick's (1994) mental skills program was delivered to grade two students.

The student participants in the present study were not only able to identify stressors, but were successful at implementing the new skills they had learned to

combat these stresses. Logbook analysis indicated a 100% success rate in children's recorded attempts at successfully using relaxation/stress control techniques. The findings concerning the existence of stress in the lives of children were consistent with previous studies (Dickey & Henderson, 1989; Ryan, 1989). These two studies had a primary goal of identifying the sources of stress in children, but it was found that children did not possess adequate coping mechanisms.

In a study by Chandler (1985), it was found that this lack in coping skills could have profound negative effects on the psychological, physical and emotional well-being of children and adults. A study examining stress in childhood revealed that children were found to lash out and behave in a disruptive manner when under stress (Blom, Cheney & Snoddy, 1986). An example of this behaviour occurred in the classroom, where acting out behaviours resulted in a stressful classroom atmosphere for all the students and almost always inhibited the learning process.

The data supplied by the teachers and their students in the present study provided similar responses: that when stressed, children tend to act out and revert to disruptive or anti-social behaviour such as crying, yelling, physically lashing out (i.e., kicking, punching) or withdrawing. All children in the present study were able to identify what stressed them by the end of the intervention, and logbook results indicated that all children had successfully implemented stress control strategies in their daily lives. These studies indicate there is a definite need for relaxation and stress control training with children, and therefore the purpose behind this study: to help develop and refine an effective mental skills training program designed specifically for children.

Another promising finding in the present study was that 89.4% of the student participants said they would continue to use the skills and activities that they had learned through the intervention program. Bonadie and Orlick (in press) also showed a high percentage of students intended to continue to use elements of the program (87.5%), while an even higher percentage of children (98%) had reported the intention to continue using these skills in the Cox and Orlick (1996) study.

The findings in the present study also indicated the children derived a high degree of enjoyment in taking part in the intervention program. Ninety-seven per cent of the student participants said they enjoyed taking part in the program (e.g., "I liked it because it was fun!" and "It had neat things to do."). Many studies have indicated the importance of a playful medium when trying to teach children new concepts, and indicated that when children learn through play, there was a better chance that they would remember what they have learned and continue to apply and investigate the new skills or concepts being taught (Hiebert, 1988; Humphrey & Humphrey, 1985; Lubetsky, 1989).

Both students and teachers reported the transfer of positive lifeskills such as relaxation and stress control strategies into the children's daily lives. However, the inclusion of the parents in future studies could provide further support. Cox and Orlick (1996) used a questionnaire to elicit parental feedback, with a 72% return rate (n=107) and found that a high percentage of parents reported that their children had told them about the program (96%) and cited specific examples of how their children used the activities and had benefited from them (87%). Questionnaires and parent feedback were not used in the present study due to time and resource constraints.

It should be noted that parents of student participants in the present study were given the opportunity to voice questions, concerns and comments at a post-intervention session, and only a small percentage of parents attended. Teachers in the present study were very supportive of the idea of including the parents and the children's home environments within the parameters of the program, and stressed the importance of the role of the parent in the stress control repertoire of children: "The longer I teach, the more I think that what goes on after school is extremely important. I have the children for a small percentage of their lives. Not at breakfast, bed time, or the time their parents spend with them in the evenings and weekends. The children who spend a lot of time discussing these things with their parents, parents who really know them, have an easier time dealing with stress..." (Teacher 1, Grade 6).

The present study did not employ a comparison group. In future studies of this nature, an obvious choice for comparison groups would be a series of intact control classes. The fact that no classes wanted to be exempt from taking part in the present study posed an obstacle to including a control group. The alternative school system is governed within a larger public school system, and is open to all children. The demographics of the children who attend alternative elementary schools are consistent with the demographics of regular public schools (Crichton, 1994; Hawley, 1991; Raywid, 1994), including age, sex, racial and socio-economic indices. Therefore, the closest comparison groups for the results in this study were the controls used in the most recent studies using the same intervention program in the same school board (Bonadie & Orlick, in press; Cox & Orlick, 1996; St. Denis, Orlick & McCaffrey, in press). The classes in the present study ranged from grade

1/2 to 6, and could be matched up with any of the controls from these aforementioned studies which spanned kindergarten to grade 6. All controls were found to have the same results in each study, as all showed no significant increase in the children's abilities to relax, control stress or develop and maintain a positive perspective.

This study showed that 61% of the children shared what they had learned from the relaxation/stress control program with a friend or family member. This transfer and application of knowledge at home is one of the core intervention program goals. Future research on effective ways to encourage parents and support systems to play a more active role in children's lifeskills' programs would be highly beneficial. Future research into ways children can become most effective at teaching positive lifeskills to their family members would also be of value.

Another valuable research area would be to assess this kind program with special populations of children, such as children with emotional or behavioural problems, children with difficulty communicating, exceptional or gifted children, and children with illnesses or injuries. As was illustrated by the present study, this program is highly versatile and the nature of its flexible structure makes it conducive to further application in a wide variety of environments.

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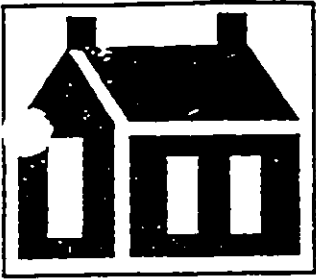
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Appendix A
Informed Consent



Crichton Alternative Community School

200 Crichton Street, Ottawa, Ontario K1M 1W2

Telephone: 749-7897

December 16, 1994

Dear Parent/Guardian:

A special project is being conducted at Crichton school, beginning in January 1995, which is designed to teach children positive life skills, including how to relax, deal with stress effectively and look for positive things within themselves, others and their environment. This research project is comprised of a series of simple games and activities which teach these important skills and concepts to children in an enjoyable way. The program will be offered to your child's class, 3-4 times per week for 10-15 minutes per time over a period of 20 weeks. Your child will participate in the activities with his/her classmates at a time which is most conducive to providing an atmosphere of calm as a way of facilitating the regular programme. The teachers are interested in the program and are looking forward to taking part in this study.

The programme is being introduced under the guidance of Dr. Terry Orlick and his team from the University of Ottawa. Dr. Orlick has completed extensive work in the area of co-operative games and visioning for high performance athletes. He is recognized world-wide as an expert in his field. He and his team will be at Crichton two to three times per week to monitor our progress and offer assistance as needed.

Children will be asked to comment on each activity and will keep a simple log book to assess their progress in learning and using these skills. The team from the University of Ottawa will observe the activities and talk with the children to gain their views of its effectiveness. Some activities may be video-taped to determine the extent to which children are involved in the activities. The information gained from this study will be used to evaluate the program in terms of its capacity to teach children important life-skills as well as to improve upon the program for future use with larger numbers of children. Results will be reported in ways that ensure complete confidentiality, and will not appear in any school records. It will be used solely for research purposes. This is the third year in which this program has been conducted in the Ottawa Board of Education and the results thus far in the previous schools have been encouraging.

Participation in this study is voluntary and your son/daughter may withdraw at any time. In accordance with the guidelines for

.... page 2



research from the OBE only students with written permission may participate. Whether or not you wish your son/daughter to participate, please complete the attached permission form and have your child return it to his/her classroom by Wednesday, Dec. 22nd.

This project has been approved by the Advisory Research Committee of the OBE. We feel it will be a very worthwhile and uplifting experience for your child. Parents are welcome to attend sessions with their child. If we have enough interest, Dr. Orlick would be willing to provide training to parents. A questionnaire regarding this will be sent out in January. Dr. Orlick is available to answer questions at 564-9114.

You may also give me a call at 749-7897 if you have any questions or need more information.

Thank you.

E. Daghofer

Evelyn Daghofer
Principal

Parental Consent:

This information is confidential and is protected under the Freedom of Information and Protection of Privacy Act, 1989 (Bill 49).

I have read and understood the request for my son/daughter to participate in the study of "Relaxation and Stress Control Activities for Children". I have discussed this with my son/daughter and

_____ I give permission for my son/daughter to participate.

_____ I do not give permission for my son/daughter to participate.

NAME OF STUDENT: _____ DATE: _____

SIGNATURE OF PARENT OR GUARDIAN: _____

Appendix B
Pre- and Post-Test Relaxation Recording Sheet

Name: _____ Boy/Girl: _____ Grade: _____ Age: _____

Recorder: _____ Teacher: _____ Room: _____

R. Pre-T #1

Topic: Relax the best way you know how

HR Before: _____

HR After: _____

Appendix C
Stress Control Recording Sheet

Stress Control



Date: _____

Did anything stressful happen?

Yes

No

What happened?

How did you feel when this happened?



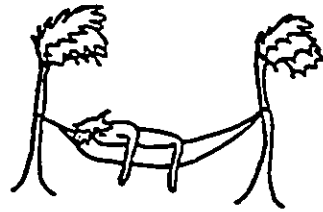
Very stressed



A little stressed



A little relaxed



Very relaxed

Did you do anything to feel less stressed?

Yes

No

What did you do?

How did you feel after you did this?



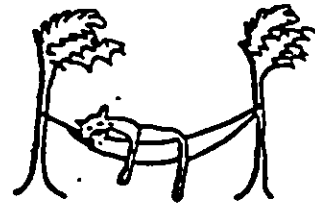
Very stressed



A little stressed



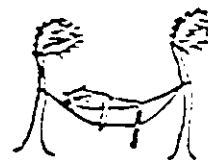
A little relaxed



Very relaxed

Appendix D
Relaxing on Your Own Recording Sheet

Relaxing on your Own



10

Date: _____

Did you try to relax on your own this week?

Yes

No

Why did you try to relax?

What did you do:

How did you feel before trying to relax?



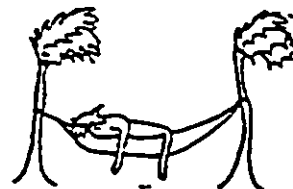
Very stressed



A little stressed



A little relaxed



Very relaxed

How did you feel after relaxing?



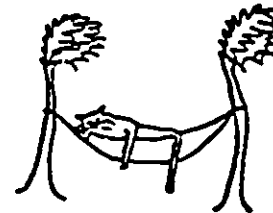
Very stressed



A little stressed



A little relaxed



Very relaxed

Appendix E
Teacher Curriculum Guide Sample Pages

✓
DAY #6

Questions: Did anything stressful happen to anyone yesterday or today?
Encourage sharing of experiences.

Did you try a relaxation exercise or anything else to feel better or to feel less stressed?

Teaching Point: Concentrating on your breathing is a very effective way to reduce stress and tension. If you can slow down your breathing everything else tends to slow down and relax.

ACTIVITY

1. Logbook Stress Control (page 15).
2. Audio-tape Follow Your Breathing (Tape 1 Side B #5).
Reference: Free to Feel Great Book, pages 57-58.

214

Post-Activity Questions: How did you feel when following your breathing?

Did it feel like everything slowed down and relaxed?

Reminders

For children: Look for opportunities to practice easy relaxed breathing to relax.

For teacher: You are breathing - but are you breathing in a relaxed way?

Notes/Comments

For those students who circled "NO", I am encouraging them to describe a situation and write a little plan for a positive way of dealing with it!

DAY #22

Questions: Did anything scary or stressful happen to anyone yesterday or today? Did you do anything to feel less stressed? Probe for details?

When children share ways they cope with stressful events, reinforce the use of positive strategies by telling them that it was good. Also allow other children to contribute by asking "Is there anything else she could have done that might have helped"?

Teaching Point: When little things happen that might scare you or make you worry, sometimes you can just relax and let the worries float away - like water flowing down a stream.

ACTIVITY

1. Logbook Stress Control (page 48-49). Take the children through the exercise step-by-step so they understand exactly what to do. If the children are too young to complete this sheet, let them talk about it, verbally.
2. Audio-tape Flowing Stream (Tape 2 Side A #3).

Post-Activity Questions: What was going through your mind when you were listening to flowing stream? What did you feel like?

Do you think it might help you to think of flowing stream if you are mad or worried, to let the bad feelings flow away?

Reminders

For children: Pick your favourite relaxation activity and do it on your own today or tonight.

For teacher: Look for times during your day where you can take a little relaxation break, even if it is simply taking a few deep relaxing breaths, relaxing your shoulders or thinking of a nice relaxing image.

Notes/Comments 3/4/95

I've come to the conclusion to split these sessions in half - alternate logbook, next tape otherwise too long or rushed.

Today we did book. Discussion stress feels "like a cut down tree" "like a balloon in a hole in it"

Appendix F
Teacher Post Intervention Interview Guide

Teacher _____
Grade _____

Feeling Great Lifeskills Program
Post-Intervention Feedback Guide

1. How did the latter part of the program go for you? For the children?
2. What did the children seem to like the best? the least?
3. What did you like best? the least?
4. What are some of the things that worked well? Are there any things that did not work well?
5. Did you notice any changes in the children, good or bad? Did you notice any changes in you, good or bad, over the course of the program?
6. Did you see any evidence that the children are using the activities they learned?

Teacher _____
Grade _____

7. In your opinion, which children in your class really got into the program or got the most out of the program? (Choose a few) What makes you think that? Why do you think those particular children got into it?

8. In your opinion, were there any children who did not buy into the program? What makes you think that? Why do you think these particular children did not get into the program?

9. Do you have any specific suggestions for improving any aspect of the program?

10. Did you made any adaptations to the program to make it fit your students, your classroom situation, or specific individuals? If so, what were they?

11. Did you reinforce or encourage the children to use the strategies in specific situations? Probe for specific examples.

12. Did you take part in any of the Feeling Great activities in the classroom with the kids? outside the classroom? If so, which ones, how often?

13. Are you going to continue with the program? Would you do it any differently?

Thank you for your cooperation with the program and for your feedback.

Appendix G
Student Post Intervention Interview

Name: Lauren M/R: A Teacher: Jill Grade: 2
Interviewer: _____ Room: 10 Age: 7



Post - Intervention Interview Guide
(Students)

1. How did you feel about the Feeling Great program? Did you like it/not like it? Why? What did you like best? Was there anything you didn't like?

- liked it - felt really good - favorite is spaghetti toes,

- liked Terry Orlick saying close my eyes + listen to my voice, sink into cloud, fall asleep

2. Do you think that the program helped you in any way? Did you learn anything from the program? If yes, how has it helped you or what did you learn?

- helped alot - to relax when hyper - calms down did spaghetti toes - makes me fall asleep.

3. Have you used any of the activities on your own? If yes, which ones and in what situations? (Probe for details). Have you made up any of your own ways to relax or to deal with stress? (any adaptations?)

- ~~did spaghetti toes, floating on~~

- do at home in room with sister during relaxation time

- do relaxation in bath, dinner table anytime

* - made up one called mother, man always in North!

think about mother if I liked spaghetti toes + jelly beley mixed together was

4. Have you told or taught anyone who was not in the program about the activities? If yes, who did you tell or teach?

- sister does spaghetti toes with her

- tell Anica (best friend)

- told mum spaghetti toes, floating on clouds + every one that we do, she wants to do it with her

- class said liked Terry Orlick's relaxation - good for tie

5. Do you think you will continue to use the activities on your own? If yes, when and where?

- if mum is mad - do relaxation - or mum or dad have a fight.

- yes - at night when not tired do spaghetti toes,

do floating on cloud (bed is cloud) dreamed

Terry Orlick + group fought 5000 diff. games at

6. Is there anything in the Feeling Great Program you would like to change to make it better? was asleep so couldn't thank. end every

wouldn't change prog.

Name: Michael MF: _____ Teacher: _____ Grade: 5
Interviewer: M.A. Room: _____ Age: 10

Post - Intervention Interview Guide
(Students)

1. How did you feel about the Feeling Great program? Did you like it/not like it? Why? What did you like best? Was there anything you didn't like?
I liked the program because it helped me relax instead of not having time. I liked space, the exercises, everything.
- helps me be more confident
2. Do you think that the program helped you in any way? Did you learn anything from the program? If yes, how has it helped you or what did you learn?
The program helped me in some cases. I learned how to relax easily.
- to fall asleep
3. Have you used any of the activities on your own? If yes, which ones and in what situations? (Probe for details). Have you made up any of your own ways to relax or to deal with stress? (any adaptations?)
Deep breathing - doctors
- jogging
Relax muscle.
- I think that everything is normal.
4. Have you told or taught anyone who was not in the program about the activities? If yes, who did you tell or teach?
mom & dad.
5. Do you think you will continue to use the activities on your own? If yes, when and where?
Even if this course stops - I'll use it ... in grade 7 & in college for big ~~the~~ test or if a train derails / car breaks down / dog sick
6. Is there anything in the Feeling Great Program you would like to change to make it better?
No... keep it up!

Appendix H
Teacher Early Feedback Questionnaire

Teacher JR
Grade 3

Feeling Great Lifeskills Program

EARLY FEEDBACK

At the early stage in the program, we would like an overall assessment of how things have been progressing. We would appreciate your valuable feedback.

1. How did you feel about the program going in? How prepared did you feel with the curriculum guide and tapes?

- Pretty enthusiastic!
- Looking forward to it!
- Hope it helps silent reading.

2. How have things been going so far for you? For the children? (the overall general feel for the program)

- Quite good!
- Kids are getting into it
- Fitting it in well

3. What do the children seem to like the best? the least?

- Spaghetti Toes
- Jelly Beans
- Star Trek

4. What do you like best? the least?

- Same
- Don't like "Laughing" - kids get too excited!

5. How long does it usually take for you to prepare for the day's session, and how long does each session typically last?

Not long at all - each session is around 20 min in total (start to finish) right now.

6. How many times a week do you include the Feeling Great activities in your schedule? Is it usually during a set time, and if so, when? Why did you choose this time?

4 times, near day's end - for calming / winding down.

Teacher J?
Grade 1/2

7. Do you have any suggestions for improving any aspect of the program thus far?

- make sure kids have their own space
- no touching, talking or looking at others!

8. Have you made any adaptations to the program to make it fit your classroom situation?

- have kids lie like spokes of a wheel
- let them get into discussion on their own, at their own pace.

9. Have you been taking part in any of the Feeling Great activities in the classroom with the kids? Are you doing any of the activities outside the classroom? Which ones, how often?

- I try to do it with them whenever I can
- I've also done the "PLUS" program

10. Has the program had any effects on your perspective or the way you teach, the way you relate to the children?

- I look forward to it to unusual, re-charge my batteries, too!

11. Has the program had any effects on you as a teacher? As a parent? As a person?

- too early to tell!

12. Please note any other comments, suggestions or feedback - good or bad.

- logbook plus discussion and exercises is pretty long for this age group - over 20 min.

Thank you for your cooperation with the program and for your feedback.

Thank you!!
😊

Appendix I
Teacher Mid-way Feedback Questionnaire

Teacher Nancy R.
Grade _____

Feeling Great Lifeskills Program

Mid-way Feedback

At the mid-way point in the program, we would like an overall assessment of how things have been progressing. We would appreciate your valuable feedback.

1. How have things been going so far for you? For the children?

The program is progressing very well. Students generally exhibit very good relaxation signs physically, and are commenting on experiencing in some instances very good inner sensations.

2. What do the children seem to like the best? the least?

They all really enjoyed "Special Place". They also enjoy listening to relaxing music. You should include this. We have not experimented with all exercises yet, but students seem to enjoy everything.

3. What do you like best? the least?

I am enjoying all aspects of the program. I concentrate on making a very good delivery of each exercise as part of a larger context. I think this is crucial.

4. How long does it usually take for you to prepare for the day's session, and how long does each session typically last?

I prepare for approximately 20 minutes and the program session lasts 40 minutes.

5. How many times a week do you include the Feeling Great activities in your schedule? Is it usually during a set time, and if so, when? Why did you choose this time?

I do it regularly once a week, thus 1:50 - 1:10 p.m. in the auditorium. It is scheduled as part of our gym time. I like a big block of time to do justice to the exercise (discussion, movement, relaxation).

6. Do you have any suggestions for improving any aspect of the program thus far? (discussion)

I like to provide a physical body sensation, centering component that the program does not seem to have much of. These students are still young and appreciate being active. It also helps settle them for relaxation.

Teacher _____
Grade _____

7. Have you made any adaptations to the program to make it fit your students or your classroom situation?

I like to add a variety of activities, physical as mentioned as well as relaxation exercises from other sources, a variety of music and visualization stories that message detailed, individual mental images.

8. Have you been taking part in any of the Feeling Great activities in the classroom with the kids? Are you doing any of the activities outside the classroom? Which ones, how often?

definitely - particularly when something has been introduced already and students know what to do. I do deep breathing, relaxation, response - special place.

9. Has the program had any effects on your perspective or the way you teach, the way you relate to the children?

There are times I feel I can give deeper explanations or more creative ones if I've just done relaxation. There is a greater feeling of connection (ie. we're all together trying to learn & grow).

10. Has the program had any effects on you as a teacher? As a parent? As a person?

It has rekindled many thoughts, ideas and practices that I have always believed in and re-inspired me to keep going. (ie. in the area of relaxation etc.) As a 3, teacher, parent, person - a positive energized outlook.

11. Please note any other comments, suggestions or feedback - good or bad.

I've enjoyed the process of this program. It will continue to be a cherished resource for me in the future, as a teacher and a person.

Thank you for your cooperation with the program and for your feedback.

Thank you!



Appendix J
Audio-taped Intervention Activities

Audio-taped Activities used in the Relaxation / Stress Control Intervention Program

<u>Activity</u>	<u>Length (mins.)</u>	<u>Description</u>
Spaghetti Toes	6:00	- wiggle and relax each body part, making it feel like warm, soft spaghetti.
Jelly Belly	4:09	- fill up your jelly belly (stomach) and empty it (abdominal breathing).
Echo Lake	4:41	- repeat positive statements to yourself or out loud (e.g. I am relaxed, I am strong).
Quiet Lake	2:20	- imagine yourself relaxing next to a beautiful, quiet, calm lake.
Butterfly / Flutterby	2:00	- imagine a butterfly fluttering and floating gently in the air.
Floating on Clouds	3:20	- imagine yourself floating on a big, soft, fluffy cloud.
Soaring	3:26	- imagine yourself soaring like a seagull.
Standing Relaxation	4:55	- relax various muscles and breathe easily, slowly, while standing.
Special Place Relaxation	3:28	- imagine your own special place, one that is very relaxing.
Flowing Stream	4:51	- imagine yourself flowing like a little stream around rocks and obstacles.
Relaxed Breathing	3:38	- breathe easily and slowly in a calm and relaxed way.
Muscle Relaxation	4:30	- think into various muscles and relax them (from toes to head).

Audio-taped Activities used in the Relaxation / Stress Control Intervention Program

<u>Activity</u>	<u>Length (mins.)</u>	<u>Description</u>
Follow Your Breathing	3:45	- breathe easily and slowly, following and listening to the sound of your own breathing.
One Breath Relaxation	3:37	- take one deep breath in, let it out, and relax.
Star Track	6:49	- imagine yourself on a space voyage floating in space.
The Peaceful Sea	3:13	- listen to relaxing music with sounds of gentle waves and seagulls.
Tree It	3:17	- put worries away (in a tree) and replace them with positive and happy thoughts.
Reminders For Feeling Good	3:00	- seven key reminders about how to be positive with yourself and others.

Appendix K
Session Changes

Session Changes

Teacher #1 - Grade 6

Session	Modification / Description
Day 1 -	Put name on the outside cover of logbook, instead of inside.
Day 3 -	Take pulse before & after the exercise to compare with yesterday.
Day 5 -	Did a couple of taped exercises, instead of just one.
Day 8 -	Tried One Breath but no kids got into it, so kept tape going to next exercise.
Day 9 -	Introduced highlights; really tried to get kids to come up with non-materialistic highlights - it was tough for them.
Day 22 -	Used 2 sessions to cover the highlight bag and charades, as opposed as the recommended single session.
Day 25 -	Limited the times we used the Laughing exercise, as the children are too activated after it.

Session Changes

Teacher #2 - Grade 4/5

Session	Modification / Description
Day 1 -	Started out with a review of concepts already taught.
Day 4 -	Started out the session by making children aware of their personal space; had them walk around the room without touching anyone else to illustrate.
Day 7 -	Had the children picture where they were (in the auditorium) and switch channels to their Special Place, because they have never done Changing Channels before.
Day 8 -	Compared the One Breath Relaxation to the one inch punch in martial arts and had the children try both.
Day 10 -	In Spaghetti Toes, asked the children to equate the spaghetti getting soft and warm in a pot of boiling water to humans getting soft and warm in a jacuzzi.
Day 13 -	Had the children imagine what it "feels" like to be at the Quiet Lake - going beyond just seeing or hearing it.

Session Changes

Teacher #3 - Grade 2/3

Session	Modification / Description
Day 1 -	Had children write their names outside the logbooks, not the inside.
Day 6 -	For those students who circled "no" on the Stress Control sheets, suggested they describe a situation and write a little plan for a positive way of dealing with it.
Day 8 -	Asked questions in a more general nature at first, to stimulate sharing.
Day 14 -	Started session with an active walk or jog session before doing Standing Relaxation to show sharp contrast.
Day 18 -	Had an extra long logbook session because it was the day after March break.
Day 22 and Day 23 -	Combine these two activities (Highlight Charades & Pictionary) and divided the children into smaller groups and offer a choice between the two (many children do not like both of these activities - this way, everyone got to do a favourite activity).
Day 25 -	Discontinued the use of "Laughing" - class and teacher do not like it.

Session Changes

Teacher #4 - Grade 1/2

Session	Modification / Description
Day 9 -	Had the children lie on the floor like spokes of a wheel, with their feet in the centre to listen to the Quiet Lake.
Day 10 -	Had the class come up with a set of "rights" - everyone has the right to lie quietly, not be interfered with, and be allowed to relax on their own; this came up because Standing Relaxation was a tough one for my young class.
Day 10 -	Repeated this day, having recited the children's "rights" and met with success. Children were much more focused and respectful of others.
Day 11 -	Had one child tell the story of Umbalakiki in her own words in great detail and found New Guinea on the world map. The children were extremely focused during this activity.
Day 12 -	Followed the "Laughing" exercises with a relaxation exercise, and limited the use of the Laughing tape altogether, as the children were too "hyper" after listening to it.
Day 19 -	I illustrated an example of when I was feeling "bugged" (I got the children to say my name over and over) and how One Breath Relaxation helps me to focus and not be "bugged." This introduction really helped clarify one breath for the children, as some had seemed distracted and lost.
Day 22 -	Began cutting logbook and taped exercises in half - alternating the days.
Day 24 -	Had the children whisper their own personal highlight after the taped exercise was over.

Session Changes

Teacher #4 - Grade 1/2

Session	Modification / Description
Day 25 -	I am leaving out the highlight jar to be used at any time.
Day 28 -	Had the children talk about their views on relaxation. As a class, they decided their feedback was worth taping, so they audio-taped it. Used Relaxing On Your Own after a surprise fire drill and has them lie on their backs for One Breath Relaxation for the best one yet. Colouring the activities the children had done was difficult because there were so many in a short period of time for this age group.

Appendix L
Authenticity Letter

AUTHENTICITY LETTER
DESCRIPTIVE NARRATIVE

Dear Teacher:

Enclosed is a draft copy of a "descriptive narrative" that I will be including in my master's thesis. It is meant to provide the reader with a synopsis of your views, experiences and modifications you made to the Feeling Great Program and a summary of the following three areas: 1) the preconceptions and attitudes you had towards the program at the start of the intervention, 2) the changes or major modifications you made, and 3) your overall views of the program and whether or not you feel you had any personal gain from the program.

I'd like to thank you again for your participation and dedication to the project. Your logbooks, interviews and informal meetings with me have provided many important lessons!

Please read the narrative and feel free to pencil in any changes you feel are required. Our goal is to provide the most accurate description of your experience with the Feeling Great Program.

Thanks again for your dedication and input! It is much appreciated!

Sincerely,



Shauna Taylor
University of Ottawa
School of Human Kinetics
Graduate Studies

Appendix M
Descriptive Narratives

Descriptive Narratives - Teachers

Teacher 1.

Teacher 1 went into the program with some skepticism, and to some degree felt that she would just like to "get it over with". However, after the first few sessions, she began participating in the exercises with her class and reached a point where she would lie down and do the exercises alongside her students. Often, she would be in such a relaxed state that she would forget to get up and turn off the cassette tape.

Teacher 1 had been introduced to relaxation methods in the past, but did not follow a program on her own or in her classroom. She did make several global changes to the intervention program in order to have it suit her students and the classroom environment: a) she played several taped exercises, one after the other, at least once a week; she feels that this really gets the children immersed in the relaxation process, b) she separated the boys and girls during relaxation sessions on the carpet to eliminate fidgeting and lack of focus on the exercises, c) in the question period, she tried to let the children lead the discussion, and d) she has cut down on the times she does the logbooks and has put an emphasis on the exercises and relaxation activities.

Teacher 1 felt that her class had benefited from the intervention sessions. Many of her students reported using the activities on their own, outside the classroom. Teacher 1 had changed her overall disposition towards the intervention program by the end of the 10-week period, and felt that learning to relax was an important lifeskill for her students and herself to learn. She would consider continuing to use the intervention program in the future, provided she delivered it in

a more streamlined format, such as her modified version.

Teacher 2.

Teacher 2 has done martial arts since she was a teenager. She has also been incorporating some relaxation exercises in her classes over the years and was looking forward to participating in the intervention program. She had felt somewhat "out on a limb" doing this kind of program with her classes, though the principal and other teachers at the alternative school have always been very supportive.

Teacher 2 made several global changes alongside many isolated session changes: a) she added more "physical" exercises to illustrate the concrete physical differences between a relaxed vs. tense state, b) she conducted a 45 to 55 minute intervention session, once or twice a week, instead of the recommended 15 minute sessions, 3 or 4 times a week, c) she let the children do demonstrations and lead in exercises as much as possible, and d) she tried to tie in school health campaigns into the lessons, whenever she could.

After becoming involved with the intervention program, Teacher 2 joined a relaxation group. It was a place for her to discuss relaxation/stress control with others and to share readings and inspiring ideas. She felt that the intervention program has rekindled her interest in relaxation methods. She feels that it has helped her to balance her duties as a mother of three at home, and a busy teacher at school.

She found the parents of her students to be very supportive and was very pleased with the positive results she has seen in most of the children in her class. She has taught almost every multi-level grade in the alternative system and she feels that she knows how to adapt her curriculum to all the ages groups. She also intends to continue using her slightly modified version of the program in the future.

Teacher 3.

Teacher 3 had found in the past that yoga and relaxation methods which she viewed of a similar nature to this program had never really appealed to her. She went into the program with a certain amount of skepticism, but was interested in seeing how relaxation and stress control was going to translate for children.

Teacher 3 had also done some stress management through workshops and courses. She noted that those methods were not her first choice at dealing with stress and anxiety and felt that was her bias. She has found it more effective to deal with her own stress through activities such as aerobics, walking or cleaning the house. She was interested in seeing if the intervention program's more passive approach was going to work for children.

Teacher 3 was very diligent about noting changes she had made to the program. The primary global changes were as follows: a) like Teacher #4, she alternated logbook and taped exercise sessions, so the children could spend more time on each, b) she allowed her class to use the intermediate logbooks, even though many of the children in her class fit into the junior logbook age group, c) in the beginning of the program, she kept the discussion questions more general in nature and tended to not probe for specific examples, unless the children gave them on their own. She felt that over the course of time they would open up in more specifics.

Teacher 3 felt that her class benefited from the relaxation and stress control activities. However, she did wonder if some of her students' might have benefited more from vigorous exercise or activity. She felt that while many of her students got something out of the program, some individuals seemed to be missing certain

concepts. She wondered whether a more active intervention method might be better for some children. However, she added that most of the children in question were not particularly athletic, either.

She felt that it took a few classes before she started to see any signs of real relaxation, but that by the end of the intervention program, most of the children had a good understanding of the main concepts. It is her perspective that some adults prefer to keep "miserying" (wallowing in their misery), as opposed to using the highlight concept.

Teacher 3 found that her class enjoyed the program and did benefit from their participation. She still finds physical activity to be most effective as her personal method of stress control, but she does now use One Breath Relaxation. She gave the relaxation tapes to her own children to try at home, and reported that both had good results and positive feedback.

Teacher 4.

Teacher 4 had attended some relaxation and stress control seminars several years ago, but had never before made a conscious effort to employ relaxation or stress control methods in her classes. She was not sure what to expect in terms of the effect the intervention program would have on her class in the short term. However, she had hoped the intervention would help her students calm down for their silent reading periods. She was looking forward to participating in the intervention, and was optimistic that both she and her class would gain from their participation.

Through the course of the program, Teacher 4 made several global changes to the curriculum: a) she stopped doing a taped activity and a logbook activity in one session, because they required too much time, b) if a session did not go well, she would repeat the session or discuss it in the next session, c) she started using a highlight jar at any time of the day, not just the prescribed intervention time, d) she tried to be more spontaneous in the discussion questions and let the children lead the discussion, e) by the end of the intervention, she began playing "old favourites" more often or on request, and f) she limited the taped exercises to no more than 10 distinctly different exercises.

Through the course of the intervention, Teacher 4 not only administered the program, but tried to take part in the exercises herself. She used some of the relaxation exercises alongside the children and had even taken the children's advice in using techniques from time to time, such as taking a highlight out of the highlight jar. While it was not always possible for her to participate in the relaxation sessions she tried to at least sit with the children. Whenever classroom conditions permitted

(i.e. all students were quiet and focused), she closed her eyes, using the relaxation sessions as a break from her already busy schedule.

Teacher 4 looked at the relaxation/stress control program as something to look forward to, though there were times when she felt that it was yet another important thing to fit into an already busy day.

She described her attitude towards the program as being very enthusiastic and she felt her students have benefited from their participation, though no drastic effects were seen in the children's silent reading sessions. She noted that some of the children who most needed these skills couldn't seem to apply themselves consistently. She intends to use her modified program with her classes in the future, refining it even further as she goes along.

Appendix N
Sample Stress Control Sheet

Stress Control



Date: _____

Did anything stressful happen?

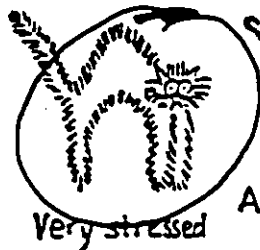
Yes

No

What happened?

My friend yelled at me.

How did you feel when this happened?



Very stressed



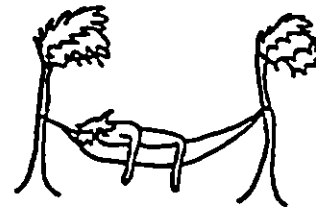
A little stressed



In between



A little relaxed



Very relaxed

Did you do anything to feel less stressed?

Yes

No

What did you do?

One Breath Relaxing and Free-It.



Very stressed



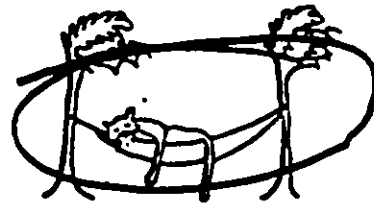
A little stressed



In between



A little relaxed



Very relaxed