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Daily Physical Activity

General Information

Age Range: Grades 7-8

Duration: 60-75 min

Materials:

- Prop cards and matching props
- Additional Props (ping pong balls, balloons, foam balls, hacky sacs/bean bags, soft Frisbees, masking tape, small butterfly net, etc.)
- Action Cards
- List of Animals
- Worksheets (for activity 2) & Pens/pencils

Set Up (Before You Start the Workshop):

Set up a simple obstacle course than can be run by 3 teams simultaneously.

Introduction (5 minutes)

- **Hi everyone! My name is _____ and I am a volunteer from Let's Talk Science at the University of Guelph. I am a student/staff/etc at the University of Guelph and I study _____. I chose to study _____ because _____ (or I knew that I wanted to be a scientist when... or one interesting thing about my work is...)**

  Maybe tell them what your favourite hobby is, or your favourite Disney movie, or if you watch hockey or have a pet. Give them once piece of info that will help them realize you're just a normal person!

- **We are here today in partnership with Wellington-Dufferin-Guelph Public Health to talk to you about the Daily Physical Activity requirement that is in place for all elementary schools in Ontario. Who here knows what the DPA requirements are?**

  Every student should take part in 20 minutes of physical activity every school day, so on days where you guys don't have gym class, you should still be doing something active and not just sitting at your desks all day.

- **We want to hear from you guys: Do you actually get 20 minutes of activity every school day? What kind of activities do you do in the classroom? Are they fun or are they kind of boring? What's your favorite activity? What's your least favorite activity?**

- **Some educators are concerned that you aren't getting the 20 minutes of activity you need, probably because it's a bit challenging to think of things to do outside of the gym, and classroom activities aren't all that exciting. Today we're going to work on changing that!**

- **First, we're going to do an activity to show that physical activity is important and helps you in more ways than we might realize.**

Activity 1: Demonstrating the Benefits of DPA (15-20 minutes)

- **Before we get started, does anyone know how to take their pulse? We're going to measure our heart rates before and after we do this activity and see how different they are.**
- Show students how to find their pulse: two fingers on the inner wrist or side of the neck. Make sure they don't use their thumbs! (Why? Because your thumb has a pulse point of its own that confuse them during counting.)
- Students will count the number of pulses or beats they feel during a 10 second interval, as timed by you. They then multiply the number they counted by 6 to get their heart rate in beats per minute.
- Split the class into 3 groups.

  Optional Modification: If you only have 60 minutes, get 9 student volunteers (and make 3 groups of 3) who would like to run through a simple obstacle course and answer a math question at the end (a simple one-digit by one-digit multiplication question will do).

Group A	**Group B**	**Group C**
Represent students that engage in DPA and have healthy bodies and minds	Represent students without the <u>physical</u> benefits of DPA	Represent students without the <u>mental</u> benefits of DPA
Before each student starts the course, they must:		
Do 20 jumping jacks	Put on the props	Memorize a list of animals
When you yell "go":		
1st student can start the course immediately 2nd student can start their jumping jacks. They must wait to start the course until the 1st student finishes the course (by answering the math question) 3rd student must wait to start their jumping jacks until the 1st student finishes the course, at which point the 2nd student starts the course	1st student can start untangling themselves 2nd student cannot start untangling themselves until the 1st student <u>finishes</u> the entire obstacle course (by answering the math question) 3rd student cannot start untangling themselves until the 2nd student <u>finishes</u> the entire obstacle course (by answering the math question)	1st student should pass the list of animals to the 2nd student and then start the course 2nd student can begin memorizing the animals. They must wait to start the course until the 1st student finishes the course (by answering the math question). Just before student 2 starts the course, they can pass the list to the 3rd student. 3rd student can begin memorizing the animals when the 2nd student starts the course

To finish the course:		
Student can answer the math question immediately	Student can answer the math question immediately	Student must recite the animal list (in any order) before they can answer the math question. (Try to get them to list as many animals as they can remember, but if it's taking too long, you can let them answer the math question)
Remind the students to measure their heart rates again.		

- Have one volunteer at the end of the course for each group to ask the math question, and then remind the students to measure their heart rates again. Recruit a teacher if you are short on volunteers. Encourage students to cheer on their teammates.

- **So what did you notice about your heart rates?**
  Heart rate increases as the level of physical activity increases. Students will have different resting and active heart rates.
- **Which team performed the best?**
  Ideally, students in group 1 should have finished the course the fastest, while students in group 2 were slowed down by being tangled up in (props), and students in group 3 were slowed down by having to recite the list of animals.
- **You guys in group 1 take part in daily physical activity regularly, and because of this, your bodies and minds were ready! You were quick on your feet and your minds were sharp.**
- **Group 2: you guys don't take part in daily physical activity very often, so your muscles were stiff and your body just wasn't ready to be active again, which slowed you down.**
- **And group 3: you guys don't take part in physical activity either. Your minds were all boggled down with irrelevant things because you spend so much time looking at cute animal videos on the internet, so you had a hard time getting into the swing of things with your math class.**
- **Hopefully you guys can see that daily physical activity helps both your body *and* your mind. There is actually a lot of research showing that students who are active, do better in school! They have better grades and they're more confident. And you guys were cheering for your teammates as well—that's great! Playing sports and being active is a great way to make friends!**

Activity Two: Invent a Sport (30-35 minutes):

- **Now we're going to have some fun inventing brand-new sports! You guys will work as a group to create a fun activity using the prop and action that you choose randomly. You can use any additional props in this container, just be sure that every group gets to use some stuff.**
- **Be creative! It can be a team sport, or an individual activity—adding some friendly competition or personal goals usually makes activities more fun. If you want to come up with a sport that can be used for DPA, all you have to do is make sure the sport can be played in 20 minutes, and that it gets your heart beating faster and makes you breathe a bit heavier.**

- **Be sure to practice it a bit, because you'll be showing us what you came up with when you're done!**
- Divide the students into 4-5 groups and have each group pick a prop card (blue) and an action card (green). Give each group a worksheet for brainstorming and keeping track of the rules of their sport. Allow 20 minutes for the groups to develop their sports, then 10-15 minutes for each group to briefly describe and demonstrate their sport.

Activity Three: Pay-It-Forward Surveys (remaining time):

- **Hopefully you guys have learned a lot today about how DPA is important for both physical health and for helping you learn in school, AND that DPA can be fun! But you guys shouldn't be the only ones with this knowledge – you should pass it on to your classmates! What are some different ways you guys could share what you learned today?**

  Ask students what they want to do for DPA activities, make posters about how DPA is good for you, demonstrate new activities, come up with themed activities for holidays or favorite movies, etc.
- **A lot of the time, the best way to solve a problem is to figure out what's not working. If students and teachers aren't doing the DPA requirements, it would be great if we could know why – that way, we should be able to come up with solutions to make physical activity more enjoyable for everyone. Think of some questions you could ask a student or a teacher to find out what their opinions are about DPA.**
- Divide students into 2 groups. One will come up with questions to ask students, and the other will come up with questions to ask teachers. Give each group about 5 minutes to come up with different questions, then have each group share all (or some, depending on time) of the questions they came up with.
- **Because you guys got to hang out with us this morning/afternoon and have fun, we're going to leave you with a task. We'd like you guys to work small groups and share what you learned with another class. You should come up with two surveys: one for the teacher and one for the students. You can use the questions we just shared or you can come up with your own. The survey should be fairly short, maybe 3-5 questions, with some room for people to write down any additional thoughts they have.**
- Pass these surveys out to the class and then look over the answers that the students and teacher gave.
- **We'd also like you to talk with your teacher about the answers that you got from your surveys. Maybe talk about what was the most common answer for one of the questions, or what the most common concern was. Discuss as a group what you've learned about how teachers and students feel about DPA, and maybe share your findings with the principal. The more we talk about what we like and don't like about DPA, the more we can think of ways to fix the issues and make DPA fun for everyone!**

Invent a Sport Prop and Action Cards

Prop Cards	**Action Cards**
Jump rope	Must keep one hand on the ground at all times
Bean bags	Can only move backwards
Hula hoop	Must waddle like a penguin
Sun hat	Must act like zombies
Bouncy ball	Must hold hands with at least one other person at all times
Rubber boot	Cannot have both feet touching the ground

Invent a Sport!

Group members: _____

_____

Sport name: _____

Team or individual sport? _____ Number of people per team: _____

Equipment required: _____

_____

_____

Sport description: _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

How do you win? _____

_____

Special rules: _____

_____

_____

_____

_____

Safety concerns: _____

_____

_____

_____

Daily Physical Activity Survey

We are students from the _____ class and we recently took part in a workshop about Daily Physical Activity. One thing we learned was _____

_____

_____

We are currently looking at ways to improve Daily Physical Activity at our school and we would like to get your opinion. Please answer the following questions and we will come by again to pick them up.

Question 1:_____

Answer:_____

_____

Question 2:_____

Answer:_____

_____

Question 3:_____

Answer:_____

_____

Question 4 (optional):_____

Answer:_____

_____

Question 5 (optional):_____

Answer:_____

_____

If you have any comments you would like to add, please write them here!

_____

_____

_____

_____

_____

DPA Workshop
Teacher Resource Sheet

Follow-up task:
Students should work in small groups to reach out to as many other classrooms as possible and share what they learned about DPA. They should develop two surveys to bring to the classroom:

- One to get feedback from the teacher about their opinions on how DPA is currently being implemented
- One to get feedback from students about their opinions

Before handing out the surveys, the groups should talk briefly to the class about what they learned from the workshop about the benefits of DPA (physical, mental, social).

As a class, have the students that participated in this activity talk about their findings from the surveys. They could figure out the most common answers, or mean scores (if they asked a 'rate your enjoyment of DPA on a scale from 1-10' type question). See if they can identify the most common problems or concerns that students and teachers have for the way DPA is currently being run, and have them brainstorm some possible solutions.

Some suggested activities to pass on the knowledge gained today:

- Look over the results from the surveys for a particular class and match an activity to demonstrate to the classroom. Revisit the classroom and demonstrate their chosen activity
- Have an activity demonstration day during recess or lunch where students demonstrate one of their invented sports or activities, and encourage other students to try
- Develop a simple 'project summary' to give to the principal, showcasing their findings from the surveys (from all classes, or just one class as an example) and some possible solutions
- Make a goal-tracking sheet for teachers to put on their doors so the class can record and keep track of their DPA activities for a week/month
- Come up with a playlist of fun, clean music for teachers to play on their computers (using YouTube, for example) during DPA
- Create a friendly school-wide competition to see which class can complete a silly obstacle course the fastest
- Suggest a physical activity that the entire school can participate in at once and try to break a Guinness World Record (http://www.guinnessworldrecords.com/set-a-record/record-services-for-non-corporates/student-engagement/)

Prop Cards	Action Cards	Animals
Jump rope	Must keep one hand on the ground at all times	Mouse Cat Dog Lion Zebra
Bean bags	Can only move backwards	Elephant Monkey Whale Dolphin Penguin
Hula hoop	Must waddle like a penguin	
Sun hat	Must act like zombies	Parrot Cat Tiger Turtle Shark
Bouncy ball	Must hold hands with at least one other person at all times	Snake Owl Dolphin Penguin Moose
Rubber Boot	Cannot have both feet touching the ground	