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RESEARCH INTO TEACHING



TEACHING AND LEARNING RESEARCH EXCHANGE

Youth Yoga

Starting Off on the Right Foot –
Engaging the Active and Under Focused Learner

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Table of Contents

The Project	1
Background to the Research	
Impetus for the Research	2
Research Question	3
Purpose and Objectives	3
Data-Gathering	4
Innovative Points and Relevance	5
What We Did	6
Reviewing the Fit Fifteen Program	9
Conclusions	12
Future Possibilities	13
References	14
Appendices	
A. Teacher Rating Scale	15
B. Parental Permission Form	16
C. Parent Survey Form	17
D. Student Interview Questions	18

The Project

During a three-month period at Venture Heights School in Martensville, Saskatchewan, two teachers from the school implemented a daily physical activity session into their classroom routine. The following document shares the questions, approaches and reflections that were part of this project. Through a myriad of lenses, the teachers have researched the impact of the physical activity session on their classroom and drawn conclusions about the importance of physical education in the classroom.

Background to the Research

IMPETUS FOR THE RESEARCH

Recently, Canada's Report Card on Physical Activity for Children and Youth, published by the charitable group, Active Healthy Kids Canada, found that 90 per cent of Canadian children and youth are failing to meet established guidelines for physical activity. Physical inactivity has led to some alarming figures with regards to childhood obesity in Canada. In children aged two to five, 21.5 per cent are overweight or obese. In the 6- to 11-year-old group, the rate increases to 25.8 per cent (Shields, 2005).

Canada's Report Card on Physical Activity for Children and Youth outlines several variables that are associated with physical activity in children: a healthy body weight, physical health, mental health and even sleep health. School plays a key role in facilitating overall physical activity behaviour, given that it is an environment where children and youth spend a large proportion of their time each week.

Children who practice daily physical exercise may not only be better able to regulate their emotions, manage stress and calm themselves, studies now show that they may also choose better foods to eat and engage in more physical activity than children who do not (Sallis, et al., 2000). As the demands on students increase, daily physical activity practice could be an essential part of daily routine that will aid students' ability to deal with growing responsibilities.

Physical activity is low cost and accessible – anyone can do it. By including physical activity in each day at school, we have the opportunity to empower students to reach their highest potential in many areas in addition to physical activity. Engaging students in physical activity at a young age has the potential to teach them that being physically active is fun and can help them learn in new fresh ways. Being active is a lifestyle choice, and by opening the door to daily physical activities, education may be opening many doors for students to health and happiness.

Yoga is a healing system of theory and practice. It is a combination of breathing exercises, physical postures and meditation that has been practiced for more than 5,000 years. Although yoga evolved as meditative practice in Buddhism and Hinduism, in the Western world, a part of yoga, known as Asana, has grown popular as a form of purely physical exercise. Because yoga invokes ideals of harmony, health and balance, it “fits” well within modern ideals of health. The spiritual aspect of yoga's history and development is not a major aspect of its popular practice in Canada, America and Europe, where it has evolved as a form of exercise with many variations in technique (e.g., power yoga, cardiac yoga, chair yoga, hip-hop yoga) (Strauss, 2005).

We thought that yoga was an ideal type of exercise to introduce to the classroom because it can be performed anywhere and it does not require much specialized equipment.

RESEARCH QUESTION

The research question addressed in this project was:

What are the effects of starting the day with creative, in-class, teacher-led physical activity instruction for grade one students?

Sub-questions included:

How does this practice affect the skills that students need to be successful in the classroom? Does beginning the day with physical activity help to increase the students' ability to concentrate on tasks, focus thoughts and pay attention?

How does this daily physical activity affect the students' self-image?

What would a physically active classroom look like? How do the students act? How do they feel and relate to each other in such a classroom?

These questions were addressed by introducing daily physical activity practice into a classroom for children aged five to eight. There was one classroom involved in this three-month long study with two teacher-researchers, Michelle Lockinger and Chantelle Kinakin.

PURPOSE AND OBJECTIVES

The purpose of the study was to gather data on the direct influence of daily physical exercise on the students, particularly with respect to any change in their ability to concentrate on tasks, focus their thoughts and pay attention.

Data-Gathering

APPROACHES AND METHODS

The basic methods and activities used to compile and analyze data included:

- 1) student journals,
- 2) daily observations by the teacher-researchers of student skills and participation,
- 3) parental feedback, and
- 4) pre- and post-interviews of students.

STUDENT JOURNALS

Students were asked to journal two to three times a week about their feelings about the Fit Fifteen. Journals included both writings and drawings of how the students felt about the Fit Fifteen activities they had just completed. Journals were considered to belong to the student, but sharing was encouraged to inform both the class and the action research process. Permissions were obtained from both students and parents before student data were used in reports, presentations and publications on the research.

DAILY OBSERVATION OF STUDENTS BY THE TEACHERS

The classroom teacher kept a record of student involvement in the physical activities using a rating scale for participation. The rating scale enabled the teacher-researchers to reflect on how participation in physical activity impacted the student immediately after the Fit Fifteen and throughout the rest of the day. The researchers compiled and interpreted the results recorded by the classroom teacher.

PARENTAL FEEDBACK

Parents were welcome at any time to participate in the Fit Fifteen with the class. They were invited to share their thoughts about the Fit Fifteen through a classroom communication book that was rotated among the homes of the students. Parents were asked for permission to use comments that were potentially helpful in completing the research.

PRE- AND POST-INTERVIEWS OF STUDENTS

Each student was asked the following questions for the pre- and post-interview:

1. What does being active mean?
2. How do you like to be active?
3. Do you think being active could help you learn new things? If so, like what?
4. Do you like to be active?

Innovative Points and Relevance

The teacher-researchers developed an innovative physical education approach to use with primary students, called the Fit Fifteen, that they felt had the potential to enhance student interest in physical activity. The Fit Fifteen involved the development of student-led, yoga-based activities and other strategies to keep students motivated and active. These activities and strategies will be of interest to primary teachers and parents.

The teacher-researchers believed that it is crucial for all people to be aware of how their own physical, emotional and mental beings relate to each other and to understand the language that is underlying their particular health patterns, good or bad. Such awareness is crucial to living a holistic and a healthy life. If all able humans took responsibility for their own health, it would have a huge impact on the way people live.

In our view, teaching children to enjoy being active in a busy world was teaching them to make time for their own well-being. It is natural for children to be physically active, but as our schedules get busier and busier in today's world, it is harder and harder to make time for physical activity, even though such activity should really be a priority for all children if a long, healthy life is a goal for all. The real value of this study lay in its attempt to show children that being active is so important and so much fun that people will choose to do it every day. Participants were encouraged to continue physical activity in their daily routines outside the classroom and the school.

The teacher-researchers believed that if their project indicated students do enjoy daily physical activity, and it increases their ability to focus and learn, then this research would provide teachers and parents all over Saskatchewan and Canada with the knowledge that taking even 15 minutes for daily physical activity in the classroom can really benefit students.

What We Did

OBSERVATIONS OF MICHELLE LOCKINGER, CLASSROOM TEACHER

The class and I started the project by having a few classroom discussions about exercise and how we feel during and after exercising. The first discussion revolved around things we do inside and outside of school to stay active. We created an activity chart that included things such as hockey, soccer, swimming, basketball, baseball, dancing, gymnastics, playing tag, tobogganing, building snowmen and going for walks. We made sure to include both structured and unstructured activities. We ended the discussion with determining how often we exercise compared to how often we watch TV or play video games.

The second discussion revolved around types of exercise and how each type of exercise improves our bodies. We discussed exercises that increase our heart rate. We brainstormed and experimented with movement that made our hearts beat faster. We talked about the importance of cardio exercise and how it makes our heart stronger. Following that discussion we talked about exercises that work our muscles and make them stronger. We brainstormed and experimented with strength-building exercises. Finally, the students and I discussed exercises that help us stretch our muscles and exercises that create better balance.

After we talked about the four main types of exercise (cardio, strength training, flexibility and balance), we then moved our discussion to how practicing these types of exercises can help us improve at sports and activities we do in and out of school. We revisited the chart we made and went through the sports and activities that were important to the students, discussing how practicing these four types of exercises could help them improve their performance in their games or activities.

The fourth discussion revolved around how exercise made us feel. After a trip to the gym, we discussed and charted how our bodies and minds felt after moving around. Students said things such as: gives them more energy; they feel calmer; they feel stronger; they feel more ready to listen and learn.

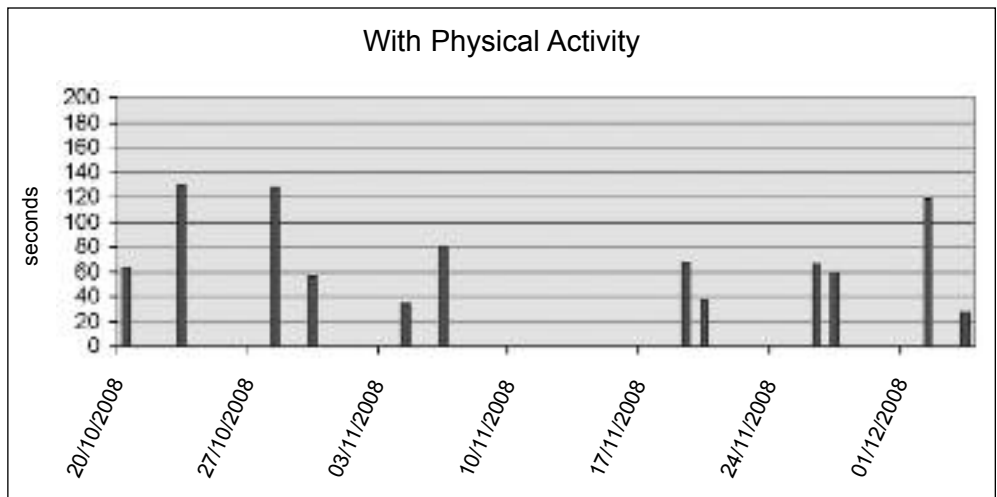
Finally we discussed yoga and how yoga is a type of exercise that will make our bodies stronger, more flexible and better able to balance. We revisited our charts and linked the benefits of practicing yoga to helping us improve our bodies, how we feel and our performance in sports and activities.

After our discussion about yoga, we started doing yoga! Each day we practiced yoga first thing in the morning. The room was dark and relaxation music was playing in the background. Students got into the routine of quietly coming into the room, finding their towels and practicing breathing. We began each practice with a two- to three-minute visualization activity. Students were asked to imagine themselves on a warm beach, watching clouds float by on a spring day or animals they might see on an African safari ride. After giving them time to breathe, relax and focus, I introduced a new pose each day. The first week we worked on breathing poses; the second week we practiced twists; the third week we did power poses; the fourth week we focused on sun salutations; the fifth week we practiced partner poses; the sixth week we did partner poses; and the seventh and eighth weeks we had student-led yoga. During the final two weeks, students were able to pick and practice favourite poses we learned during our study of yoga. We ended each yoga session by moving into a relaxation pose and completing a self-esteem exercise. We congratulated ourselves for taking

time out of our day to exercise, we practiced positive self-esteem statements and we took time to go around the room saying things we were good at or complimenting others on things they were good at.

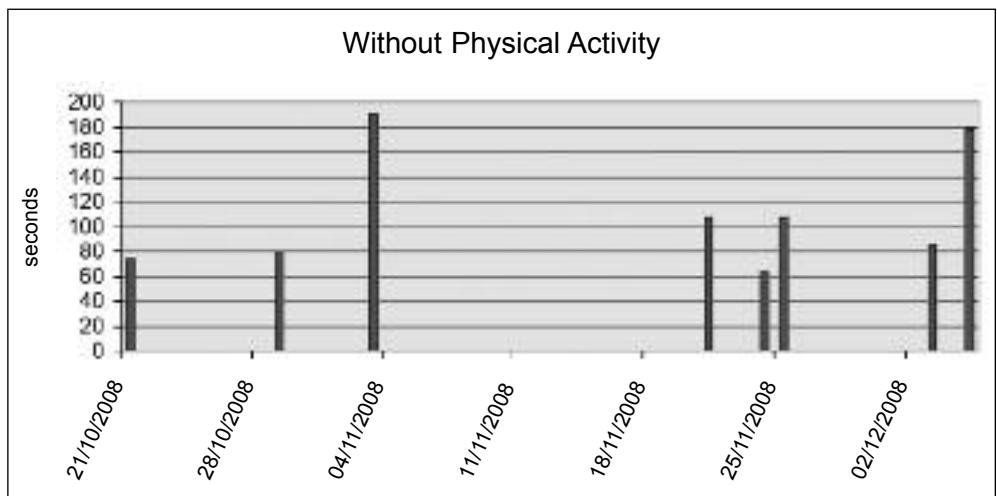
After each yoga practice, students were asked to return to their desks to journal about the yoga session and how it made them feel. Students could write about anything they chose. Students could choose to do an illustration, text or both. The class was given 15 minutes to complete an entry. The students were timed in this activity using a stop watch to determine how long the transition time was from the time we stopped yoga and the journal instructions were given to the time it took them to get settled into their desks to write (Figure 1, below).

FIGURE 1: NUMBER OF SECONDS TAKEN FOR CHILDREN TO SETTLE TO JOURNALING AFTER PHYSICAL ACTIVITY



On non-yoga days students listened to a morning read aloud and were asked to journal about what we read that day. Students were timed on these days as well. Students were timed on the transition time it took to get back to their desks and journal about the day's story (Figure 2, below).

FIGURE 2: NUMBER OF SECONDS TAKEN FOR CHILDREN TO SETTLE TO JOURNALING WITHOUT PHYSICAL ACTIVITY



We noticed a trend towards reduced transition times on yoga days compared to non-yoga days; however, the data gathered are suggestive rather than conclusive. There was potential for bias because the timer was not blinded to whether it was a yoga day rather than a non-yoga day. In addition, other factors than physical activity may have affected the time taken on some days. For example, the transition times could have been affected due to the fact that students had more things to do before journaling on yoga days. Students needed to put away their towels, get their shoes, and return to their desks.

However, it was clearly noticeable to me as the teacher that there was a big difference in the mood of the room on yoga days. Students were better able to sit in their desks and journal on yoga days. They could concentrate for longer periods of time and were more on task after the 15-minute yoga class than on non-yoga days. I also found the students to be more patient, understanding and respectful of each other.

The 15-minute yoga practice is definitely something I will continue in the classroom. It is a safe and effective way for students to get the exercise they need without the need for expensive equipment or gym time. It provides them with a chance to center and focus their minds, and it provides them with the much needed time to breathe and relax in today's busy world.

Reviewing the Fit Fifteen Program

THE STUDENTS SAID . . .

One week prior to beginning the fitness program, the teacher-researchers interviewed students to gather their thoughts regarding physical activity. A sample of our pre-interview questionnaire may be found in Appendix D. Student responses to these questions are given below.

- ... being active means using up all of my energy
- ... being active means moving around
- ... being active means playing hockey, doing gymnastics, dancing, basketball

- ... I like to play hockey
- ... I like to dance with my sister
- ... I like to go to the park
- ... I like to ride my bike
- ... I like to swim at the lake

- ... playing hockey helps me learn to skate better
- ... I'm not sure what being active can help me learn

- ... I like doing things outside with my Dad
- ... I like swimming
- ... I like being active

One week after we completed 10 weeks of the program, we interviewed students again using the same questions as outlined in Appendix D for a post-program interview. Student responses to the questions after 10 weeks had elapsed are given below.

- ... being active means taking care of my body
- ... being active means walking
- ... being active means jumping jacks
- ... being active means running and jogging
- ... being active means doing exercise
- ... being active means getting stronger
- ... being active means using lots of energy
- ... being active means running on a treadmill or lifting weights
- ... being active means stretching
- ... being active means being creative with energy and not just sitting around all day
- ... being active means doing things that are good for you

- ... I like to be active by doing jumping jacks
- ... I like to be active by playing hockey
- ... I like to be active by riding my bike with my Dad to the bakery
- ... I like to be active by going outside and playing with my friends at the park
- ... I like to be active by stretching

- ... I like to be active by learning to skate
- ... I like to be active by running outside in the summer but not in the winter
- ... I like to be active by running on the treadmill or lifting weights at home
- ... I like to be active by doing pushups and playing hockey
- ... I like to be active by doing yoga with my sister
- ... I like to be active by doing yoga and dance and ballet

- ... being active helps me learn to do yoga
- ... being active helps me learn to bake
- ... being active helps me learn about playing new animal games
- ... being active helps me learn to skate
- ... being active helps me learn to do the monkey bars
- ... being active helps me learn how to get strong
- ... being active helps me learn about my body and growing
- ... being active helps me learn to do math
- ... being active helps me learn to listen and how to do the splits
- ... being active helps me learn to try new things
- ... being active helps me learn to do new things

- ... I like being active when I bike with my Dad
- ... I like being active when I play hockey
- ... I like being active when I go to dance
- ... I like being active when I play outside
- ... I like being active when I do yoga
- ... I like being active when I play running with dog
- ... I like being active when I play at recess

THE PARENTS SAID ...

Parents were asked to complete a parent comment form at the end of the 10-week program. Parents were asked four questions and given space to comment freely. A copy of the parental survey form is provided in Appendix C. Given below is a summary of the parents' responses.

Does your child talk about yoga at home?

- ... we discussed it together but it was not something brought up on her own
- ... yes
- ... yes, quite frequently; it is important to her
- ... she lights up when she knows she will be doing yoga that day at school
- ... yes, we even joined a mother/daughter yoga class in town
- ... occasionally

Has your child shown you any yoga poses at home?

- ... yes, she has; she is very excited about them
- ... I often do yoga and now she joins in
- ... yes, the tree pose

- ... yes, has shown many
- ... yes; she has shown poses, talked about how to do each pose and what it is called
- ... yes, cobra, butterfly
- ... yes, several

Do you think yoga has made a difference in your child's ability to focus on tasks either at home or at school?

- ... hard to say
- ... yes, any movement, especially yoga, is important for their minds and bodies
- ... somewhat
- ... yes, definitely; she has a great attitude about yoga; her concentration level has improved
- ... she has shown pride in being involved and demonstrating yoga for her family

How many times per week does your child partake in 15 minutes or more of physical activity in addition to activities during school time?

- ... 3 organized activities that are 1 hour each
- ... 2-3 at least
- ... 3 times at least
- ... 5 times hockey and outdoor play
- ... we have something every day after school
- ... 5 times, 100 if you count fighting with her brother

Parent Comments

- ... she has developed how flexible her body is
- ... I think this was a fantastic experiment; I would love to see yoga be a daily part of our child's day at school; it could only be a benefit
- ... I think it's a great way to get physical activity without a gym
- ... I do like my child participating in yoga; I think that there are many benefits and would like to see it continued
- ... any kind of physical/mental/spiritual activities are always beneficial; We appreciate all your hard work
- ... it is a fantastic program and should be done all year
- ... I think it was great for these kids to help them do stretches, because we do not stretch enough
- ... great experience, highly recommend it

Conclusions

Our teacher research group reached a number of conclusions based on our own reflections and reactions to the interviews, surveys and professional development.

1. As teachers, we found this project re-energizing; it reaffirmed our knowledge that students need to be physically active every day in order to optimize their learning, and it strengthened our commitment to supporting them in daily physical activity.
2. Our research findings indicated that creative in-class, teacher-led physical activity is an important part of a student's day and does create optimal learning opportunities.
 - Starting each day in the classroom with physical activity was a positive learning experience that resulted in students reaching their best individual potential, including better focus and attention to tasks on days when physical activity was implemented. It fostered a positive learning atmosphere that led to higher student productivity. Being physically active daily gave students skills that they needed to be successful in the classroom; for example, the students were better able to concentrate on tasks, focus thoughts to complete an assignment and pay attention during instruction times.
 - The students' self-image was affected by daily physical activity as the students developed a better understanding of how their bodies worked and how taking care of our bodies could make them stronger. For example the students took great pride in demonstrating yoga poses to family members and friends.
 - Beginning each day with a variety of physically active activities provided an opportunity for students to develop trust and respect for one other and build a community of physically active learners.

Future Possibilities

Future possibilities growing out of this project could include a school-wide implementation of a daily physical activity program. This project created many staff room discussions on physical activities that might be done in the classroom. The teacher-researchers enjoyed sharing ideas of how to incorporate short daily physical activities with staff and students.

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APPENDIX A: Teacher Rating Scale

Focus/Physical Activity Rating Scale (by teacher)

Focus Student _____

Teacher _____

Date _____

To be completed by classroom teacher

Focus	Rarely			Frequently			
Is student focused during the physical activity session?	0	1	2	3	4	5	6
Does student show improved focus in the classroom the hour immediately after the physical activity?	0	1	2	3	4	5	6
Does student show improved focus throughout the day following the physical activity?	0	1	2	3	4	5	6

APPENDIX B: Parent Permission Form

Parental Permission Form for The Fit Fifteen

Hello Grade One Parents,

This year we have the exciting opportunity to take part in a classroom study of the benefits of being physically active every day. This study will involve only 1L and the findings may be shared all over the world. The research will involve Mrs. Lockinger and Miss Kinakin and is made possible by a grant that they have received through the Dr. Stirling McDowell Foundation for Research into Teaching. Student participation in the research part of the project is voluntary and a student may withdraw at any time.

As part of this study we would like to share information and insights that we gather from:

1. Student journals
2. Student photos
3. Student video
4. Student data

With your approval, this information gathered from your child will be used in the development of our final report to the McDowell Foundation, which will be posted on the Foundation's website so that other teachers may access it for years to come. All information from and about students will be kept confidential and presented in a way that does not identify students by name.

If you approve of this information being shared, please sign the permission slip below and return to the school. Please note that you may withdraw your child from the research being collected on classroom physical activity at any time.

There will be an information evening on Tuesday, September the 12th at 6pm in the VHS library. Please come ready with any questions or concerns.

Sincerely,

Miss Kinakin and Mrs. Lockinger

I _____ give permission for my child _____ to participate in the journaling, photos, teacher-collected observations and interviews pertaining to the research project on being physically fit in a grade one classroom. I understand that this information will be shared for research and educational purposes only.

(Parental Signature)

APPENDIX D:
Student Interview Questions

Youth Yoga
Starting off on the
Right Foot – Engaging
the Active and Under
Focused Student



Parent Survey Binder

Student _____

Pre- and Post-Interviews of Students

Each student will be asked the following questions for the pre- and post-interview:

1. What does being active mean?
2. How do you like to be active?
3. Do you think being active could help you learn new things? If so, like what?
4. Do you like to be active?

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