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**TEACHING AND LEARNING
RESEARCH EXCHANGE**

Closing the Gap

*Addressing the
Attitudes and Experiences
of Young Women in
Physical Education Classes*

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- 5) encourage experimentation with innovative ideas and methodologies related to teaching and learning.

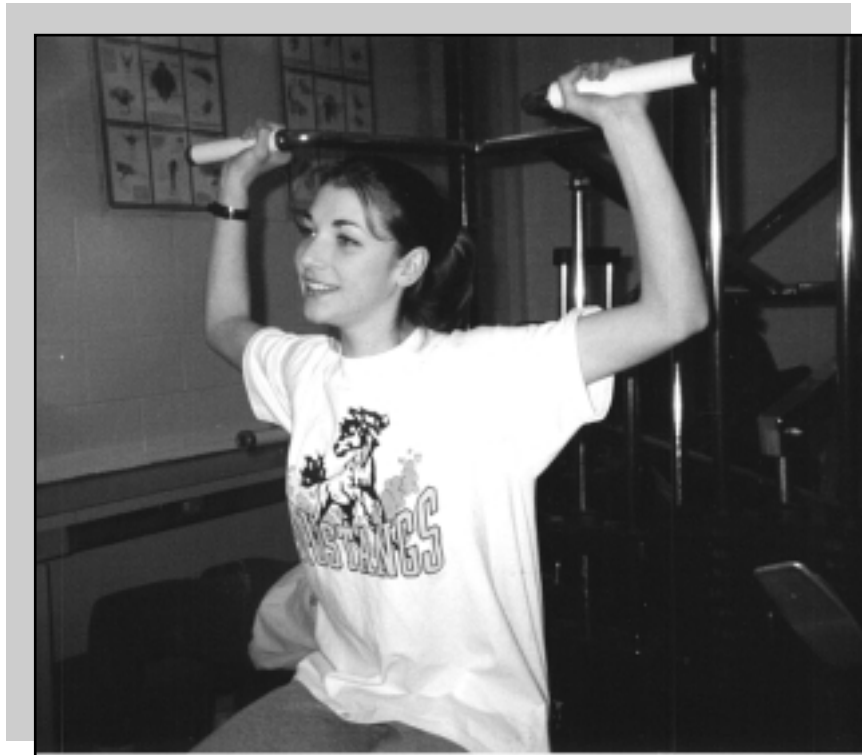
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A high school student involved in the project enjoys working out.

Introduction

*We shall be telling this with a sigh
Somewhere ages and ages hence
Two roads diverged in the wood, and we —
We took the road less traveled by,
And that has made all the difference*

The metaphor of a journey is often used when researchers attempt to describe the processes used in the collection, analysis, and reporting of information gained during research studies posing unasked questions and using non traditional methods. This is indeed one of those studies. We are the research team that embarked upon this journey. Who are we? We are three physical educators, two of us teaching in a Saskatoon high school, with the other teaching at the University of Saskatchewan. Together we journeyed toward our goal of improving the experiences of young women in physical education classes. This indeed was a road less traveled as few have attempted to understand and work with young women so that they may enjoy the benefits of physical activity so well known to those of us already active.

Much of this paper is written in first person as we felt it was important to provide opportunities for people to have a voice, to tell of their experiences, to share stories of their journeys. We wanted you as a reader to understand what brought us to this journey and what we have learned. With the exception of the research team, pseudonyms are used to protect the identity of all involved in the study.

Although we worked as a team, we had different reasons for pursuing this project. Our stories follow.

One of the biggest reasons for becoming involved with this research project was to try to understand why so many grade 9 girls come into my office the first day in September with excuses for getting out of my physical education class. I think to myself “how can they not want to be here...they don’t even know who I am or what I do!” So many girls come into grade 9 with a negative attitude towards physical education and I really wanted to find ways to motivate girls to want to

be active, and to stay active. After reviewing this information I have found that some of my questions were answered, but only enough to trigger more questions, more thoughts, and more desire to reach our young women. If in listening to these young voices I can reach even one student and change her attitude toward physical education and life long activity, then this was all worth it, and I have done my job.

This research greatly interested me. Although I am no longer in daily contact with high school students, it is critical that I understand their experiences as I now work with future teachers to ensure that they are adequately prepared to teach physical education to high school students. Lately I find that I talk about high school students, seldom with them. I looked forward to observing and talking to young women to get a better understanding of what physical education was like for them. In addition, the chance to work again with high school teachers was invaluable to me. I often worry that I am forgetting how challenging teaching high school can be and how many things there are to deal with. This project gave me an opportunity to return to a world I had left behind, but a world that I must understand if I am to continue to grow as a teacher educator.

Background

The purpose of this study was to create an innovative physical education program designed to increase the participatory rate of young women in physical activity. The importance of physical activity for individual health and well being has been well documented. Research has determined that physical activity and physical fitness are inversely related to the incidence of coronary heart disease, cardiovascular disease and all-cause mortality (Berlin & Colditz, 1990; Paffenbarger, Wing & Hyde, 1978; Oberman, 1985). Regular physical activity has a proven association with decreased incidence of obesity, hypertension, and has a favorable effect on serum cholesterol and lipoproteins (Dennison, Straus, Melits, & Charney, 1988). In addition, higher levels of physical activity have been associated with reduced incidence of non insulin diabetes mellitus (Frisch, Wyshak, Albright, Albright, & Schiff, 1986), depression (Taylor, Sallis & Needle, 1985), and colon and reproductive cancers (Kohl, LaPorte & Blair, 1988). There is also increasing recognition of the importance of the role physical activity plays in the acquisition of bone mineral content (Bailey, Faulkner, & McKay, 1996). The recently released Report of the Surgeon General concludes that physical inactivity is a major public health concern, “Given the numerous benefits of physical activity, the hazards of being inactive are clear. Physical inactivity is a serious, nationwide problem. Its scope poses a public health challenge for reducing the national burden of unnecessary illness and premature death” (Center for Disease Control and Prevention, 1996, p.1). The awareness of the benefits of physical activity is not a new phenomenon. In 1666, Francis Fuller concluded “If only some of the advantages of physical activity were to be procured by any one medicine, nothing in the world would be held in greater esteem than that medicine” (Canadian Association for Health Physical Education Recreation and Dance, 1993).

One of the rationales for promoting physical activity in youth is to enhance their future health by increasing the probability that they will remain active as adults. Adult sedentary behavior has been shown to contribute substantially to the epidemic of cardiovascular and chronic diseases (Berlin & Colditz (1990); Paffenberger et. al. (1986); Sallis & MacKenzie, 1991). It is believed that children who develop a habit of participating in activity, that can be carried over into adulthood, will be more likely to remain active and thus reduce the risk of hypokinetic diseases (Sallis & Patrick, 1994).

In addition to the physiological benefits of a physically active lifestyle, there are many psycho-social benefits to be gained from participating in physical activity. These include: feelings of enjoyment, excitement and personal challenge; opportunities to practice dealing with success and failure; learning to respect rules and operate in team situations; social skills gained through interaction and cooperation; the opportunity to develop leadership skills, the promotion of group and community identities; and the enhancement of self esteem (Australian Sports Commission, 1993).

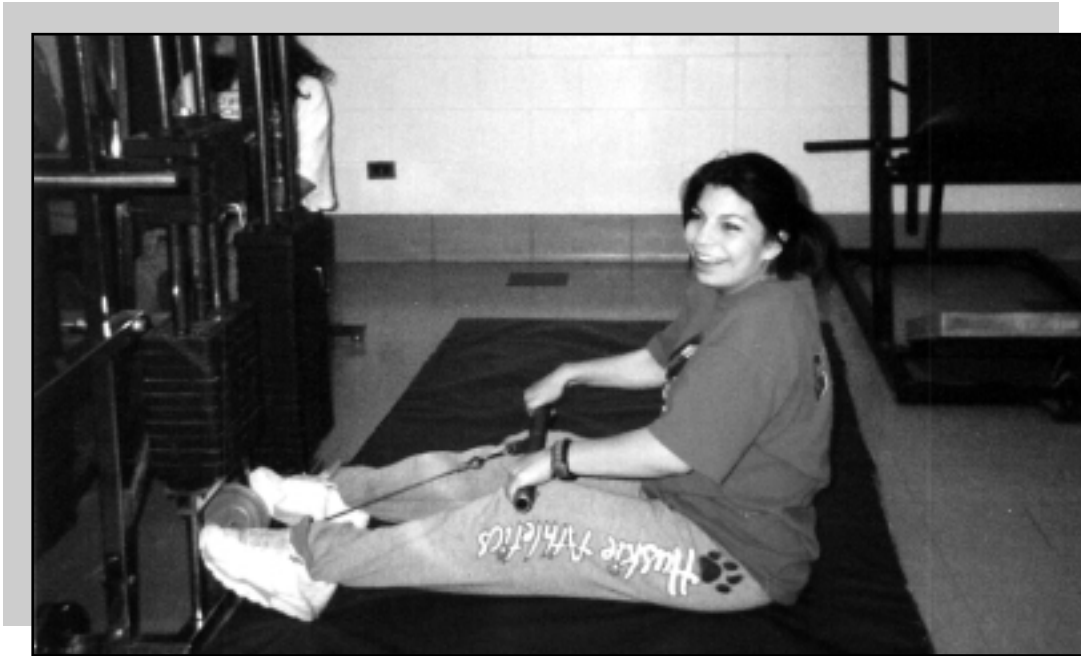
In light of the importance of adopting physically active lifestyles, it is disheartening to learn that large numbers of young women are not physically active. Gibbons & Van Gyn (1994) and Dahlgren (1988) reported that in Canada, girls drop out of physical activity at an earlier age than boys, with fewer girls returning to regular physical activity in later life. A study by King and Coles (1992) determined that,

While Canadian students appear interested and active in sports and physical activity, there is a steady decline in participation between the ages of 11 and 15. This is especially noticeable for females. Young females participate less often in physical activities than young males and also consider themselves less fit and less likely to be physically active at age 20 (p.3).

What can be done to increase the rate of participation of young women in physical activity? It is no surprise that numerous authors stress that the school has an important role to play in the promotion of physical activity for young women. The school may be the only institution in which children can be taught the health related physical activities necessary for lifetime physical fitness and the skills necessary to enjoy physical activity into adulthood (McKinnis, Kanner & DeGraw, 1991; Sallis & MacKenzie, 1991). Flintoff (1996) stresses that physical education programs represent an important gateway for encouraging young people to develop the knowledge, attitudes, and skills necessary for active, healthy living. However, the important role that physical education programs can play in the physical activity patterns of young women does not appear to be realized since when physical education programs become optional, young women leave them in great numbers. By secondary school the majority of young women use any excuse they can to drop out of physical education (Gibbons & Van Gyn, 1994). In Canada, young women have a higher drop out rate and lower registration in elective physical education classes than young men (Dahlgren, 1988; Humbert, 1995). In Saskatchewan, approximately 63% of grade eleven girls choose not to participate in physical education classes (Saskatchewan Education Training and Employment, 1993). In the school selected for this study, over 80% of the young women who participated in physical education when it was compulsory did not enrol in optional physical education.

As educators, teacher educators and researchers, we wished to engage in a research project that would permit us to address the gap we believed existed between the goals of our instructional physical education program, and the attitudes and behaviors of the young women in our physical education classes. We were very aware of the benefits of physical activity and we wholeheartedly supported the mission of physical education in Saskatchewan schools which is, “the development of autonomous, lifelong learners who readily participate in meaningful physical activity on a regular basis” (Saskatchewan Education, 1992, p. 3). We were greatly concerned, however, about the high numbers of young women who did not pursue physically active lifestyles. Upon a critical reflection of our present

curriculum and our existing ways of teaching we became concerned that we were not providing young women with the knowledge, experiences and motivation required to lead a physically active lifestyle. Thus, we decided to embark upon a research project that would give us an opportunity to learn more about what we needed to do as physical educators to increase the numbers of young women leading physically active and healthy lifestyles.



A physically active lifestyle is experienced by one of the young women involved in the project.

Research Question and Objectives of Study

The research question addressed in this study was:

How can the current grade nine and ten physical education programs be improved so that greater numbers of young women can have a positive experience in physical education classes and thus be encouraged to lead more healthy active lifestyles?

The following objectives guided this project:

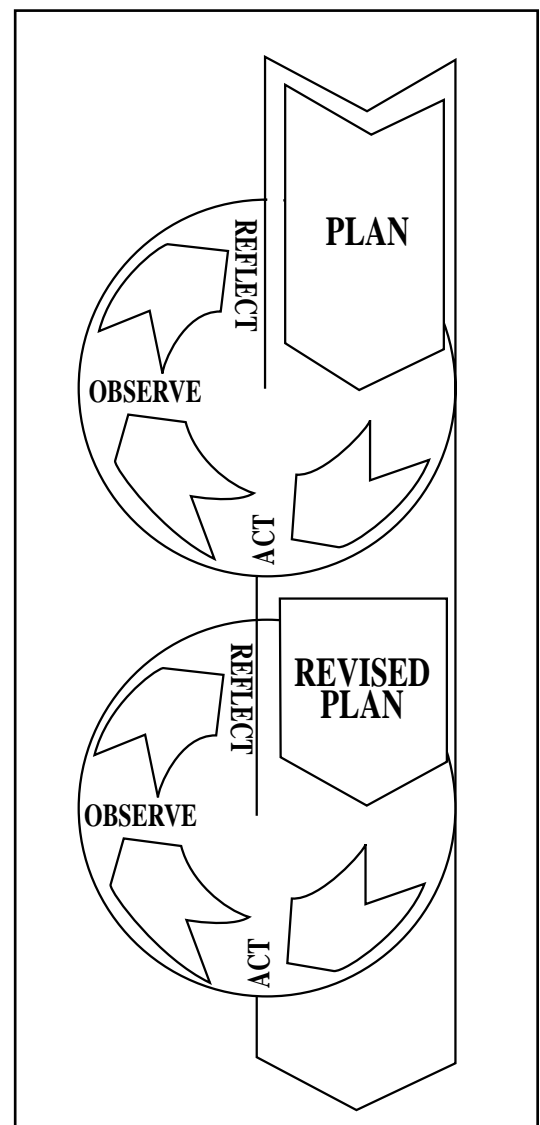
1. To provide opportunities for teachers and students to reflect upon their past experiences in physical education programs.
2. To provide opportunities for young women to have input into the design, implementation and evaluation of their current physical education program.
3. To establish an environment in physical education classes that was attractive and equitable for young women.
4. To increase the self confidence of young women in a variety of physical activity settings.
5. To motivate young women to continue to participate in physical activity.

Methods and Procedures

The method chosen for this study was action research. Action research is a combination of action and research and has been used by numerous educators as a way to better their educational environment. Educators are given the opportunity to become involved in the research process, to address questions that they have about their teaching practices and reflectively act in ways that will improve their situations. Action research enables teachers to “. . . really look at our teaching actions and actively explore the possibilities that there may be better ways of acting that may result in a better teaching situation for the teacher and a better learning situation for the students in our classes” (Carson, Connors, Smits & Ripley, 1992, p. 2).

Action research has four key features. The first is that action research is practical in orientation; it is an attempt to better understand and deal with the real problems of our teaching practices. Second, action research has as its focus active, not passive observation. Unlike many of the traditional research projects done on those in the education system, action research directly involves educators. It requires researchers (teachers, professors) to reflectively act in ways that will improve teaching practices. Third, action research is democratic. All involved in the project become equal partners. All participants have a voice, and if the project is to be successful, all have equal power and work together as a team. Fourth, action research is systematic and reflective and occurs in a cycle. This is a key feature of action research as this addresses the “doing” of an action research project (Carson, Connors, Smits & Ripley, 1992, p. 2-3).

The four phases in an action research cycle include planning, acting, observing and reflecting (Kemmis & McTaggart, 1988). During the planning phase, all members of the research team question the realities of their teaching practices and search for “what ought to be.” In an effort to address their concerns about their current situation the researchers implement a plan they have developed during the acting phase. Simultaneous with the action phase is the observation phase. This phase is key for subsequent reflection and action. The last phase involves the researchers reflecting upon what is happening with their project. They then develop revised plans based upon what they are learning. The following diagram of the “action research spiral” (Kemmis & McTaggart, 1988) illustrates the four phases of the action research cycle:



Putting The Spiral Into Action . . .

As we were concerned about discovering ways in which we could change our teaching behaviors to better meet the goals of physical education, we felt that action research would be an excellent method for a study of this type. The way we utilized the action research cycle in this study is described below. It is important to note that the young women were also seen as partners in the study and not something to be simply measured or studied; they too played a key role in several of the action research cycles.

Phase One: Planning.

In the planning phase we met as a research team to determine the realities of our current teaching practices and brainstorm ways in which we could move closer to the mission of physical education in Saskatchewan. It was determined that each member of the research team would take on specific responsibilities. As one of the teachers was on a maternity leave, she was assigned the role of data analysis, the other teacher was the “practitioner” and was responsible for implementing the plan. The university professor was responsible for data collection and ensuring that the research method was followed.

This study took place at Morgan Heights High School during the 1995 - 1996 school year. Morgan Heights is a public high school located in the city of Saskatoon. It is one of the largest high schools in the city with an enrollment of approximately 1800 students. Morgan Heights was chosen for this study as it was where both teachers taught physical education, and the administration was very supportive of the research project. Four classes of compulsory, gender segregated, physical education were selected to participate in the study. Two of the classes were comprised of grade nine girls and two were grade ten girls. We selected the classes in the summer prior to the initiation of the project; thus we had no prior knowledge of the make up of the students in the classes. We knew we wanted to focus on compulsory physical education so we simply chose the compulsory classes which best suited the timetables of all members of the research team.

The grade nine classes were both non-semestered and occurred during the last period of the day. One class had four students who were repeating grade nine physical education. One of the grade ten classes was non-semestered and occurred during the first period of the day. The other grade ten class was semestered, occurred in semester two and had many students who had previously failed grade ten physical education either at Morgan Heights or a variety of other high schools. Many of the young women in this class were classified as “at risk” students.

Prior to the formal initiation of the research project, we met repeatedly to determine the goals of the study and how

we would achieve these goals. This was a large task as we knew that the physical education program needed to be changed but we were unsure where to start. We determined that for the grade nine students we would focus on making the environment of their physical education classes one that provided “unconditional support and encouragement” (Dahlgren, 1988, p.12). Using the work of Boomer, Lester, Onore and Cook (1992) as a guideline, we decided to focus much of our work with the grade ten students on “negotiating the curriculum” (p.9). Both of these initiatives will be explained in detail in a later section of this report.

Phase Two: Acting.

During this phase, the research team began to implement the plan they had developed. The physical education curriculum was reviewed and activities were placed into one of two categories, “negotiable” and “non-negotiable.” Negotiable activities and practices provided opportunities for students to have input into the program and evaluation. Non-negotiable activities and practices meant that the program and activities remained as they were. Some examples of negotiable activities included: choice of physical education attire (in the past uniforms were required); evaluation, activity units of the curriculum, and fitness activities. Examples of non-negotiable activities were: twenty hours of intramural and out of school activity, certain components of the curriculum and evaluation practices. It is important to note that the teacher did not disrupt other physical education classes that were occurring at the same time as the classes involved in the research practices, and that the physical education teacher retained the final say in the negotiation of activities. The teacher made every effort to make the physical education environment inviting to all students involved in the study.

Phase Three: Observing. (Data Collection)

This phase involved the collection of data which provided us with valuable insights for subsequent phases of our project. The data collected during this study came from a variety of sources including: questionnaires (group and individual); journals (student and researchers); critical incident forms, semi-structured interviews and document analysis.

Questionnaires: During the course of the study all of the young women were given opportunities to respond to questionnaires discussing topics related to the types of activities offered and their likes and dislikes with respect to their present physical education class. Some of these questionnaires were done privately while others served as the basis for group discussions.

Journals: All members of the research team kept personal journals of events and issues they felt were important. The organization of these journals varied depending on the role of the researcher. The teacher involved in the

implementation of the plan used her journal as a day to day log of how she felt the study was progressing, she also recorded questions she had with respect to the changes being made to the physical education program. The researcher responsible for data analysis recorded in her journal the categories and themes emerging from the data. The researcher responsible for data collection used her journal to record the logistics of the study such as scheduling of interviews, themes emerging from data collection and topics in need of further investigation.

Critical Incident Form: The critical incident form was administered at the end of the study and asked the following two questions:

1. Please tell us about the things that you have experienced in the past that have caused you to *like* physical education.
2. Please tell us about the things that you have experienced in the past that have caused you to *dislike* physical education.

Interviews: The key source of information in the observation phase came from several semi-structured group interviews with young women involved in the study. All young women were given an opportunity to participate in these interviews. All who participated were required to complete a consent form which clearly indicated to the participants and their parent or guardian that their participation in such interviews was voluntary, and would not affect their physical education grade in any way. Approximately one third of all young women involved in the study volunteered to participate in these interviews. Some of the questions which guided these interviews included:

1. What is physical education like for you this year?
2. What were your past experiences in physical education?
3. What do you enjoy about your present physical education class?
4. What do you not enjoy about your present physical education class?
5. If you were the physical education teacher what would you do to make physical education more enjoyable for young women?
6. What would you like to learn in your physical education class?
7. Compare and contrast your experience in physical education this year with your previous experiences in physical education classes.

Since the interviews used a semi-structured format, these questions served only as a guideline. The young women were always encouraged to discuss issues about physical education that they felt were important to them.

Document Analysis: Data obtained from all of the above sources was supplemented with information obtained through a review and analysis of documents. These documents included the provincial physical education curriculum, school board statements, visual displays in the gym area, and the goals, objectives and yearly plans of the Morgan Heights physical education department.

It is important to note that during all phases of data collection the young women were informed that their responses would be kept confidential and that their physical education teacher would not see any of the information shared with the other two members of the research team. As we used the observation phase to guide our future actions, we reported the data collected to the teacher in general terms, such as “they really seem to enjoy _____” or “we need to spend more time on _____” etc.

Phase Four: Reflecting. (Data Analysis)

As the project progressed we met to review the data collected during the observation phase and develop revised action plans for subsequent phases of the study. Typical of action research we felt that we were continually in a reflecting phase. We found ourselves constantly wondering if the plans we were devising were achieving our goals; we were always open to responding to the data and revising our plans. At several points during the study we reviewed the objectives of the study and reflected upon whether we were indeed achieving them. We also used the reflecting phase as an opportunity to share portions of our journals. This proved to be a valuable learning process for all of us, as during these sharing times we experienced a true sense of teamwork as we realized that we shared many of the same feelings of apprehension and accomplishment around the project.

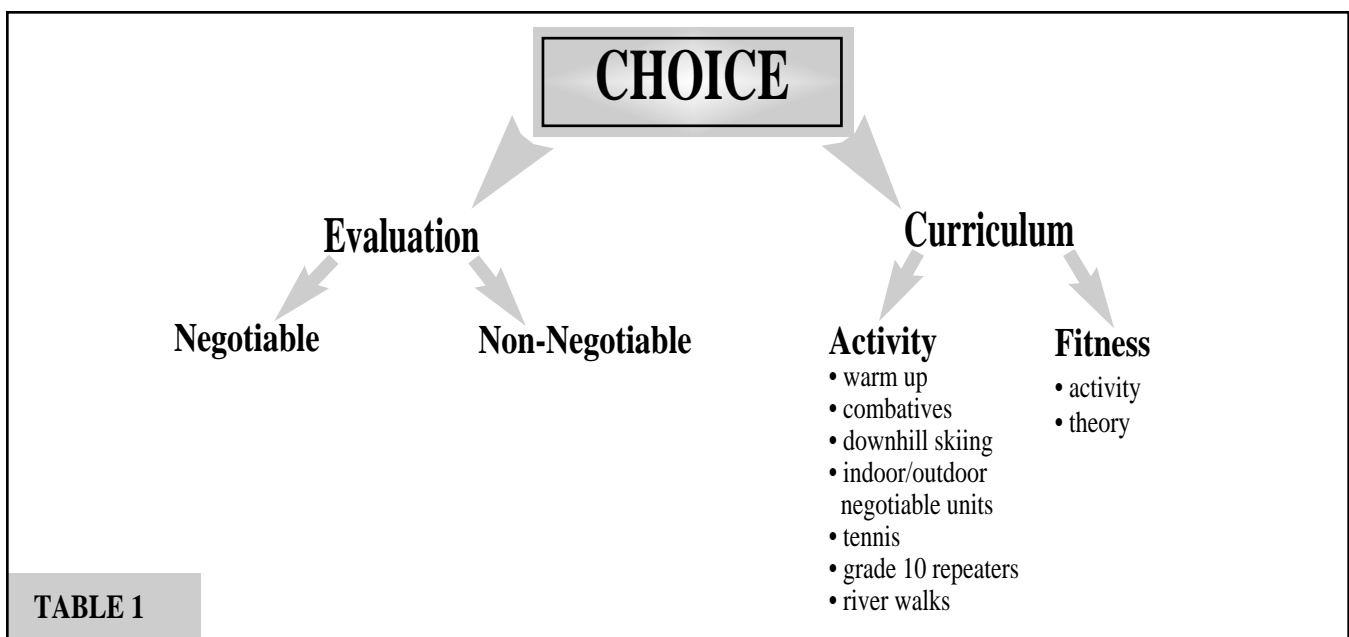
It is important to note that due to the dynamic nature of action research, it is often difficult to determine when one phase of the research study has concluded and the next phase began. As researchers we have determined that through the continual process of planning, acting, observing and reflecting, we were able to develop and implement new plans of actions as a result of knowledge gained from each cycle. This phase is explained in detail in a later section of this paper.

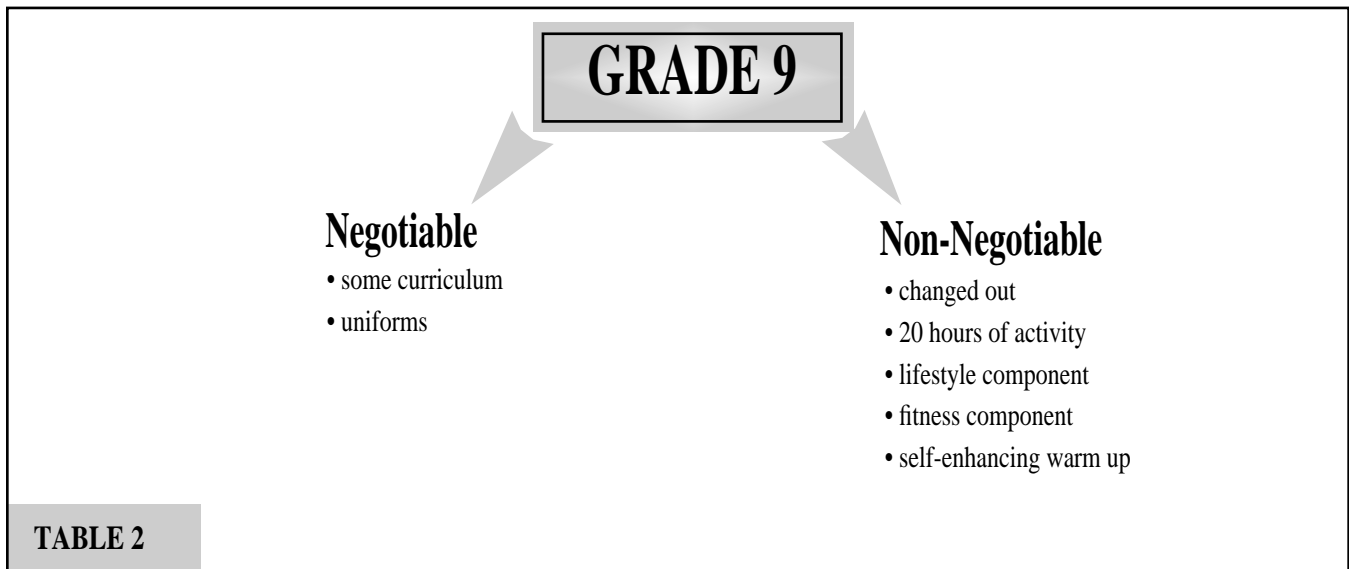
Developing and Implementing The Plan

One of the most interesting features of this research study was the actual changes to the physical education curriculum that we developed and implemented. As we felt it was important to give those involved in the study a voice, we determined that the researcher who assumed the role of the practitioner, the one who implemented the “new” program, should have an opportunity to present her work, in her own way. It has been our experience that this portion of the research study is often of the greatest interest to those considering making changes to their existing practices. Her remarks follow:

My role was predominantly that of a practitioner. I was a teacher and was on the front-line, so to speak, with the students — imparting change, hoping to make this experience enjoyable. When we decided to do this research project we started out with our traditional physical education program; the three of us sat down in the summer and decided what we wanted to change. We reviewed the physical education program and decided to label some experiences negotiable and others non-negotiable. We found it difficult to decide which components were negotiable and which were non-negotiable. This was because what we thought was worthwhile and fun was not necessarily what the Grade 9’s and 10’s thought was worthwhile and fun. We made sure that, if we were scheduled in the gym, we stayed there so we didn’t conflict with the other physical education classes. We were very aware of all the other classes going on at the same time. Examples of the choices offered to students are included in Tables 1, 2, and 3.

On the first day of classes another member of the research team came in to each of my classes chosen to participate in the study, and explained her role in the research project. She gave them a questionnaire to work within small groups and this sort of opened up discussion as to giving the students choice.





Some of the questions included:

What do you think grade 9 physical education is all about? What have you heard?

Can you think of something in elementary school physical education that you really liked? Explain.

Can you think of something in elementary school physical education that you really did not like? — Explain.

For Grade 10 we changed the questionnaire to include questions such as:

Physical education would be great if _____.

If I was a physical education teacher I would _____.

This year in physical education, I would like to do more of _____; less of _____.

Do you want your physical education teacher to teach you to be good in an activity or do you just want to play? Please explain.

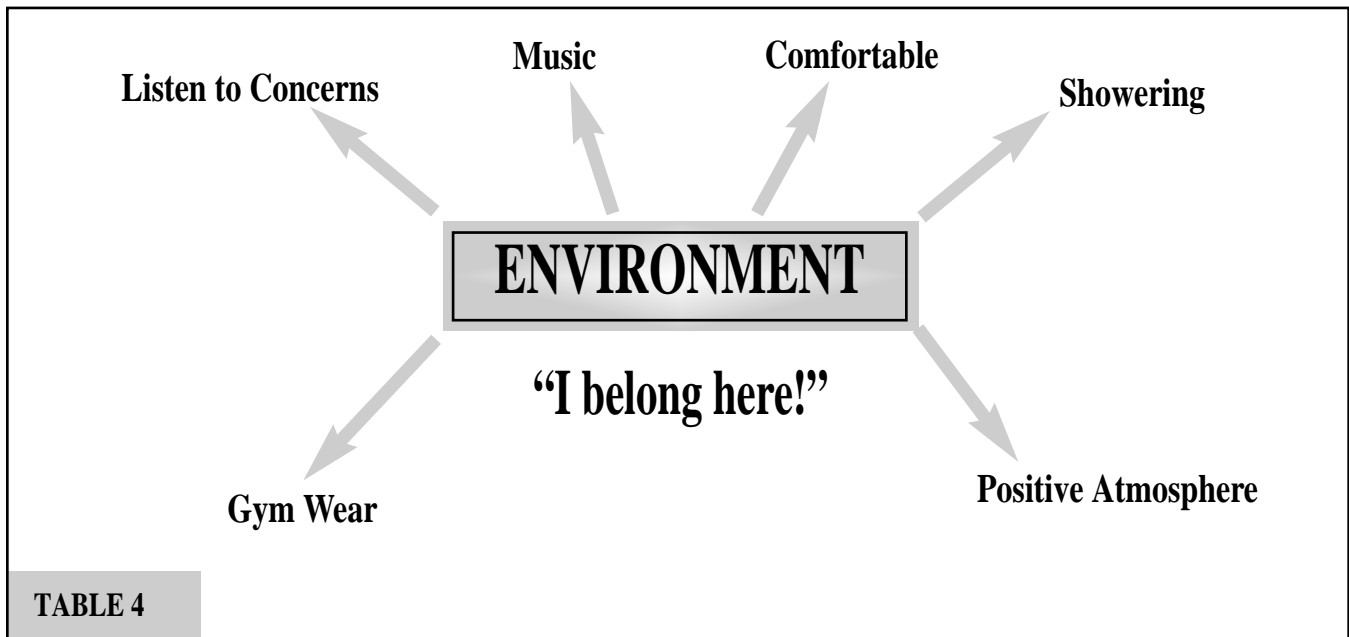
This activity proved to be an excellent way to initiate this project as it indicated to the young women in the classes that physical education *was* going to be different this year. We also wanted to give the young women an opportunity to have input into their physical education program right from the first day of classes!

GRADE 10	
<p>Negotiable</p> <ul style="list-style-type: none"> • evaluation • uniforms • areas of curriculum • type of fitness 	<p>Non-Negotiable</p> <ul style="list-style-type: none"> • changed out • 20 hours of activity • lifestyle component • wellness • self-enhancing warm up

TABLE 3

Based on the information gained from this first day and the readings and discussions we had experienced as a research team, we decided to focus our study on two major themes, the environment in physical education and providing the young women with choice in a variety of areas of their physical education program. We decided to emphasize the environment in the grade nine classes. We wanted the grade nine girls to feel like they belonged in physical education and physical activity in general; we wanted them to feel comfortable; we wanted them to walk into the gymnasium and say, “I belong here.” It was apparent that they had received a great deal of misinformation during their time in elementary schools. This misinformation seemed to come from some of their elementary teachers, and from other students and friends. We had a challenge to show them that physical education wasn’t as “bad” as they thought!

Some of the things that I tried to do are evident in Table 4 which illustrates the goals we established with the environment in physical education classes. I also made an effort to greet them as they came into the gym, learn all their names, make them feel comfortable, and really listen if they had a concern instead of just saying “Yeah, Yeah, go get changed.” The ways that I made them feel comfortable included giving them a choice of gym wear; they didn’t have to wear the Morgan Heights gym wear but they could wear whatever they wanted within reason and good taste. It also included offering them the choice of showering or not showering. I also permitted them to bring music to play during portions of their physical education classes, and I encouraged strong, confident students to help other students. I made a conscious effort, being a coach as well as a physical education teacher, to speak to the students who were not on teams. I knew how easy it was to talk to the girls I knew well. I tried to be aware of the students who may become lost, that is, the students who were not confident or vocal. I really wanted to focus on those students who often slip into the background to make sure that they had a positive experience in physical education.



The second theme that we focused upon was choice. We decided to give the young women in both grade nine and ten an opportunity for input into their physical education program and the evaluation procedures that would be used to assess their performance in physical education. The grade ten girls were given the most opportunities to change their evaluation procedures. This was done because they were aware of what a high school physical education program was all about and they would be able to implement their own changes to evaluation better than the grade nine students. The comments that I heard were:

“What do you mean - we get to choose?”

“You mean this is for real - this is going on our report card?”

I was pleased to see that the young women were quite fair with their evaluation choices. As a matter of fact they appeared to be a lot tougher than I would have been if I had evaluated them. Table 5 provides an example of how the choice offered in evaluation was implemented.

The second area of choice offered to the young women was in the area of the activities offered in their physical education program. The young women had many opportunities for input into what they wanted to do, and how they wished to be taught. A good example of this was the tennis unit. There are four tennis courts at Morgan Heights school. On one court I taught them skills and drills and stroke improvement; on another court I gave them the choice of just playing; and on the other two courts I gave them the opportunity to just hit the ball around and be active that way. All in all, all courts were filled and all the courts had a high degree of activity. I also gave them the chance to change their mind if they wanted to learn the rules one day while the next day they just wanted to play.

EVALUATION

Non-Negotiable	Self-directed warm-up10%
	Hours10%
	• outdoors
	• intramurals
Negotiable	Attitude Checklist5-20%
	<i>(was 10%)</i>
	Fitness and Lifestyle10-30%
	<i>(was 20%)</i>
	Unit Evaluation30-60%
	<i>(was 50%)</i>
	TOTAL80%

TABLE 5

One of the activities that the grade 10 students really wanted to participate in was downhill skiing. Downhill skiing had not been part of the grade ten program in the past as it had been “saved” for the Grade 11 special Physical Education program, in which only a quarter of the students enroll. So as a research team we decided that we were going to take the plunge and take them downhill skiing and it was tremendously successful. This was yet another example of us trying to demonstrate that we were listening to the young women and that whenever possible we would try to incorporate their choices into the program. I also took the young women to the Golf Dome to practice our golf skills in new surroundings. This is another example of an activity that was “saved” for grade eleven. The students enjoyed this tremendously and many told me they were going to go back with girlfriends, boyfriends or parents.

I found that I was constantly reminded that young women in grade nine and ten love opportunities to socialize. They wanted to be active but they also wanted to socialize at the same time. Therefore, as a research team we came up with the idea to take them to the river to walk around the river bank. These walks were very enjoyable and frequently culminated in a barbecue or marshmallow roast down by the Bessborough.

An idea I introduced with much success was the “Indoor Negotiable Units.” In these units we set aside a block of dates and I gave the students opportunities to choose their own activities. Each group was in charge of their warm-up, the main activities, and the cool down. In addition, the students had to be aware of any safety issues that may affect their activity; they had to include everyone so that no one felt left out and everyone had to be active. Examples of activities that the young women chose were: low organizational games, soccer, badminton, obstacle courses. Some groups took traditional activities and modified the rules so that everyone was a participant. An

interesting aspect about offering choices within the curriculum is that if some of the students didn't like something, they didn't complain because they knew their chance was coming up to choose.

Another area where we wanted to give the young women choices was in fitness profiling or fitness testing. We are always struggling with fitness testing as it has such a negative connotation for students. They always seem to come up with a hundred excuses not to participate in that class. We determined that we would offer them a choice in an effort to increase their motivation to improve their personal fitness levels.

In an attempt to negotiate this part of the curriculum, I followed the guidelines suggested by Boomer et. al (1992), and asked my students four basic questions:

1. What do you already know about fitness?
2. What do you want to know?
3. How can you find out about this?
4. What fitness activities do you want to do?

I was surprised to learn that my students knew a lot about fitness and what they should be doing. It's just a matter of them getting active, so I let them choose their fitness activity. At Morgan Heights we are fortunate to have a variety of fitness machines. The young women had a choice of a rowing machine, stepper, step aerobics, jogging, power walking or stationary bike. They evaluated themselves on their effort and participation, and they also evaluated their performance or their work effort on the rate of perceived exertion level or "going by feel." We gave them reflective questions and, if they wanted to choose a different fitness activity the next day, they did. The basic idea was to get them exposed to a number of fitness activities so that hopefully they would find one they enjoyed and would pursue.

Fitness profiling occurred three to four times per month. It was not my intent to "run" the girls or force them to do cardiovascular activities so that they became fit. The young women understood the FITT (Frequency, Intensity, Time and Type) principle and knew how to become fit. With the help of a buddy system, I wanted them to explore many ways to challenge themselves and put their knowledge into action.

We also gave them choice surrounding theoretical topics that related to Physical Education. We were interested if there were any topics that they wanted to know more about, such as eating disorders, body image, the role of the media in the objectification of women, etc. The bottom line was that the young women could choose what they wanted to learn. Once they indicated to me a topic of interest, I went to work searching for resources, identifying guest speakers and creating activities that would permit us to investigate their topics.

What Did We Learn?

The analysis of the data gained during this study was conducted in two stages. The first stage occurred while the study was in progress. To engage in action research meant that as researchers we were constantly attending to the results of our actions. Throughout the study we attempted to make sense out of all the information we were collecting. We learned quickly that information gained from our previous actions drove our future plans. This dynamic ongoing process that action research provides makes it a truly unique research method and one that we felt was very valuable to us as we worked to achieve the goals of our study.

The second stage of data analysis began when all of the data had been collected and the study was drawing to a close. All of the information gained from documents, questionnaires (group and individual), journals (student and researchers), critical incident forms and semi-structured interviews was reviewed to determine categories and emerging themes. The determination of categories began with a search for regularities: the ideas, experiences and thoughts that seemed to be shared by the young women. Merriam (1988) stressed that these categories must be internally homogeneous, all items in a single category should be similar and the categories should be heterogeneous, that is, the differences among the categories should be bold and clear. Using these criteria, the researcher responsible for data analysis identified 13 categories.

Once the categories were developed, all of the data collected was “unitized” (Lincoln & Guba, 1985). Unitizing refers to the process of assigning categories to small chunks or sections of meaningful data. As the data was broken into smaller units it became more manageable. The computer program NUD-IST was used to unitize the transcripts of the data obtained during the interviews. NUD-IST is a software package “designed to aid researchers in handling nonnumerical, unstructured data by supporting processes of indexing, searching and theorizing” (QSR NUD-IST 3.0 for Microsoft Windows user guide, back cover, 1994). The remaining data was reviewed manually with the assigning of categories occurring in the margins of pages of information.

Once all the data had been assigned categories, the identification of emerging themes occurred. A theme is often thought of as a concept or story that emerges from the data. Bogdan and Biklen (1982) suggested that when formulating themes it is beneficial to “pencil out different ways of putting things together, drawing up lists and diagrams” (p.179). The computer program NUD-IST generated numerous diagrams of relationships occurring in the data, and the researchers drew many flow charts in an attempt to determine what categories were related to each other and which could stand alone. This process facilitated the development of five themes. Each of these themes will be presented in the following section of this paper. Whenever possible, we have tried to allow the young women’s words to illuminate the key findings of our study.

Theme One: Where it all began

An area of the study that was of great interest to us was the experiences of our students prior to their enrollment in a high school physical education class. In elementary school all of the young women in the study had participated in coeducational physical education classes that were usually taught by their classroom teacher. It became apparent that the majority of grade nine students were coming into physical education with incorrect perceptions of the program and a very negative attitude towards physical education in general. Comments such as the following were abundant in discussions of their past experiences in physical education, “Last year our phys-ed teacher threatened us that gym in grade nine is going to be worse and all you are going to be doing is running.” We found it interesting that the student used the word “threatened” when discussing information they had gained about high school physical education. It made us wonder why a teacher would need to threaten students about a program and whether the teacher had any background in physical education.

In addition, the young women repeatedly reported that in elementary school, the physical education classes were dominated by boys and that their teachers appeared to have very low expectations for both the ability and participation levels of girls. A group of young women recollected that, “in grade seven we didn’t bring our stuff so we just sat at the side of the gym, about ten of us. Our teacher put us there and we weren’t allowed to do gym, it was a guy. He called us the vegetable garden.” The powerful effect that teacher expectations have on student behavior has been well documented. Turner and Purkey (1983) emphasized that “one gets what one expects.” They state that “the productive or destructive behaviors of the teacher are signals or invitations to the students’ success or failure. People respond best when they are invited to feel valuable, able and responsible” (p.12). It is clear from the statements of the young women that their experiences in elementary school were not inviting or productive.

It was not surprising to learn that many of the young women in the study admitted to not being active in elementary school physical education classes. We found ourselves wondering if this lack of participation was because elementary physical education classes were not a welcoming place for them or if they did not like the competitiveness and aggressiveness that often occurs in coeducational physical education classes. It became apparent that the young women often viewed themselves as non-entities in elementary physical education classes. It did not seem to matter to the teacher if the young women participated or not, and if they did participate it was frequently in activities selected by the young men in the classes. Thus, they were often left out of activities and many appeared to be content to take a place in “the vegetable garden.”

The debate over the scheduling of physical education in a coeducational or single gender situation is ongoing (Dahlgren, 1988, Gibbons & Van Gyn, 1994). In a timely article discussing the issue of coeducational physical

education, the American Association for Physical Education and Recreation asked for input from its members to whether or not students could reach their full potential in a coeducational setting. The feeling that girls benefit from segregated physical education was emphasized repeatedly. Myrick (1996) concludes that coeducational physical education does not allow high school students to reach their full potential. “When high school students convene for physical education, the skill level of both the girls and the boys declines. The competitive nature of the boys subdues the girls. The girls will avoid play while the boys control the activity” (p.6). Myrich (1996) noted, “Girls have the capacity and desire to work just as hard and to accomplish the same goals as boys, but this can and should be done separately. Girls feel comfortable, feel less pressure, and reap more benefits from single-sex physical education. Girls are not a weaker sex, just a different sex. Contrary to popular belief, girls don’t hate to sweat. Many other issues come into play, including sexual harassment, body image, self esteem, major physical changes, and a more severe degree of gender bias when dealing with coeducational physical education” (p.7).

Theme Two: “I Belong Here, I Fit In”

As this was one of the goals of our study it was exciting for us to learn that the young women commented frequently that they felt welcome in their high school physical education class. A member of the research team observed, “they do not only feel like they belong, they are confident about being here.” This observation was supported by the comments of the young women who explained, “I’m more confident now, I don’t feel like everyone is watching me.” It became evident that the following factors enhanced their feelings of belonging:

1. The opportunity to be with friends in a gender segregated setting.
2. Being included in class discussions and decisions.
3. Knowing everyone in the class.
4. Feeling comfortable about their skills and abilities, as their self image was enhanced.
5. The teacher knowing their names and talking to them on a daily basis.

Whenever discussion turned to past situations of not feeling comfortable or not belonging, two main issues emerged. The first was the problem of being in a coeducational physical education class. In the past, the young men in their physical education classes frequently made them feel uncomfortable by not including them in activities and making derogatory comments about their bodies or physical abilities. These findings are supported by the work of Portman (1995) who determined that the higher skilled students were more receptive to activities being coeducational and that girls in general (and mostly the middle and lower skilled girls) resented coeducational physical education classes. They named harassment and critical remarks from classmates as their reasons.

The second area of concern was the preferential treatment the young women had observed athletes of both genders receive from past teachers, “We feel left out when the teachers only talk to the people who are on the teams. Like we really have no purpose to be in the class because we are not involved, if you are not on a team, you do not get much attention.” In this study the teacher made a conscientious decision to get to know all students in the class. This was noticed by the young women and was a key factor in their positive experiences in physical education.

Theme Three: “The Teacher Makes the Difference”

A prominent factor in all of the discussions with the young women was the integral role the teacher played in their physical education experience. In all focus groups, the consensus was that the program we provided worked because of the teacher and the opportunities students were given for choice. The young women frequently commented that the teacher was flexible, she listened to them, and gave them choices. A comment frequently voiced by the young women was, “the teacher makes the difference.” Aicinena (1991) determined that teachers have a profound impact upon students’ attitudes toward physical education. “The prudent teacher would seem to be one who allows some input into classroom decision making, yet maintains control of the processes involved in instruction. Such actions would seem most likely to affect positive attitudes toward physical education” (p.21).

The fact that the teacher consistently demonstrated that she cared about all of the students in her class was noticed and valued by all of the young women. The following statements sum up the feelings of many:

She respects us and treats us better. She doesn't treat us like we are no good and lazy. She treats us like she has respect for us, she is so friendly and everything. You know what it is? She acts like she is excited about what we are doing.

She treats everyone the same cause I haven't been on a sport team yet and she treated me just the same as the girls on the team.

It is important to note that the young women did not see opportunities for choice as negotiating the curriculum, a teaching strategy, or as a research idea; they simply saw it as a teacher caring enough about them to listen to their opinions. Many recollected past experiences in physical education in which their opinions were not attended to:

I hated the other gym class but this year I like gym. I feel like I'm not being driven to do things I don't want to do and don't feel comfortable doing. This way I feel more like doing things.

This year we get choices and I like it better, because when you get to decide what you are going to do you are going to be happier about it and you are going to want to do it more. You feel more like to have done something for yourself instead of having someone tell you to do something.

Our (the class) attitude has changed so much. I mean we now have fun in gym, when we have fun we try harder. If you can choose things you know what you are getting into and you know you are going to enjoy it, cause if you don't you had a choice, so it is really up to you.

Diehl (1988) concluded that the most important step in encouraging young people to be active is the enthusiasm of the teacher to motivate the students. Students learn by example, and we need to set examples for our students. The next important step is variety. Doing the same activity and exercises every day is boring. In our study we feel we had great success by offering students choice and variety in the curriculum!

Theme Four: “We Want To Have Fun; We Want To Be Active”

The young women in the study viewed their physical education class as an opportunity to be active and have fun. It is not surprising to learn that the young women wanted to have fun in physical education; what may surprise some is that they wanted to be active! However, it is important to note that our idea of being active may be quite different from the young women’s idea of being active. To the young women, if they are participating, they are being active; whereas our definition of being active included more of a fitness dimension rather than a fun dimension.

An interesting aspect of physical education was brought to our attention in many of the focus group discussions. Many of the young women expressed the feelings that “phys-ed keeps you active, but not necessarily fit.” The young women reported, however, that physical education is different for boys. They felt that unlike themselves, young men participate in physical education to get or stay fit. This perception may be due to the fact that the program offered to the young men at Morgan Heights places a great emphasis on calisthenics and running.

We learned from the young women that if we as physical educators are going to motivate and encourage them to be active, a physical education program needs to recognize the importance of the following factors.

a. Fun – From our analysis of the data we determined that:

FUN = Being with friends + Low skill level + Everyone involved + Not hard to catch on to.

In response to the question, what is fun? The young women explained, “Well, everyone is involved, you pass to everybody, you don’t have to be good, it doesn’t involve any real skill and everyone is getting along and having a good time.” Numerous authors have debated the importance of “fun” in physical education classes. Bean and Kinnear (1989) suggested that if physical educators include fun as a goal of their programs, “there is danger of risking the educational content of physical education programs at the secondary levels” (p.19). Whitehead (1988) stated that “students in physical education may on occasion have fun, but physical education is not centrally a vehicle for trivial diversionary occupation” (p.155). From our experiences in this study we determined that such theorists are totally missing the point regarding the role that fun plays in helping young women to enjoy a positive experience in physical education. Over and over again our experiences supported the views of Vertinsky (1992) who reported that “girls often value the fun and friendship of sport and activity more than competition and achievements” (p.376). Portman (1995), in a study involving grade nine students, found that all of the students interviewed, irrespective of skill levels or gender, agreed that if largely unsuccessful, the activity was not fun and should be dropped from the curricular offerings. In addition, Portman (1995) determined that lower-skilled stu-

dents could name very few times when they were successful. Possibly because of their high rate of failure, they wanted to change the entire curriculum, largely dropping team sport, competition or increasing skill practice. All students attributed their success or continued participation in class activities to having a friend as a partner.

b. “An Equal Playing Field” – The young women repeatedly told us that they do not like the “traditional” physical education program. In their opinion the “traditional” physical education program requires a high degree of skill if one is to experience any success. The needs of a few students are met, while the majority of the students feel left out. The program is too repetitive; the majority of the activities have been offered every year in elementary school and then again in high school. The young women stressed that they wanted activities that offered most of the students in the class an “equal playing field.” They felt that such a situation could occur if the activity was new to most of the students and if the activity did not require a high degree of skill. These experiences are confirmed by Vertinsky (1992) who noted that the decrease in girls activity is especially seen in programs emphasizing highly structured and competitive sports and physical activities as opposed to recreational or cooperative activity. The curriculum should be redesigned to “de-emphasize competitive sports, shift fitness activities away from standardized performance, and increase the range of recreational activities, the active living concept implies that girls may then have both greater opportunity and the desire to become more active.” (Vertinsky, p.375)

c. “Playing the Game” – It became apparent that the young women wanted to play an activity or game without spending large amounts of time learning the skills and rules. When discussing learning skills, we learned that young women frequently equate skill learning to drills. It was interesting and exciting to learn that they wanted to learn skills, but in a modified game format. Many young women emphasized that it was not that they did not want to learn the skills necessary to succeed at an activity, they simply wanted to learn skills while playing. We wondered why this was the case and began to ask if this feeling occurred because when the young women are involved in drills, people are watching. The young women confirmed this and explained that “when you do drills too many people are inactive, therefore, you are singled out in the drill and it seems that everyone is watching you. But, when we learn in a modified game idea, no one really notices except those in your group.”

d. Variety – The young women continually expressed a desire to have more variety in their physical education program. They wanted to participate in activities that differed from the traditional sports that they had experienced for many years. For example, activities such as volleyball and basketball were not popular; however, a traditional sport such as soccer was popular. We wondered if this was because soccer met many of the criteria included in their definition of fun. Soccer contains sending and receiving skills which many of the young women can do, and to actively participate in soccer, one does not need to be highly skilled. Activities that were really enjoyed by the students were tennis and combatives. These activities were new to the students and there really were no negative

comments about them. One of the most popular units offered was a unit on low organizational games or modified games. All students greatly enjoyed these and we determined it was because they did not require a high degree of skill and everyone could be involved. There were few rules, everyone just played and was active. We frequently heard the young women say they loved these games because “they don’t involve skill.” While the young women perceived that these games did not require skill; upon closer inspection, we determined that these games did require skills but the skills were related to fundamental movements such as running, catching, throwing, dodging and evading and not specialized sports skills often found in traditional sports.

We also learned that the young women wish to participate in activities for 5 days in a row at the most. They frequently reported that they would like the activities scheduled more frequently rather than in only one block of time. “Yeah it gets boring...like why can’t we kind of break up the seven days and do it for 2 days here and 3 here and then 2 some other time.” Many young women stated that they wanted more opportunities to be active outside of the gym. They frequently commented that they wanted to go outside - but on their terms. They did not enjoy being “forced” to go outside in inclement weather. When asked what picture they would take of what they wanted to do in physical education class, many simply stated, “I would take a picture of outside.”

Related to these findings, Budris (1993) stressed that teachers need to learn new ideas to help motivate students to be physically active. “If you don’t take the time to learn new activities, how can you expect our students to try new things? If you aren’t excited and interested in the activities and skills you’re teaching, will your students care about those same items?” (p.21). Budris (1993) further comments that new activities can positively affect the atmosphere in physical education classes, “You can improve the psychological atmosphere of your classes with new activities, and you can improve the physical environment even more easily” (p.21).

e. Fitness Testing – The importance of the development of physical fitness in young people has been a concern of physical educators and many members of the health care professions for years. Many researchers believe that teachers of physical education play a critical role in the development of positive attitudes towards physical activity, and that if fitness is taught properly to students they can learn the necessary skills attitudes and behaviors to permit them to be physically fit for a lifetime (Canadian Association for Physical Education Recreation and Dance, 1993). The question that remains unanswered is: What is the best way to teach young people about physical fitness? Is it through a rigorous testing procedure that gained favor in the 1940’s and is still evident in many programs today? Is it through encouraging students to achieve their own fitness goals? Is it through simply advocating any kind of physical activity on a daily basis? Graham et. al. (1990) in working with elementary students determined that the children identified many of the activities of standardized physical fitness tests as “not fun”. These researchers pose a critical question: “Are we not causing students to associate fitness with unpleasantness and turning them off to become physically fit?” (p. 9).

Fitness testing is an area that we as a research team spent many hours discussing. One of the members of our team reported that “I really struggle with fitness testing, I think that I have changed my ideas of fitness testing pretty well each semester.” We really feel we have more questions than answers. The only things we know for certain are:

1. Most students do not like running - they see it as punishment in many cases.
“It would be better if we didn’t have to run laps. I hate running, I just feel clumsy. Now we have a choice so we can do something we don’t mind.”
2. No matter what we do, or what we call it, students still view the assessment of personal levels of fitness as a competitive situation.
3. Fitness testing does not motivate our students to get and stay fit.
4. Choice in fitness testing works!
“This is way better we get to choose the thing we want to do and she doesn’t force us to run and stuff. We work harder cause we decided to do it.”

We believe that Wolfe and Sharpe (1991) are correct in their conclusions that by forcing students to participate in fitness testing, and running in particular, we may be doing more harm than good.

We may be sending messages to our youth that running and exercise in general are forms of punishment. This connection contributes to the challenge for physical educators to promote enthusiasm for these activities and ensure continued participation outside the classroom. If we want our children to exercise outside of the physical education classroom, then practitioners in the field must make it initially attractive in the classroom. Promoting enthusiasm for fitness activities is the challenge for the physical educator. We need to incorporate the notion of fun into exercise activity as much as possible to better ensure a student’s future desire to participate (p.9).

Implications for Teaching and Learning

From our work in this study, we are pleased to offer the following recommendations for those interested in improving the experiences of young women in physical education.

1. Encourage teachers of physical education to provide opportunities for students to “have a voice” in physical education programs, e.g., offer input around choice of activities.
2. Review existing physical education programs critically to determine if the curriculum and teaching practices are meeting the goals of physical education and meeting the needs of students, e.g., review the repetition of traditional activities in compulsory physical education programs while lifetime activities are saved for optional classes.
3. Recognize the importance young women place on “having fun” in physical education classes, and that fun often means being physically active, e.g., provide opportunities for low organized and lead up games and for non-traditional activities.
4. Review the emphasis placed on skill development through drills and repetitions, e.g., consider teaching skills in game-like situations to increase participation.
5. Work on developing an “inclusive” environment in physical education, one in which all students feel like they belong and play an important role in the class.
6. Recognize the importance of student choice in the pursuit and attainment of personal fitness, e.g., provide a variety of aerobic activities (exercise bike, stepper, step aerobics) .



One of the students in the physical education class that the researchers restructured to meet the need of young women for an opportunity to be active and have fun.

Conclusion

It may appear that our journey has concluded, but in reality we journey on. As a research team we have learned that change is difficult yet necessary if we are going to grow as educators and continue to offer our students the best program possible. We have experienced first hand the importance of critically examining our professional practice, both our day to day actions and the beliefs that underlie our behaviors. Although the research project has come to a formal conclusion, we continue to meet and ask the tough questions that the young women have encouraged and continue to encourage us to ask. The following journal entries recorded by two members of the research team accurately sum up our experiences on our journey.

I think that as a result of this project I learned a great deal about myself as a teacher, and about the needs and interests of my students. The project was not without it's challenges. At times I think I gave my students too much choice. Students felt overwhelmed and needed more direction, perhaps more suggestions of options available to them. Students wanted structure, rather than leaving the negotiating wide open. When we met as a research team to reflect about this issue, we decided to continue to offer choice but perhaps give the young women a little more direction. We realized that as students they had experienced limited opportunities to have any input in their educational experiences in any subject area! As the year progressed I felt that I didn't have anywhere near the amount of negative attitudes I had in previous years. I didn't have to fight with students to get changed. It seemed that they took some ownership for their physical education classes and they knew what was expected of them and they knew that they did have choice. It's also important to know that the students didn't have the run of the class but we worked together to develop an inclusive challenging program. The last thing I want to share is a quote that I wrote in my journal. "We really have to show the young women that we are listening to them; we need to deliver when we promise something. Students remember this." Thus it is not only important to involve our students in many aspects of the program, we must actively listen and then follow through on the plans that we implement together.

As the study comes to a close you ask yourself, "what next?" As I re-read student quotes and personal reflections I am sure that we are moving in the right direction. In all my classes I continue to give students both choice and a voice. Once they become part of their education and evaluation, the students feel a sense of ownership and a sense of responsibility. As we were pursuing this research project I realized that I had uncovered more questions. This feeling continued

throughout the project and I now have more questions, as well as more ideas and more excitement for improving many aspects of my teaching. No one should back away from change; they should look for it.

The following comments of a student have inspired all members of the research team to continue to work to improve the experiences of young women in physical education classes.

One thing I have always tried doing is losing weight. I think once I have been really successful. I now have decided that my problem is not eating habits, its my level of physical activity. Since school has started I've had lots of activities going on. I have this new program we are doing in gym now. For as long as I can remember, I have hated gym and anything to do with it. However this year is different. I really am enjoying gym class, I hope that every person in gym class is given the same opportunities I have been given. Because of this program, I have learned fun activities and have been doing much better in being physically active. I doubt that I will take gym after grade ten, but at least I won't have a memory of how much I've hated it like my mom does. I'm not pressured into things I can't or shouldn't do in my personal life, or with physical problems. This new gym class has made me more interested in my own personal fitness.

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