ABSTRACT

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This study examined the effects of adventure education and a traditional sport unit on self-esteem in middle school boys and girls. The study also examined the correlation between Hellison's levels of responsibility and self-esteem. Hellison's levels of responsibility is a performance grade each subject gave himself/herself on their perceived level of responsibility for each class period. The sample included 53 male and female students from St. Mary's school. The subjects were randomly placed into one of two groups. The treatment group (N = 27) participated in a ten-class period adventure education unit. The control group (N = 26) participated in a ten-class period floor hockey unit. Subjects completed a pre/post test questionnaire measuring their perceived self-esteem. This instrument was a modified version of Rosenberg's 40-point Likert scale. An independent samples t-test yielded no significant difference between group means (p = .091). A change in self-esteem was measured by subtracting the posttest score from the pretest score. The t-test yielded no significant difference in self-esteem from either group. A one-way ANCOVA test indicated a significant difference between groups (p = .148). A Pearson Product Moment-Correlation Coefficient test found no significant relationship between Hellison's levels of responsibility and self-esteem. The treatment group yielded an (r = .789) and documented high levels of self-esteem and social responsibility, but it is unclear as to the extent of the correlation between self-esteem and the student's level of responsibility. The results of this study indicate no significant difference in self-esteem from an adventure education unit or a traditional sport unit. It also found no significant correlation between self-esteem and Hellison's levels of responsibility.
THE EFFECTS OF AN ADVENTURE EDUCATION UNIT
VERSUS A TRADITIONAL SPORT UNIT ON SELF-ESTEEM IN MIDDLE
SCHOOL BOYS AND GIRLS

A THESIS PRESENTED
TO
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BRET M. Nielsen
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Candidate: Bret M. Nielsen

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Thesis Committee Chairperson Signature: [Signature]
Date: 11-21-02

Thesis Committee Member Signature: [Signature]
Date: 11-21-02

This thesis is approved by the College of Health, Physical Education, Recreation and Teacher Education.

Associate Dean, College of Health, Physical Education, and Recreation
Date: 1-23-03

Dean of Graduate Studies
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CHAPTER I

INTRODUCTION

Nationally, physical education curriculums are continuously changing what skills and values are important for students. Many schools value team and individual sports as a skill-based curriculum, while other school districts value inclusion activities and participation. Still other school districts believe that fitness and wellness classes are the best approach best to keep the students active. The newest model of instruction is adventure education. It helps to develop the whole person, mind body and soul. It focuses on accountability for one’s decisions in the classroom (Bunting, 1989). It also helps to develop group dynamics and allows students at all skill levels to participate and succeed in a group setting (Rohnke, 1989). Adventure education teaches the students that every person is valuable to the success of the group, and that no one person can accomplish the goal for the group. Teamwork and communication play an important role in the adventure model.

Developmentally appropriate sets of sequential events are facilitated throughout the unit. Each activity poses a new and challenging problem to a group or individual (Rohnke, 1989). The idea that each person is given the choice to participate in the activity or not, allows students the freedom to step outside their self-imposed boundaries. Challenge by choice addresses the idea of trust within the group. Trust plays a vital role in the classroom and in every day life. The students identify what trust is, how it is built,
and how it is broken. The students participate in various stages of trust activities to help build trust within the group. The concept of *challenge by choice* helps students feel at ease because they know at any time they can choose to stop participating in the activity (Rohnke, 1989). It is a safety net and provides emotional stability for each person. It allows students to try new activities allowing them to fail in a non-threatening environment. This helps students learn that it is acceptable to display incompetence and to have limitations (Halliday, 1999).

Through the various stages of adventure students form attitudes, values, and beliefs through various experiences. This helps facilitate physical, emotional and spiritual growth (Bunting, 1989).

Adventure education addresses social responsibility among students, allowing them to interact and socialize in a safe and friendly environment while developing and refining social skills. In addition, it helps them to understand individual differences among one another. This holistic approach develops a well-rounded person who is conscientious of the needs and feelings of others.

**Need for the Study**

There are numerous studies that have examined the effects of an adventure education versus a traditional sport unit. However, there are currently no studies that have attempted to utilize a social responsibility scale to determine if there is a correlation between the levels of responsibility and self-esteem throughout each unit taught. This study addresses whether or not high levels of self-esteem correlate with high levels of responsibility.
Purpose of the study

The primary purpose of the study was to examine the effects of an adventure education unit versus a traditional sport unit on self-esteem in middle school boys and girls. The secondary purpose of the study examined the relationship between social responsibility and self-esteem in middle school boys and girls.

Hypothesis

The following hypotheses were tested in the study:

1. There will be no significant difference in self-esteem between the adventure and the traditional group.

2. There will be no significant correlation between students’ levels of responsibility and self-esteem as a result of participating in either the control or the treatment group.

Assumptions

The following assumptions were made in this study:

1. The facilitator had no influence on the outcomes of the study.

2. All students were honest and accurate in their responses to the questions in the pre-posttests.

3. All students assessed themselves honestly on a daily basis.

Delimitations

The delimitations for the study were:

1. Subjects were seventh and eighth grade males and females from St. Mary’s School in Caledonia, Minnesota.
2. The same instructor taught both the treatment and control groups so that teaching style does not become a variable for the study.

3. The students participated in a 10-day sequence of activities for each unit. The control group participated in a traditional floor hockey unit, while the treatment group participated in various activities from an adventure education unit.

Limitations

The limitations for this study were:

1. Students have had prior experience with others, which may have been positive or negative.

2. Class absences may have influenced this study.

3. School events, during which the students do not attend physical education class (i.e., band, field trips and special events), may have influenced the study.
CHAPTER II

REVIEW OF LITERATURE

Introduction

This chapter reviews literature that focuses on the following topics: trends in physical education curriculum, social responsibility, adventure education background and review of literature.

Physical Education

Physical Education has been a controversial topic in recent years. The term physical education has multiple meanings. Some people believe that physical education is associated with only play, a concept denoting little or no purpose and the lack of need for physical education specialists (Zmudy, 1999). To others, the term refers to militaristic skill-oriented activities used to train people for the military (Seaton, Schmottlach, Clayton, Leibee, & Messersmith, 1993). Yet others have associated physical education with competitive sports.

Buecher (1971) defined physical education as an integral part of the total education process, a field of endeavor that has as its aim the development of physically, mentally, emotionally, and socially fit citizens through the medium of physical activities that have been selected with a view to realizing these outcomes. The development of the whole person preparing them for lifetime activities is a common goal of physical education curriculums. There have been several thoughts as to what physical education should center its pedagogical content. First, the Greeks believed the holistic approach was the
best for their people. The Greeks believed that the mind, body and soul, are equally important in the development of a productive citizen. In the 1960s, the emphasis was on lifetime sports. The next wave in physical education shifted to fitness-oriented curriculums in the 1970s. The fitness oriented physical education classes focused on aerobic conditioning (Bunting, 1989). In July 1994, the office of the Surgeon General of the United States authorized the Center for Disease Control to serve as lead agency for preparing the first Surgeon General’s Report on Physical Activity and Health (U.S. Department of Health and Human Services, 1996). The primary purpose of the report was to summarize the literature on the role of physical activity in preventing disease. According to this research, the Surgeon General reported that regular activity improves health and greater health benefits can be achieved by increasing the amount of physical activity. These benefits will aid in the reduction of the following: premature death, heart disease, developing diabetes, developing high blood pressure, developing colon cancer, feelings of depression and anxiety, and being overweight. Other benefits cited were the maintenance of healthy bones, muscles, and joints, minimizing muscle atrophy in older adults, and promoting psychological well being (U.S. Department of Health and Human Services, 1996). After the report was released, the importance of physical activity was reborn.

Fitness concepts changed into wellness in the later 1990s. The primary focus of wellness was on the physical components of the individual (Bunting, 1989). Pangrazi (2001) defines wellness as the attainment of a special type of lifestyle driven by nurturing the body and avoiding substances that are destructive to a healthy body. Pangrazi believes that wellness is comprised of three parts: The knowledge that contributes to the
concepts of wellness, secondly the understanding of lifestyles, which contribute to and are destructive to wellness, the understanding that wellness is achieved through applying these concepts through every day life.

In 1995, NASPE (National Association for Sport and Physical Education) came out with a set of seven content standards to give schools an idea of the outcomes which they should strive to achieve for their students. The content standards specify, “What students should know and be able to do.” They include the knowledge and skills-the ways of thinking, communicating, reasoning, and investigating, and most important enduring ideas, concepts, issues, dilemmas, and information that characterize each discipline that the students are expected to learn (NASPE, 1991). NASPE took the content standards another step when they defined performance standards to specify “how good is good enough.” Each performance standard has a performance benchmark used to describe behavior that indicates progress toward a performance standard (NASPE, 1991).

In 300 B.C. Herophiles (considered the “Father of Anatomy”) stated: “When health is absent, wisdom cannot reveal itself, art cannot become manifest, strength cannot be exerted, wealth is useless, and reason is powerless” (AAPHERD, 1999). Although some things are the same today as they were long ago, many things have changed including instructional models and teaching methods. Today the newest trend in physical education is adventure education. Adventure education strives to achieve the NASPE standards but takes a different approach to attaining the seven standards.

Adventure Education Background

The first organized thoughts of adventure education started in the 1920s by Kurt Hahn but it wasn’t until the 1970s that schools and corporations bought into the concept.
Adventure education puts people in a unique situation and creates a sense of
disequilibrium. Adventure education teaches people about responsibility and decision-
making through movement (Project Adventure, 1989). In a school setting, most learning
is taught in a classroom. This is why most people choose adventure experiences that take
place in the outdoors. There are many activities that can be classified as an adventure
experience. Some of them include: mountain biking, wilderness hiking, rock climbing,
high and low element ropes courses, canoeing and kayaking. Technically speaking, any
experience that is unique to the group can be classified as an adventure experience. This
means that sewing could be an adventure experience if it is facilitated as one. Most
people think adventure takes place in the outdoors. This happens to be the case because
most learning in school settings takes place indoors. This could be why adventure
education carries some stipulations along with it. Society is now identifying the value of
adventure education as an educational tool instead of a way to have fun in the outdoors.

Adventure education creates a new environment for the students to stimulate more
interest within the group. Adventure education enables individuals to extend beyond
their self-imposed boundaries within a safe learning environment. Another term brought
to adventure education by project adventure is *challenge by choice.* This term simply
states that each person may choose to do any or all activities without being looked down
upon if s/he chooses not to participate in any one activity. Perceived freedom of choice is
another term, which is often used in the field of adventure education. This term indicates
that the person has the freedom to choose to participate or to end the activity at any time
(Ford and Blanchard, 1993).
Competition is de-emphasized in the realm of adventure-based learning since the groups work together to achieve a common goal. Adventure education stresses the importance of the whole being, mind, body and soul. This is achieved through a method called front end loading, which involves a base of knowledge given to the students by the facilitator. A facilitator is different than a teacher. A facilitator is a person who guides the group by setting parameters the group needs to follow. The facilitator does not tell the group directly what needs to be done, but gives them a general base of knowledge, which allows the group the ability to interpret the information and brainstorm for possible solutions. The facilitator also needs to allow the group to work together and experience the activity without interfering with the group's own progress by giving them detailed hints to ensure the success of the group. The facilitator's duty is to give the group the base of knowledge, which allows the group to work together to achieve the goal. It is also vital that the facilitator does not allow his/her goal to interfere with the goal of the group.

Front-end loading helps achieve a physically and emotionally safe environment by the parameters set by the facilitator. A physically and emotionally safe environment helps to relax the students and feel a sense of comfort within the group. This aids in the success of the group by breaking the boundaries set by the predisposed social dynamics of the group. Students are encouraged to cooperate and solve problems in a group setting in order to achieve the goal of the group. It also teaches the value of every person not just the "good athletes" in the group. Adventure education helps groups realize the importance of working together and communicating with verbal and nonverbal actions. This helps the students see the connection between perseverance, commitment, effort,
success, as well as procrastination, laziness, ambiguity and failure. Adventure education also has the ability to relate all the experiences to problems students will encounter in their lives. At the end of each experience the students reflect on the day’s activities with a series of open-ended questions to encourage group discussion and reflection. This is also called “debriefing” and is done at the end of every experience whether it was successful or not. Debriefing is the most integral component of adventure education (Gass, 1993). Participants have a tendency to overlook or ignore experiences without a facilitation method. Without debriefing, a dynamite experience is simply an outstanding recreational activity (Rohnke, 1989). By reflecting on the experience, the students are able to interpret the results and apply the knowledge gained for a similar real life experience in the future. Another concept that adventure education helps students to realize is that it is acceptable to fail. Not every problem in life can be solved. If it was that easy we would have a perfect world, crime would be eliminated and hunger would vanish. What adventure education teaches students, the necessary tools to help them break down and analyze each problem in order to solve it. It is a way to train the brain to use deductive reasoning to break down the problem at hand and brainstorm for possible solutions. Then analyze each solution to determine which solution will work best and finally decide if the solution solved the problem within the parameters set by the facilitator. Students are able to take the formula for problem solving and apply it to every problem they face whether it is in school, business or in every day life. Every experience in adventure education can be transferred to other aspects of life, which helps facilitate life-long learning, physically, mentally, and emotionally.
Adventure Education Review of Literature

Adventure education encourages and facilitates the development of specific life skills for children in an innovative and engaging way (Moote and Wodarski, 2001). The goal of adventure education is to gather students together and teach them how to grow, not only physically but also mentally. "The Greeks had it right all along. We are individuals comprised of three interdependent entities: our physical selves, our spiritual selves, and our intellectual selves." The defining characteristic of adventure education is that a conscious and overt goal of adventure is to expand the self, to learn and progress toward the realization of human potential (Miles & Priest, 1990). To truly be ourselves, we must nourish all three recognizing their interdependency. Adventure education is one method that can relate simultaneously to all three dimensions (Bunting, 1989). The emphasis in adventure education is placed on cooperation rather than competition (Bunting, 1989).

Attarian (1996) states that outdoor experiences offer us a chance to explore and shape our values, attitudes, and behaviors towards the environment and ourselves. These situations require teamwork and communication within the group. Experiential education philosophically and educationally provides a perspective that is in line with many educational reform initiatives. Adventure education emphasizes activity, cooperation, challenge, risk, and problem solving. Adventure education is highly effective in developing team and group skills in both students and adults (Stevens and Richards, 1992). Adventure education immerses students in activity-based exercise, which creates
a unique atmosphere. Most adventure education programs put students in novel tasks where everyone is in an uncomfortable situation. Then the students work through the situation together to solve the problem. The teacher guides the students but does not give them the solution to the problem (Rohnke, 1989). The students are active learners and learn through the experience. This method of teaching challenges students to become active participants, as they become leaders in the classroom and in the community (Yerkes and Haras, 1997). Project Adventure (1989), a leading organization for the development of adventure activities and ropes course programs stated, “the aim of many activities is to allow the students to view themselves as increasingly capable and competent.” The students learn to listen to others’ opinions and ideas and accept other as peers. Students also learn to reflect upon their experiences, thus developing new skills, new attitudes, and new theories or ways of thinking (Stevens and Richards p. 3, 1992).

“Learning is thinking about an experience” (Kielsmeier p. 5, 1988). Since adventure education encourages reflection upon completion of the activity, it is a very productive way to learn. This approach can be utilized in a number of situations across academic curriculums. The ability to transfer knowledge from science, math, and other core educational subjects makes the adventure education model a great way to help students understand the importance of all the subjects taught in school. Not only does the adventure education model help integrate subject matter, but Lappin (1984) states that there was a significant increase in self-concept, social adjustment and academic achievement.

Scholastic knowledge “seems strictly” bound to school settings, while outdoor education fosters “connected knowing, where education is part of, rather than separate
from life. Unlike classroom learning, outdoor education uses the students’ whole environment as a source of knowledge. The community, rather than the classroom, is the context of learning” (Gardner p. 117, 1991). Gardner also found that adventure education encompasses the use of the outdoor environment, whether natural or man made, to promote learning from experience and enrichment of nearly any subject in the curriculum. Adventure education programs stimulate the development of interpersonal competencies, enhance leadership skills, and have positive effects on adolescents’ sense of empowerment, self-control, independence, self-understanding, assertiveness, and decision-making skills (Hattie, Marsh, Neill & Richards, 1997).

With the increase for teacher accountability in today’s schools, NASPE introduced its benchmarks as a way for schools to identify what outcomes schools should be working towards. These benchmarks identified that eighth grade students shall explore introductory outdoor pursuit skills (e.g., backpacking, rock climbing, hiking, canoeing, cycling, indoor and outdoor ropes courses (NASPE, 1991). Adventure also involves all three domains, especially the affective domain! Adventure education encompasses all seven standards and really focuses on the personal and social behaviors. Sutliff and Taylor (2001) reconfirmed this notion by stating that adventure activities can help students learn how to express themselves effectively, interact socially, and work together on personal and group challenges. The atmosphere of adventure activities demonstrates physical and emotional opportunities for success each and every time. Adventure activities don’t guarantee success but allow students to reflect on their experiences and grow from each experience. It teaches students the importance of each person and helps each person relate to others in the group. The primary goal of adventure
activities is to learn about the self and the world around you (Miles & Priest, 1990). Adventure activities identify individual and group intrapersonal or interpersonal strengths and weaknesses and from this awareness, promote positive personal growth. Some interpersonal issues include self-concept and self-confidence; encompass social skills, communication, trust, problem solving, conflict resolution, cooperation, competition, leadership and follower ship (Hammersley, 1992). In order to have high self-esteem, students need to respect and celebrate personal uniqueness (Halliday, 1999). Halliday also states as students begin to cooperate to achieve common goals, they can learn to view individual differences as strengths rather than as threats.

*Challenge by choice*® is a philosophy used in challenge activities and can be especially effective in building feelings of competence (Rohnke, 1989). It is important to allow students to choose their own level of risk. Choosing, in itself, is a success experience, in that students make a conscious decision to overcome their natural reluctance to try an intimidating task (Halliday, 1999). Lambert (1987) states, allowing students to make choices encourage self-management, and prepares them for a lifetime of self-directed activity. He also states that building a gradual foundation of responsibility by modeling positive behaviors and the creation of choice in learning environments will set up students for success and enhance their potential for long-term activity pursuit.

It is important to have a variety of activities at various levels of risk to help every student shine and achieve another rung on the ladder of perceived competence. It is also vital to make note of the small accomplishments for each student to help boost his/her confidence allowing him/her to set and achieve new goals. Adventure activities really focus on creating a physically and emotionally safe environment for the group. This
sense of safety and comfort within the group will allow each student the ability to accept their own weaknesses and limitations and also thrive at the chance to demonstrate their strengths. Freedom to fail within an emotionally safe environment is one of the keys to helping students learn that it is okay to display incompetence and to have weaknesses and limitations. When students are in an environment in which there is freedom to fail, they are much more likely to try new and challenging activities (Halliday, 1999). It is vital to give students the chance to reflect on the activity to help them understand and apply what they are learning to other situations and settings in their daily lives (Luckner, 1989). If a student does not reflect on the activity, it becomes nothing more than a simple recreation game played during school time. When a student is given the opportunity to reflect on the activity and relate it to a personal experience or a similar situation they have gone through, it helps foster physical and emotional growth. Every activity can be utilized as an opportunity to stimulate and encourage student growth. If the student reaches a level of comfort and confidence upon reflecting about his/her experiences, it will help that person continue to reflect for a lifetime of learning and activity.

Social Responsibility Review of Literature

Self-esteem is an important part of a person’s identity. It literally refers to the esteem that one holds toward oneself, that is a person’s overall judgment of the self (Briggs, 1975). Rosenberg (1965) states that a high self-esteem indicates a personal sense of self-respect and self worth, whereas a low self-esteem implies self-rejection, self-dissatisfaction, and self-contempt.

Adolescence is a critical time, which molds individuals’ perceptions and thoughts about themselves for the rest of their lives. Children with a higher self-esteem have been
found to have fewer emotional problems such as anxiety and depression (Weiten & Llyod, 1994). Weiten states that people with high self-esteem are more likely to develop adaptive coping strategies to deal with issues that arise in life. During adolescence, some children feel a sense of helplessness, a feeling that dictates how they act towards other people. These feelings of helplessness often permeate the rest of their lives, reducing their ability to deal with setbacks and limiting optimism and hope for a bright future (Martinek & Hellison, 1997). High self-esteem has also been linked to less delinquent behaviors and are less at-risk for suicide attempts. They have more appropriate approaches and interactions with peers and are less apt to lie to one another. The development of a high self-esteem among children and adolescents is important because it influences how the child makes decisions (Nassar-McMillan, & Cashwell, 1997). If children feel self-conscious, afraid of failure, or unable to contribute to group success, they will be reluctant to engage in challenging activities and more apt to participate in the all-too-common practice of ridiculing their peers (Sutliff & Taylor, 2001).

Cason & Gillis (1994) conducted a meta-analysis of 43 programs, which provided evidence of adventure therapy effectiveness. They concluded that participants became more internal in their locus of control, received better grades, and had more positive self-concepts after completion of adventure therapy programs.

Many characteristics have been associated with locus of control. Internally oriented individuals have been described as having a tendency toward self-regulation (Liverant & Scodel, 1960). Internals describe themselves as being assertive, achieving, powerful, independent, effective, and industrious (Luckner & Nadler, 1997). Brissett and Nowicki (1973) similarly found that people with internal locus of control are able to
overcome obstacles and are able to develop constructive responses to frustration. Individuals who possess external control orientation have been described as being self-pitying and unable to cope with the reality of a situation (Phares, 1968). They express aspirations incompatible with their abilities (Ducette & Wolk, 1972). Hountras and Scharfe (1970) have characterized externally oriented individuals as inhibited, wary, resentful, self-centered, confused, and lacking self-direction and self-discipline. In addition, they have been described as low in self-confidence and in expectations for success (Rotter, 1966).

Project Adventure defines its goal to increase participants' sense of self-confidence, increase mutual support within a group, develop a higher level of agility and physical coordination, increase pleasure in one's physical self and in being with others, and increase familiarity and identification with the natural world (Rohnke, 1989). These goals are common in programs of similar nature. Not only do these experiences through the programs create a positive atmosphere of learning about the world, they prepare each person for adult civic responsibility (Boss, 1999). The study also found that low participation in civic life often occurs because citizens feel powerless to bring about changes. Programs that promote civic responsibility have found that students respond effectively to problems by providing opportunities for them to apply their knowledge in real-life situations (Boss, 1999). Not only do adventure programs give each student the knowledge base to make a difference, but also by relating every experience to a real-life situation it helps to generate interest and the want to make a difference in the environment and in their daily lives. It gives each person the sense of control in life instead of a feeling of helplessness and frustration. The Center for Civic Education
(1994) found that students who participate directly with the democratic process feel more politically effective than most adults. Similarly, a study conducted on a group of seventh graders found that when given information about environmental issues and a chance to work through environmental action skills, the student’s environmental behavior changed significantly while the control group which received the usual scientific instruction did not report such changes (Ramsey & Hungerford, 1989).

What people think, believe and feel affects how they behave (Bandura, 1999). Bandura also states that people who hold a low view of themselves will credit their achievements to external factors rather than credit their own capabilities. Success and failure are largely self defined in terms of personal standards and ironically, it is the talented who have high aspirations, which are possible but exceedingly difficult to realize, who are especially vulnerable to self-dissatisfaction despite notable achievements (Bandura, 1999). Pajares (1996) found that people with low self-esteem could foster stress, depression, and a narrow vision of how best to solve a problem.

Don Hellison has identified “levels of responsibility” to help students increase their awareness and make them accountable for their decisions inside and outside of the classroom. Hellison identified an instructional model, which values similar attributes as adventure education. The TPSR or Teaching Personal and Social Responsibility model focuses on the well being of the child by emphasizing effort, self-direction, respect, and caring. Implementation of the model involves providing awareness and reflection strategies and opportunities for taking responsibility (Hellison, 1995). The concept of the levels is similar to the adventure model, because it requires students to take responsibility for their actions as well as to make conscious decisions increasing accountability. The
reflection process, or debriefing as the adventure model calls it, allows students to think about and react to every decision they make and helps them relate it to the situations life presents. Each student evaluates himself/herself daily, allowing for reflection throughout the class. The adventure model does not necessarily give the students the opportunity to numerically evaluate themselves, but it allows them to reflect daily on their experiences at the culmination of the activity through a series of questions presented by the facilitator. Past studies have shown that adventure experiences have increased self-esteem, and the TPSR is another method of teaching that allows the students to reflect in a similar fashion, thus aiding in the increase of student responsibility and self-esteem.
CHAPTER III

METHODS AND PROCEDURES

Introduction

This chapter includes procedures, followed by subject selection and recruitment, the informed consent procedures, the administration of the testing, the description, the analysis, protocol used when administering an evaluation, and an overview of the class content for the control and the treatment groups.

The primary purpose of this study was to examine the effects of an adventure education unit versus a traditional sport unit on self-esteem in middle school boys and girls in selected parochial school. The secondary purpose of this study was to examine the relationship between social responsibility and self-esteem in middle school boys and girls in a selected parochial school. Fifty-three students from St. Mary’s School in Caledonia, Minnesota participated in the study. The groups were randomly selected and divided into control and treatment groups. The facilitator is the same for both groups to eliminate variation. The control group participated in a floor hockey unit. The treatment group participated in a variety of adventure activities including cooperative games, trust and communication activities.

Methods

Subject Selection

The subjects were enrolled in the seventh and eighth grades at St. Mary’s School. The study took place during the spring of 2001. There were a total of 53 subjects that
participated in the study with N = 27 for the treatment group and N = 26 for the control group. The subjects in each group were randomly selected. Each group was placed in the treatment or control group by flipping a coin. Each class list was pre-selected by its academic classroom teacher. The class list rotates quarterly to ensure interaction between all students.

Recruitment

The students were informed of the study and every subject had a parental consent form signed and filed before participating in the study. Each student was also informed that it was not necessary to participate in the study and they would not be penalized for leaving the study at any point.

Consent Form

Each parent/guardian was informed of the study via a letter sent to them. The letter outlined the study and its purpose. The parents were informed of the class content and the risks involved. The parent/guardian was also ensured subject confidentiality. The subjects were assigned a coded number to identify their data (see Appendix A).

Treatment Group

Each group was informed of the details of the study by the researcher. The treatment group participated in six of the seven stages of adventure education throughout the five-week, ten-class period unit. The first stage includes name games, and was eliminated as all subjects previously knew each other. At the beginning of the unit, the subjects participated in two days of new games and icebreakers. Then the subjects entered the third and fourth stages of adventure education: problem solving and communication. During this section of the study, the subjects participated in group
activities to accomplish a common goal. Various activities within this segment also incorporated the sixth stage of adventure education: low elements. After three days of problem solving and communication, the subjects participated in trust activities. These activities encouraged students to build trust by providing individuals an opportunity to work with each member of the group (see Appendix B). For the last experience, the treatment group was taken to the outdoor ropes course at UW-La Crosse. This incorporated the seventh and final stage of adventure education: high elements. The control group was also given the opportunity to participate at the UW-La Crosse outdoor ropes course.

Each group performed a pretest and posttest self-evaluation during the study. At the beginning of the study, the students participated in a ten-question self-esteem questionnaire. At the end of the study the students answered the same ten-question self-esteem questionnaire (see Appendix C). The data was collected and analyzed appropriately. The subjects also graded themselves daily on their perceived level of social responsibility. The daily scores were logged and kept confidential by the researcher (see Appendices D and E). Each day the subjects gave themselves a performance grade between 0 (lowest) and 4 (highest). Each number is associated with a set of criteria, which the subjects followed to determine the grade they received on a daily basis.

**Control Group**

The control group participated in a five-week, ten-class period floor hockey unit. The unit focused on cooperation, communication, and the basic skills needed to be competent floor hockey players. Each student was taught how to hold the stick correctly,
pass to a moving target, form strategies within the group, learn basic positions, and follow the rules of the game. At the beginning of the five-week unit, the focus was skill-based. The subjects worked specifically on stick handling and passing, both to stationary and moving targets. Next, the subjects were taught the forehand and backhand shots. When the subjects demonstrated proper form and knowledge of the skills, they participated in a game of sideline hockey. The next two class periods were spent learning the positions and playing a full game of floor hockey. The subjects then had a passing tournament that focused on the speed and direction of the puck. During the last three periods of the unit, subjects engaged in game play, refining their hockey skills and forming strategies in game play situations (see Appendix F).

Each group performed a pretest and posttest self-evaluation during the study. At the beginning of the study, the students participated in a ten-question self-esteem questionnaire. At the end of the study the students answered the same ten-question self-esteem questionnaire (see Appendix C). The data was collected and analyzed appropriately. The subjects also graded themselves daily on their perceived level of social responsibility. The daily scores were logged and kept confidential by the researcher (see Appendices G and H). Each day the subjects gave themselves a performance grade between 0 (lowest) and 4 (highest). Each number is associated with a set of criteria, which the subjects followed to determine the grade they received on a daily basis.
Instruction

A certified physical education teacher taught the control and the treatment groups to eliminate variation. Each group was taught in the proper progressions for their respected activities.

Instrumentation

Each subject was given a ten-question self-evaluation of self-acceptance and self-worth statements. This is a modified version of the 40-point Rosenberg self-esteem test. A four point Likert Scale was used to record the subjects' responses to the questions. A mean score was calculated with a range of 10 (low) to 40 (high) per question (Rosenberg 1965).

Hellison's levels of responsibility were also utilized in the study. The subjects graded themselves on a daily basis. A zero consisted of (irresponsible) behaviors such as talking out of turn and demonstrating lack of respect for other individuals in the class. Level one (self-control) consisted of behaviors such as a low level of participation and lack of motivation. Level two (involvement) behaviors meant that they demonstrated self-control, but also demonstrated a high level of participation during the class. Level three (self-responsible) behaviors included participating at a high level but also demonstrating good decision-making skills throughout the class, and holding oneself accountable for one's actions. Level four (caring) behaviors include level three's criteria as well as demonstrating the ability to help others in the class feel welcome. Level four behaviors also include complimenting others during class and demonstrating a high level of compassion for others in the class.
Data Collection

Each subject was assigned a number in chronological order according to the subject's first letter of their last name. The number was recorded at the top of the ten-question questionnaire they received at the beginning of the unit. All information was kept confidential by the researcher. After the completion of the survey, the students handed the survey to the instructor to be filed until the posttest survey was given at the end of the unit. After completion of the pretest survey, the students participated in a five-week unit in their respected activity. At the end of the units, each person filled out the same ten-question survey. The instructor went through the same procedures by assigning the students the same number from the pretest survey and collecting them when the students finished.

Data Analysis

Descriptive statistics were computed for the control and treatment groups. Mean and standard deviations were computed for each group to determine the effects on self-esteem. Independent samples t-tests were computed to look at the difference between the control and treatment groups. Analysis of covariance was used to measure the pretest and posttest scores of each group. A Pearson Product Moment-Correlation Coefficient test was performed to determine the relationship between levels of self-esteem and levels of responsibility.
CHAPTER IV
RESULTS AND DISCUSSION

Introduction

This chapter presents a description of the subjects pre-post self-esteem questionnaire results. This chapter also presents the relationships of Hellison's levels of social responsibility to the self-esteem questionnaire. The data obtained from the 53 subjects included: (a) pretest self-esteem questionnaire, (b) posttest self-esteem questionnaire, and (c) daily social responsibility scores.

Two research hypotheses were tested in the study, which were formed from a review of related literature. The following null hypotheses were tested in the study:

1. There will be no significant difference in self-esteem between the adventure and the traditional sport unit.

2. There will be no significant correlation between the students' level of responsibility and self-esteem as a result from participating in either the adventure unit or the traditional sport unit.

The treatment group consisted of 27 students ages 12-13. The control group consisted of 26 students of the same age group.

Pre-post Self-esteem Scores

To test the subjects' change in self-esteem over the length of the study the subjects were given a ten-question self-esteem questionnaire at the beginning of the first class. On the last day of class, the students took the same ten-question self-esteem
survey. The group means and standard deviations for the pre-post self-esteem scores are presented in Table 1. The table shows the control group started with a slightly lower mean, but yielded a slightly higher posttest score. An independent samples t-test was used to assess the initial pretest difference between the groups. The test yielded no significant difference $t = -1.720$, degrees of freedom $= 51$, $p$ value $=.091$.

Table 1. Pre-Post Self-Esteem Score Means and Standard Deviations

<table>
<thead>
<tr>
<th>Group</th>
<th>Pretest Mean</th>
<th>Pretest SD</th>
<th>Posttest Mean</th>
<th>Posttest SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>29.4</td>
<td>4.3</td>
<td>31.8</td>
<td>4.6</td>
</tr>
<tr>
<td>Experimental</td>
<td>31.5</td>
<td>4.4</td>
<td>32.4</td>
<td>4.4</td>
</tr>
</tbody>
</table>

A one-way ANCOVA test was administered to determine between group differences on the posttest self-esteem questionnaires. The ANCOVA test yielded a $p$-value $=.15$ at alpha $=.05$ which yielded no significant difference between the treatment and control groups. The results are presented in table 2.

Table 2. ANCOVA Results for the Change in Self-Esteem in the Treatment and Control Group

<table>
<thead>
<tr>
<th>F</th>
<th>df</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.154</td>
<td>1, 53</td>
<td>.148</td>
</tr>
</tbody>
</table>

A Pearson Product Moment-Correlation Coefficient Test was used to determine if there was a relationship between Hellison's levels of responsibility and self-esteem. The pretest scores were subtracted from the posttest scores. The change in score was then
used in the Pearson Product Moment-Correlation Coefficient Test to determine the relationship between Hellison’s levels of social responsibility scores and self-esteem scores. The test was administered for both the treatment and control groups. The treatment group $r = .789$ and control group $r = .534$ yielded no significant results. There was no significant correlation between self-esteem and levels of social responsibility.

**Discussion**

The pretest analysis, an independent samples t-test indicated, no initial difference between groups ($p = .091$). Similarly, the posttest yielded the same results. An ANCOVA test was administered and found ($p = .148$) no significant difference between groups from the pretest to the posttest ($F = 2.154$). Therefore, the researcher failed to reject the null hypothesis. The adventure education unit had no significant effect on self-esteem in middle school students, nor did the traditional sports unit.

A Pearson Product Moment-Correlation Coefficient Test was used to test the second hypothesis. The second hypothesis was to determine the relationship between self-esteem and Hellison’s levels of social responsibility. There was no significant relationship found between self-esteem and the students’ levels of responsibility between groups. The change in score from the pretest to posttest was taken along with the raw scores for the levels of responsibility for the treatment and control groups. This yielded $r = .789$ for the treatment group and $r = .534$ for the control group. There was no significant correlation found in either test. There was a positive trend in the treatment group that seemed to increase self-esteem, but it was not statistically significant.

The results in this study are in line with past research. The researcher observed some traits that were found by similar studies. Bunting in 1989 stated that the emphasis
is placed on cooperation instead of competition. She also found that adventure education helps increase problem solving skills and cooperation within a group setting. The researcher is in agreement with Bunting. The treatment group definitely worked together to solve each problem. When observing the treatment group it seemed that the absence of competition had a very positive impact on the group’s dynamics. Similarly, Stevens & Richards (1992) found that adventure education is highly effective in developing team and group skills in students and adults. The researcher also noticed an increase in the level of trust in the treatment group. Similarly, Hammersley (1992) found that adventure education helps students identify individual strengths and weaknesses and promotes the understanding and acceptance of them within the group. Hammersley also found that this helps foster trust in the group increasing conflict resolution, cooperation and leadership. As a result of competition being downplayed in the adventure education unit, there were more opportunities for a variety of individuals to give valid input to aid the group in accomplishing the goal.

Bandura (1999) stated that what people think, believe, and feel affects how they behave. This is very similar with the observations made during the study by the researcher. A couple of the subjects made a very noticeable improvement in behavior and attitude when the trust activities were introduced. The subjects were observed taking responsibility for their actions as the unit progressed. This was in conjunction with the research that Hellison has done on the levels of responsibility. Hellison believes that the Teaching Personal and Social Responsibility model (TPSR) works hand-in-hand with the adventure model (Hellison, 1995). When students can reflect on the experience afterward, it allows students to interpret what happened, learn from the experience, and
with others. This helps students relate the experience to other life experiences that they have had in the past. The researcher also observed similar results. The subjects who thought about the experience after its completion seemed to gain more from the experience as a whole.

Despite the results of the study, the researcher agrees with the past research. Past studies have shown to increase levels of self-esteem. In the researcher’s opinion, there were various reasons why the study yielded such results. One reason was the lack of diversity within the groups. The two groups used in the study were from a very small town. The subjects have grown up together from a very young age. All of the subjects have had a chance to develop rapport and work out any personality conflicts within the group throughout the years. Such a homogenous population with limited subjects is bound to yield different results as compared to a much larger and more diverse population. Another aspect, which could have affected the result of the study, was the length of the units. During the second half of the study, the seventh grade subjects only had physical education once a week for thirty minutes. This increased the length of the unit an extra month. The researcher observed some loss of interest in various students due to the length of the unit and time of the school year (late spring).

Despite the results, the researcher believes that adventure education has a positive effect on student behaviors and helps increase student accountability. The researcher also believes that adventure education has the potential to increase self-esteem and helps create an emotionally safe environment where students can express their opinions freely.
Summary

The primary hypothesis tested in this study stated that there would be no significant difference in self-esteem between the adventure and the traditional group. The results of the questionnaire revealed no significant difference in self-esteem between the treatment and control groups. Both units yielded positive outcomes, but neither were statistically significant. The results failed to reject the null hypothesis.

The secondary hypothesis tested in this study stated there would be no significant correlation between Hellison's levels of responsibility and self-esteem as a result of participating in either the control or treatment group. Results failed to reject the null hypothesis. There was not a significant correlation between the levels of responsibility and self-esteem.

Conclusion

The results found no significant difference between the adventure group versus the control group. Since the results of the pretest yielded all subjects having high levels of responsibility, it was unclear as to what the correlation was between the subjects' levels of responsibility and self-esteem.

The researcher believes the homogeneous nature of the population, along with the small school atmosphere, may have played a role in the outcome of the study. This conclusion is based on the fact that all subjects have grown up together in the same class and school for a number of years.
CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The primary purpose of this study was to examine the effects of an adventure education unit versus a traditional sports unit on self-esteem in middle school boys and girls. The secondary purpose of the study was to examine the relationship between social responsibility and self-esteem in middle school boys and girls. Fifty-three subjects from St. Mary’s school participated in the study. The subjects were derived from two classes at St. Mary’s school. The seventh and eighth grades are split into two sections each. Half of each class was placed into the control group to participate in the floor hockey unit. The other half of the seventh and eighth grade classes were placed in the adventure education unit where they participated in the seven stages of adventure. Each class met a total of 10 times for approximately 45-minutes each class.¹

All subjects participated in pre- and posttesting during which they completed a 10-question self-esteem survey that consisted of self-worth statements. A 4-point Likert scale was used to determine each subject’s raw score. The scores were then statistically analyzed using a t-test to determine if increases in self-esteem were a result of participating in an adventure education unit.

The t-test that compared the pretest score to the posttest score indicated there was no significant difference between the control and treatment groups (p = .091).
A one-way ANCOVA test was administered to determine difference between groups on the posttest self-esteem scores. The test yielded no significant difference between the control and treatment groups ($F = 2.154$).

A Pearson Product Moment-Correlation Coefficient Test revealed no significant correlation between the levels of responsibility and self-esteem scores. The treatment group yielded an $r$-value of .789 while the control group yielded an $r$-value of .534.

The researcher believes that given a more diverse population this test would yield a significant correlation concluding that there is a highly positive correlation between self-esteem and levels of responsibility.

**Conclusions**

Based on the results of the study, the following null hypotheses failed to be rejected:

1. There will be no significant differences in self-esteem between the adventure and the traditional sports unit.
2. There will be no significant correlation between the students’ level of responsibility and self-esteem as a result of participating in either the control or treatment group.

**Recommendations**

1. Conduct a study with a more diverse population.
2. Conduct a similar study with a group where all members have been identified as having low self-esteem.
3. Repeat the study with a larger sample size in a larger school.
4. Conduct a study where all of the adventure subjects are able to attend the ropes course before the posttest self-esteem survey is given to the subjects.
REFERENCES


Center for Civic Education. (1994). We the people...Program validated by educational researchers. Calabasas, CA: Center for Civic Education.


APPENDIX A

INFORMED CONSENT FORM
THE EFFECTS OF AN ADVENTURE EDUCATION UNIT ON SELF ESTEEM IN MIDDLE SCHOOL BOYS AND GIRLS

Parent /Guardian Consent Form

I have been informed that my son/daughter will be participating in a research study that will compare the possible effects of two different Physical Education curriculums on my child’s feelings of self-esteem. I have been informed that my child’s participation in the five-week study may include adventure games or other traditional sport activities. I have been informed that my child will be requested to complete a ten-question survey, which will measure his or her perceived self-esteem in the beginning and at the end of the study. Completion of the questionnaire is the only additional activity your child will be requested to participate.

I have been informed that participation in this study will require no additional time outside of the regular Physical Education class. I have been informed that there are no additional risks to my child other than the risks involved in a normal Physical Education class.

To my knowledge, my child is in good health and has no physical limitations or conditions that would put my child at risk. I consent to the publication of the research study as long as the information remains confidential so that no personal identification can be made after the research is completed. I have been informed that the investigator will answer any questions I have. I have been informed that my child may withdraw from the study at any time without fear of prejudice or penalty.

Concerns about the study may be referred to the principal researcher Bret Nielsen at (608) 785-7168 and thesis advisor Dr. Jeff Steffen at (608) 785-6535. Questions regarding the protection of human subjects may be addressed to Dr. Dan Duquette, University of Wisconsin-La Crosse Institutional Review Board (IRB) for the Protection of Human Subjects at (608) 785-8161.

Please sign both copies, keep one for your files and please return the second form for school records. Thank you for your cooperation.

Investigator or Researcher Date Participant Parent or Guardian Date

I have been informed about this project and I agree to be a participant.

Student (Assent) Date
APPENDIX B

ADVENTURE CURRICULUM
<table>
<thead>
<tr>
<th>Performance Objectives</th>
<th>LX's</th>
<th>Time</th>
<th>Organization</th>
<th>Cues</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSWBAT cooperate in small group settings by listening to others opinions and working together to achieve a goal.</td>
<td>1. Full Value contract</td>
<td>Time will vary for each activity depending upon the interest level of the students per activity</td>
<td>1. Physically and emotionally safe environment.</td>
<td></td>
</tr>
<tr>
<td>TSWBAT work in large group settings in order to achieve a common goal.</td>
<td>2. Full body stretch</td>
<td></td>
<td>2. Start with the eyebrows, eyes lids, neck, shoulders...</td>
<td></td>
</tr>
<tr>
<td>TSWBAT participate in a variety of games to learn the value of cooperation.</td>
<td>3. Honey I love you.</td>
<td></td>
<td>3. Stand in a line and pick a person to start the game, say honey I love you will you smile for me? Then the person responds by Honey I love you but I can’t smile for you.</td>
<td></td>
</tr>
<tr>
<td>TSWBAT learn the importance of communication throughout the unit by participating in daily activities.</td>
<td>4. Giant jump rope.</td>
<td></td>
<td>4. Groups of 2, 4, 6, 8. Let’s see if we can get the whole class as one group.</td>
<td></td>
</tr>
<tr>
<td>TSWBAT understand that adventure education is experiential based learning, which puts the student in unique situations and helps them take responsibility for their actions.</td>
<td>5. Snort.</td>
<td></td>
<td>5. Pass it to one person on either side of you. Try to make them smile if they do they are out.</td>
<td></td>
</tr>
<tr>
<td>TSWBAT define communication as the ability for people to share their viewpoints, to learn from the experiences of others, and to foster an environment where people can talk openly and freely about their feelings.</td>
<td>6. Needle and thread tag.</td>
<td></td>
<td>6. One has it and every time they pass through the circle of people they join hands creating a barrier eventually eliminate possible routes.</td>
<td></td>
</tr>
<tr>
<td>TSWBAT cooperate with others focusing on working and playing together to achieve a common goal.</td>
<td>7. Killer</td>
<td></td>
<td>7. One person is the killer and they attempt to kill everyone by showing them a hand signal without letting everyone else know who is the killer.</td>
<td></td>
</tr>
<tr>
<td>Performance Objectives</td>
<td>LX's</td>
<td>Time</td>
<td>Organization</td>
<td>Cues</td>
</tr>
<tr>
<td>------------------------</td>
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<td>------</td>
</tr>
<tr>
<td>Continuation of lesson #1 goals.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Human treasure hunt</td>
<td></td>
<td>Time will vary for each activity depending upon the interest level of the students</td>
<td>1. Find a person in the class who has done each statement on the sheet.</td>
<td></td>
</tr>
<tr>
<td>2. Blob tag</td>
<td></td>
<td></td>
<td></td>
<td>2. Two people have it and every time &quot;it&quot; tags someone they join hands and work together to grow as big as they can.</td>
</tr>
<tr>
<td>3. Monarchy</td>
<td></td>
<td></td>
<td></td>
<td>3. One person starts with the ball and can run with it until they get someone else, then they work together to get the rest of the class.</td>
</tr>
<tr>
<td>4. Giants wizards and elves</td>
<td></td>
<td></td>
<td></td>
<td>4. Giants crush the wizards, wizards cast spells on the elves and elves trip the giants.</td>
</tr>
<tr>
<td>5. Commonalities</td>
<td></td>
<td></td>
<td></td>
<td>5. Stand in a circle and if you are in the middle of the circle state something you have done or know only one other person has done then those people switch spots as fast as they can. The person without a spot then they are in the middle.</td>
</tr>
</tbody>
</table>
1. Squeeze the person's hand to send the impulse to the next person. The last person picks up the object at the end. This is a timed event.
2. Line up in a shape of your choice. Remember your spot because I am going to find a new spot and you have to make the same shape exactly the way the original was.
3. Make a shape with the rope with a large group.
4. With a partner get two blindfolds and find an animal sound that you will use to find your partner.
5. Sit in a circle. I will pass two objects around the circle. One is a rosy red rotunda ring and the other is a gorgeous green grotto grinder. I will pass the object to you and you say "a what." Then I will say the name of the object again and the pattern continues for both objects.
## Performance Objectives

- **TSWBAT define problem solving as the ability to think through break down, analyze and solve a given situation.**
- **TSWBAT solve problems in a group setting by demonstrating the ability to break down the problem and brainstorm for possible solutions.** Then performing the solutions discussed. (Recipe for problem solving)

## Cues

1. Slip the rope cuff over both hands of your partner. Then place one cuff on your hand and the other loose end between your partner’s two hands cuffed together. Then attempt to get the ropes untangled without taking them off your hands.

2. Try to balance all of the nails on the single nail at once.

3. Find a way to get across the shore using the planks provided. You cannot cross the planks if they are touching the ground. Everyone needs to cross to the other side.

4. Find a way to get all people on the platform at once without touching the floor.

5. Find a way to suspend the ball on the blocks using the four planks given.

---

### Time

- Time will vary for each activity depending upon the level of interest of the students.
<table>
<thead>
<tr>
<th>Performance Objectives</th>
<th>LX's</th>
<th>Time</th>
<th>Organization</th>
<th>Cues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tell what understand individual differences among group members and be willing to accept them as a member of the group.</td>
<td>1. Electric fence</td>
<td>Time will vary depending upon the level of interest of the students.</td>
<td>1. Take a group of people from one side of the fence to the other. Work together to get everyone over to the other side.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. River Crossing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Traffic jam</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Stepping Stones</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Same objectives as the previous lessons regarding problem solving.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance Objectives</td>
<td>LX's</td>
<td>Time</td>
<td>Organization</td>
<td>Cues</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>--------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Same as lesson five</td>
<td></td>
<td>Time will vary</td>
<td></td>
<td>1. The goal is to get each person through a certain hole in the web.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>for each activity depending upon the level of interest of the students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Spider web.</td>
<td></td>
<td></td>
<td></td>
<td>2. Transfer the marble through the pipeline from point A to point B.</td>
</tr>
<tr>
<td>2. Pipeline</td>
<td></td>
<td></td>
<td></td>
<td>3. Try to get all the arms untangled to form a circle.</td>
</tr>
<tr>
<td>3. Human knot</td>
<td></td>
<td></td>
<td></td>
<td>4. Try to get each person to touch the can at the same time without touching another person.</td>
</tr>
<tr>
<td>Performance Objectives</td>
<td>LV's</td>
<td>Time</td>
<td>Organization</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>------</td>
<td>------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td>TSWBAT define trust as a firm belief in the honesty and reliability of another.</td>
<td>1. Spotting technique</td>
<td>Time will vary for each activity. Make sure the students are ready for the next stage of trust before you move on to ensure an emotionally and physically safe environment</td>
<td>Trust is a fragile thing. It is hard to get and easy to break. Everyone here wants to be a trustworthy person, someone others can rely on for help. 1. Place hands up and brace your self by creating a staggered stance. Put slight pressure on their back to start so they know you are there. The person falling needs to be as stiff as a board. Gradually increasing the distance of the fall. 2. Ready spotters, spotters ready, falling, fall away. 3. Spot each other. Make sure they use the contract. 4. Get into a group of three. 5. Join two more groups and form a tight circle. Then go through the contract within the group. Let the person falling rotate all the way around the circle. 5. Start the person on the ground and have him/her shut their eyes. Then on a silent count the person is brought off the ground and moved back and forth. Then the group sets the person back on the ground. The goal is to disorient the person so s/he feels like they are suspended in the air.</td>
<td></td>
</tr>
<tr>
<td>TSWBAT learn the importance of trust.</td>
<td>2. Contract</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TSWBAT understand the importance of the contract and follow the contract throughout the trust activities.</td>
<td>3. Partner spot</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TSWBAT understand the concept of challenge by choice and participate in the activities only when he or she wants to.</td>
<td>4. Three person spot</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TSWBAT try new activities, which will extend their comfort zone.</td>
<td>5. Willow in the wind</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Levitation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance Objectives</td>
<td>LK's</td>
<td>Time</td>
<td>Organization</td>
<td>Cues</td>
</tr>
<tr>
<td>------------------------</td>
<td>------</td>
<td>------</td>
<td>--------------</td>
<td>------</td>
</tr>
<tr>
<td>Same as lesson seven</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Review contract</td>
<td></td>
<td></td>
<td></td>
<td>2. Form two lines facing each other. Hold your hands out in front of you. When the person is running towards you raise your hands up above your head. Make sure you raise your hands up in time so you don’t hit anyone. This will break the trust you have gained throughout the class.</td>
</tr>
<tr>
<td>2. Trust wave</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Car and driver</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Zipper line</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Trust Fall</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Only spend as much time as the student’s level of interest dictates. Always quit when the activity is still interesting.

Always quit when the activity is still interesting.

Tap the left shoulder—turn left.
Tap the right shoulder—turn right.
Two taps on either shoulder—turn hard in that direction. Hands placed on both shoulders—stop.

Intertwine hands with the person across from you. The person will then run at the group and jump into the hands of the zipper line. Make sure everyone is ready by following the contract. Also make sure the person stays in line with the zipper.

The same formation as zipper line. The person falling needs to go through the contract. Then they fall like a stiff board into the hands of the group.
<table>
<thead>
<tr>
<th>Performance Objectives</th>
<th>LX's</th>
<th>Time</th>
<th>Organization</th>
<th>Cues</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSWBAT complete belay school by understanding the importance of maintaining a rope and how to care for a rope.</td>
<td>1. Explain what belaying in and its function.</td>
<td>4 min</td>
<td></td>
<td>Sunlight, petroleum based products and dirt is the three main items to be aware have with regards to possible break down of the rope fibers.</td>
</tr>
<tr>
<td></td>
<td>2. Rope care</td>
<td>7 min</td>
<td></td>
<td>Check the rope before you use the rope for separation between the sheath and the core.</td>
</tr>
<tr>
<td></td>
<td>3. Define terms such as stacking, sheath, sheer,</td>
<td>3 min</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Butterfly coil</td>
<td>10 min</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Joust with different partners</td>
<td>7 min</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Explain the physical skill of belaying demonstrating how both hands work together.</td>
<td>5 min</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. One person belays the entire rope while the other person helps guide them. (Dominant hand)</td>
<td>5 min</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. Other person belays the entire rope using slip slip slide method.</td>
<td>5 min</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9. Eyes closed dominant hand.</td>
<td>10 min</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10. Eyes open non-dominant hand.</td>
<td>10 min</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11. Eyes closed non-dominant hand.</td>
<td>10 min</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12. Relay races using different hands.</td>
<td>15 min</td>
<td></td>
<td>The skill is the same with the non-dominant side.  Talk your way through it. Make sure you are comfortable using both side to belay.</td>
</tr>
<tr>
<td></td>
<td>13. Belay check off sheet</td>
<td>10 min</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C

SELF-ESTEEM QUESTIONNAIRE

1. On the whole, I am satisfied with myself. 
   SA A B D

2. I do not have a good deal of good self-esteem. 
   SA A B D

3. I feel that I have a number of good qualities. 
   SA A B C

4. I am able to do things as well as most other people. 
   SA A B C

5. I feel I do not have much to be proud of. 
   SA A B C

6. I feel I have a good deal of confidence in myself. 
   SA A B C

7. I feel that I am a successful person. 
   SA A B C

8. I wish I could have more success in my life. 
   SA A B C

9. All in all, I am satisfied with how I am. 
   SA A B C

10. I feel I have a strong sense of control over my life. 
    SA A B C

11. I feel I have a strong sense that I am an important person. 
    SA A B C

12. I feel I have a strong sense that I can handle my problems. 
    SA A B C
ID # __________________

Circle One

Pretest  Posttest

Self-Esteem Evaluation

1. On the whole, I am satisfied with myself.          SA  A  D  SD
2. At times I think I am no good at all.             SA  A  D  SD
3. I feel that I have a number of good qualities.    SA  A  D  SD
4. I am able to do things as well as most other people. SA  A  D  SD
5. I feel I do not have much to be proud of.         SA  A  D  SD
6. I certainly feel useless at times.                SA  A  D  SD
7. I feel that I'm a person of worth at least on an equal plane with others. SA  A  D  SD
8. I wish I could have more respect for myself.      SA  A  D  SD
9. All in all, I am inclined to feel that I am a failure. SA  A  D  SD
10. I take a positive attitude toward myself.        SA  A  D  SD

SD = Strongly agree
A = Agree
D = Disagree
SD = Strongly disagree

APPENDIX E

EIGHTH GRADE TREATMENT GROUP LOG SHEET
<table>
<thead>
<tr>
<th>Code #</th>
<th>Grade</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Day1</td>
<td>Day2</td>
</tr>
<tr>
<td>Name</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX F

TRADITIONAL CURRICULUM
### Performance Objectives

<table>
<thead>
<tr>
<th>LX’s</th>
<th>Time</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>LX1- demonstrate hand position</td>
<td>2 min</td>
<td>Head up</td>
</tr>
<tr>
<td>LX2- Each student gets a puck to control while walking around the gym</td>
<td>2 min</td>
<td>Look where you are going</td>
</tr>
<tr>
<td>LX3- Control the puck while jogging around the gym using both sides of the stick</td>
<td>2 min</td>
<td>Keep the stick on the ground</td>
</tr>
<tr>
<td>LX4- Pass to a stationary partner</td>
<td>2 min</td>
<td>One hand lower than the other</td>
</tr>
<tr>
<td>LX5- Pass to a moving target</td>
<td>4 min</td>
<td>Lead the puck in front of the body while running</td>
</tr>
<tr>
<td>LX6- Three person weave</td>
<td>3 min</td>
<td>Keep the stick glued to the ground</td>
</tr>
<tr>
<td>LX7- Pass game</td>
<td>3 min</td>
<td></td>
</tr>
</tbody>
</table>

**Closure:** Where are your hands positioned on the stick? Why is it more difficult to pass to a moving target? What do you have to do differently?

---

**Unit:** Hockey  
**Lesson:** Stick handling  
**Grade:** 7-8  
**Style:** Station  
**Date:** Day 1  
**Materials:** Sticks and pucks for each student  
**Standards:**
### Performance Objectives

<table>
<thead>
<tr>
<th>LX's</th>
<th>Time</th>
<th>Organization</th>
<th>Cues</th>
</tr>
</thead>
<tbody>
<tr>
<td>LX1- Review stick handling by walking around the gym with a puck keeping it under control</td>
<td>2 min</td>
<td></td>
<td>Head up</td>
</tr>
<tr>
<td>LX2- Pass the puck to a stationary target on the wall from 5 feet away hitting the target</td>
<td>3 min</td>
<td></td>
<td>Keep the stick glued to the ground</td>
</tr>
<tr>
<td>LX3- Pass from 10 feet away hitting it</td>
<td>2 min</td>
<td></td>
<td>Lead the puck in front of you</td>
</tr>
<tr>
<td>LX4- Pass to a target while jogging hitting the target</td>
<td>2 min</td>
<td></td>
<td>Aim the stick in the direction of the intended pass</td>
</tr>
<tr>
<td>LX5- Introduce back hand shot</td>
<td>3 min</td>
<td></td>
<td>Follow through keeping stick on the ground</td>
</tr>
<tr>
<td>LX6- Back hand pass drill</td>
<td>7 min</td>
<td></td>
<td>Encourage others by giving positive statements</td>
</tr>
<tr>
<td>LX7 Back hand pass game—same as forehand pass game on line</td>
<td>15 min</td>
<td></td>
<td>Look at the target you are aiming for</td>
</tr>
</tbody>
</table>

**Closure**: How was this game different than the forehand passes game? Why was it more difficult? When can this pass come into play?

**TSWBAT** demonstrate the ability to pass the puck to a target from ten feet away 7/10

**TSWBAT** pass to a moving target while demonstrating proper stick holding

**TSWBAT** demonstrate how the direction of the stick dictates the direction that the puck goes by completing passes to a partner directing the puck to the left, right and center of the person from ten feet away

**TSWBAT** cooperate with others in class and encourage each other by being positive
<table>
<thead>
<tr>
<th>Performance Objectives</th>
<th>LX's</th>
<th>Time</th>
<th>Organization</th>
<th>Cues</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSWBAT shoot and hit the target using proper form 6/10 times</td>
<td>LX1- Review rules</td>
<td>1 min</td>
<td></td>
<td>Look where you are going</td>
</tr>
<tr>
<td></td>
<td>LX2- Intro shooting/Pick a spot on the wall and shoot a wrist and a drag shot</td>
<td>3 min</td>
<td></td>
<td>Drag the stick and follow through</td>
</tr>
<tr>
<td>TSWBAT follow the basic rules of the hockey unit while they work with their classmates to improve their skills and teamwork</td>
<td>Lx3- 3 lines- puck handling down the gym and student makes a shot on the goal at the end</td>
<td>4 min</td>
<td></td>
<td>Look at the target</td>
</tr>
<tr>
<td>TSWBAT understand the different types of shots used in the game of hockey and demonstrate them properly 5/10 times each</td>
<td>Lx4- Weave between the cones and then shoot on goal</td>
<td>2 min</td>
<td></td>
<td>Lead the puck in front of you</td>
</tr>
<tr>
<td>TSWBAT play a basic game which helps develop the shooting and passing skills necessary to be successful in the class 70% of the time</td>
<td>LX5- Pass to a partner and then shoot on goal</td>
<td>3 min</td>
<td></td>
<td>Keep the stick on the ground</td>
</tr>
<tr>
<td></td>
<td>LX6- Sideline Hockey, pick a couple of numbers and those students are out there trying to score a goal against the other team</td>
<td>25 min</td>
<td></td>
<td>Lead the pass to your partner so it is on target</td>
</tr>
</tbody>
</table>

Closure-what went well? What do we need to work on?
### Performance Objectives

<table>
<thead>
<tr>
<th></th>
<th>LX's</th>
<th>Time</th>
<th>Organization</th>
<th>Cues</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSWBAT follow directions and work in small groups to complete the stations</td>
<td>LX1 - Rules</td>
<td>3 min</td>
<td></td>
<td>Work together as a team</td>
</tr>
<tr>
<td></td>
<td>LX2 - Get into groups and I will explain the different stations</td>
<td>35 min</td>
<td></td>
<td>Encourage your classmates</td>
</tr>
<tr>
<td>TSWBAT play various game-like stations which will increase their skill level as well as teamwork</td>
<td>#1 one defensive and two offensive players</td>
<td></td>
<td></td>
<td>Keep the stick down</td>
</tr>
<tr>
<td></td>
<td>#2 one offensive and two defensive players</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>#3 Timed cone weave</td>
<td></td>
<td></td>
<td>Look at your target</td>
</tr>
<tr>
<td></td>
<td>#4 pass to target. See how many you can hit from 10 and fifteen feet away</td>
<td></td>
<td></td>
<td>Follow through</td>
</tr>
<tr>
<td></td>
<td>#5 Keep away in group of three</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TSWBAT encourage their teammates using positive comments when they score a goal or make a nice pass</td>
<td>LX3 - closure - discuss strategies they had developed during the time</td>
<td>4 min</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Materials
- Sticks, pucks, cones

### Standards
<table>
<thead>
<tr>
<th>Performance Objectives</th>
<th>LX’s</th>
<th>Time</th>
<th>Organization</th>
<th>Cues</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSWBAT Understand the positions on a hockey team</td>
<td>LX1- Introduce Positions</td>
<td>7 min</td>
<td></td>
<td>Head up looking at the target</td>
</tr>
<tr>
<td>TSWBAT play a game of 3 on 3 hockey while demonstrating competency in passing.</td>
<td>LX2- Introduce Game rules</td>
<td></td>
<td></td>
<td>Keep the puck or ball ahead of your body</td>
</tr>
<tr>
<td></td>
<td>LX3- Play 3 on 3 hockey 4 teams of three people.</td>
<td>35 min</td>
<td></td>
<td>Point the stick in the direction you want the puck to go</td>
</tr>
<tr>
<td>TSWBAT develop strategies through out the game to better their ability to work together.</td>
<td>LX4- Closure- What was one thing that you and your teammates did to cooperate together during the game?</td>
<td>3 min</td>
<td></td>
<td>Follow through your shot</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>One hand lower than the other on the stick</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Keep sticks on the ground</td>
</tr>
<tr>
<td>Performance Objectives</td>
<td>LX's</td>
<td>Time</td>
<td>Organization</td>
<td>Cues</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------------</td>
<td>-------------------------------</td>
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<td>--------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>TSWBAT apply basic skills in game play situations and work well with teammates 70% of the time</td>
<td>LX1 play knock out</td>
<td>5 min</td>
<td></td>
<td>Work together</td>
</tr>
<tr>
<td></td>
<td>LX2 Play keep away</td>
<td>5 min</td>
<td></td>
<td>Pass to your teammates</td>
</tr>
<tr>
<td></td>
<td>LX3 Play Shooting game/each person tries to hit the other people in the foot. If they do they need to do five curl ups</td>
<td>5 min</td>
<td></td>
<td>Lead the puck in front of you Sticks on the ground</td>
</tr>
<tr>
<td>TSWBAT apply different strategies while working as a team to accomplish a common goal 60% of the time</td>
<td>LX4 play sideline hockey</td>
<td>30 min</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TSWBAT follow simple directions throughout the class 80% of the time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Unit**: Hockey Thesis  
**Lesson**: Tournament  
**Grade**: 7-8  
**Style**: Station  
**Date**: Lesson #7

<table>
<thead>
<tr>
<th>Performance Objectives</th>
<th>LX's</th>
<th>Time</th>
<th>Organization</th>
<th>Cues</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSWBAT participate in a passing tournament while demonstrating good sportsmanship throughout the class.</td>
<td>1. Warm up passing *</td>
<td>2 min</td>
<td></td>
<td>2 points touching the line</td>
</tr>
<tr>
<td></td>
<td>2. Explain tournament rules and tie breaker criteria.</td>
<td>3 min</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TSWBAT apply basic passing skills learned in class to participate in the tournament.</td>
<td>3. Play passing game rotating every three minutes</td>
<td>35 min</td>
<td></td>
<td>1 point for a puck that stops up to 2 squares in front of the line.</td>
</tr>
<tr>
<td></td>
<td>4. Give out awards for first through third place.</td>
<td>5 min</td>
<td></td>
<td>Criteria: If it is a tie the person who scores first wins the match. The person who scored first in regulation gets the puck first.</td>
</tr>
</tbody>
</table>
**Unit:** Hockey  
**Lesson:** Game play  
**Grade:** 7-8th  
**Style:**  
**Date:** Day 8-10

<table>
<thead>
<tr>
<th>Performance Objectives</th>
<th>LX's</th>
<th>Time</th>
<th>Organization</th>
<th>Cues</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSWBAT play a game of hockey demonstrating good sportsmanship by complimenting others as well as understand individual differences among other players.</td>
<td>LX1 Explain rules of the game</td>
<td>2 min</td>
<td></td>
<td>Keep the stick on the ground</td>
</tr>
<tr>
<td></td>
<td>LX2 Review positions</td>
<td>2 min</td>
<td></td>
<td>Play your position</td>
</tr>
<tr>
<td></td>
<td>LX3 Play the game</td>
<td>40 min</td>
<td></td>
<td>Tap sticks three times to start face-off</td>
</tr>
<tr>
<td>TSWBAT play every position demonstrating the various rules that go along with each position during game play.</td>
<td></td>
<td></td>
<td>Stick needs to stay below the waist</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX G

SEVENTH GRADE CONTROL GROUP LOG SHEET
<table>
<thead>
<tr>
<th>Code #</th>
<th>Name</th>
<th>Grade</th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
<th>Day 6</th>
<th>Day 7</th>
<th>Day 8</th>
<th>Day 9</th>
<th>Day 10</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
</table>