**Activity Guide for Sled Dog harness**

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**Introduction**

The sled dog activity was developed out of a need to meet NASPE Standards # 4 (Fitness) and #5 (Social-Emotional) for total body fitness and fun team building activities, that even lower elementary students could derive benefit. I was already doing a one-on-one activity called the magic carpet ride/the sleigh ride but thought a team approach to be more fun and yet meet the need for children who weren’t strong enough to pull one-on-one. I came upon a book entitled “Elim The Determined Athlete” in my travels and decided the sport of mushing to be the perfect activity to accomplish these goals. Besides the above mentioned book (1st-2nd grade level) there are numerous children’s books about mushing that appeal to students up through grades 7 and 8. As I started to use the prototype, which I designed from webbing and canoe rope, I realized that the harness activity would lend itself perfectly to an adventure approach for middle and high school age students. I called this adventure activity “The Iditarod Challenge”. The problem solving initiatives associated with this activity were limitless.

The harness lends itself to multi-age use, is simple in design, accommodates up to seven students per harness, lends itself to both indoor and outdoor use with no modifications and uses a rug square (indoors) or plastic saucer (outdoors on-snow) for the rider (musher). The fitness benefits are tremendous, the activity is fun and thought provoking and the cultural aspects of the sport, as related to the state of Alaska and its native people, are many.

**Product Use**

The product is used to reenact a dog team pulling a sled as in the sport of mushing. Students stand on each side of the webbing, where the handles are located. Thus you
have two dogs (students), one on each side of the webbing for the lead dog position (front handles), there are two dogs (students) beside the middle two loops and we call these the “mid-dogs”, and two dogs closest to the musher (rider) are called the “wheel dogs”, one on each side. Students pull the musher up and back in the gym, around a serpentine course or, as in the case of older students (MS/HS), around a challenge course. At various checkpoints dogs and musher are switched so all students have a chance at each of the positions. For the older students, the checkpoints can also represent various real life challenges they must solve in order to move on. You can accommodate up to 4-5 teams at once depending on the size of the gym. Outside, in the snow, you can accommodate classes of almost any size. The harness and saucer can also be used on sandy surfaces like a beach with all of the same benefits of a snow medium.

**Objectives**

The harness activity targets development of various health related fitness elements especially muscle strength, muscle endurance and cardiovascular endurance. It also promotes inquiry based thinking where students not only have to deal with the physical challenges but various problem solving issues that relate to safety, team cohesion, how to avoid entanglement, how to turn the harness and switch positions. It promotes team building elements even at a young age. This is one activity in which young children can achieve success when working in a larger group (5-7 students). At the high school/middle school levels, students can effectively solve team challenges which replicate real life scenarios as experienced in the Iditarod. This activity assists in meeting many grade level benchmarks for both NASPE Standard #4 Fitness and Standard # 5 Social-Emotional. Assessment techniques can accompany these activities and give evidence of student performance and achievement. Heart rate monitors and step counters are easily used by the participants to measure fitness changes and give evidence to perceived exertion versus actual exertion.

**Games and Activities**

Prior to the activity being presented in class for elementary grades, read the book, *Elim the Determined Athlete*, by Joan Jackson. Integrate this activity with the classroom teacher or librarian so you do not loose activity time in the gym. For older students consider books by Jack London or many of the authors listed on the Iditarod website under the teachers section. There are many other resources on the Iditarod Webpage, [www.iditarod.com/teachers](http://www.iditarod.com/teachers). If you need any further resources contact Diane Johnson at [djohnson@iditarod.com](mailto:djohnson@iditarod.com). Diane is the educational director for the Iditarod. I also want to thank the Iditarod Association for their permission to use the “Iditarod” name and for offering their resources to all of our physical education professionals. High School Teachers may be interested in the health connection to the Iditarod and include a challenge that requires processing about dealing with cancer. Susan Butcher lost her battle to breast cancer just recently and was a three-time Iditarod winner and is originally from Cambridge, MA. Check out the Susan Butcher link for the “Family Center” on the Iditarod website.
**Sled Dog Sprints**

Construct a start/finish line using cones or lines and be sure to leave a buffer zone between the end lines (cones) and the walls (10’ minimum). Set harnesses on the floor with enough harnesses to accommodate the entire class (usually 2-4 harnesses). Explain safety rules and game constructs to the class. Then line up each student at a position standing next to the harness, adjacent to a handle or loop. When instructed, students will pick up handles and hold with hand closest to webbing. Musher sits on carpet square and holds both handles (different color than all other handles). Musher places feet, spread apart, into corners and flat on carpet. Keep hands along side knees which are bent. The musher should counter the pull force by leaning back slightly. On a signal all teams commence pulling and listen and respond to directions from musher (gee/haw). The word “gee” means go and the word “haw” means stop. These are real life terms used by mushers in the sport. The musher is responsible for his/her safety and should let go of the handles if they tip or turn sideways. Dogs must go back to the musher and continue from there. Once a team pulls to the opposite end of the gym, the team turns the harness around and the musher must reposition the carpet by picking it up and moving it to the end line or cone. All participants change positions as instructed by the teacher and commence pulling once they have a new musher and the musher has given the command. Continue until all participants have had a turn. If one team has fewer participants as compared to another team or teams, the team short handed must pull an extra turn to keep things even. If a team has fewer than 6 dogs, leave the mid-dog position(s) open. Always have teams do a walk though and start with a fast walk for the first set of sprints.

*Sprint Diagram*

* The teacher must continuously monitor the activity to be sure all safety issues have been reinforced (musher safety and team going off course).
**On-Snow (Sand) Saucer Sprints**

On-snow sprints are just like sled dog sprints except a saucer is used for the musher to sit on and the students pulling must run in the snow. This is an invigorating and exciting activity. Be sure children know how to regulate comfort level by dressing in layers. This activity can be done with just an inch of snow or with deep snow. If snow is deeper than 4", be sure to pack out the tracks first with a sled or snow shoes. Running in the sand will have even more strength benefits and aerobic demands so don’t have your start and turning lines too far away.
**Serpentine Pulls**

Serpentine pulls entail setting an “S” shaped course in the gym or outside in the snow. Teams will start with a staggered start time or use a shotgun start so no one is standing around. Speed is not a factor in this activity. The objective is for each team to have a successful run through the course without knocking any of the cones over or off of their designated point. Be sure to place a piece of tape under the cones so if they are dislodged they can be replaced. If outside, place a 3” poly spot underneath. Each time a team meets success or dislodges a cone change positions of participants so that each gets to be a musher. Penalties for hitting a cone can be either starting again or a point deduction from their score for each cone hit. Start with an arbitrary score, say 10 or 20 points.

**Serpentine Course**

![Serpentine Course Diagram](image)

**The Iditarod Challenge**

![The Iditarod Challenge Diagram](image)
High School/Middle School

The Iditarod Challenge is an adventure activity in which sled dog teams will face real life challenges that must be solved in order to continue. These challenges are based on obstacles mushers and dogs face in the actual Iditarod event. Be sure to check out the resources mentioned earlier for more information on the Iditarod and the Iditarod home page. This activity directly measures NASPE Standard 5. Use a Standard 5 assessment activity or processing sheet at the conclusion of the event. An example is included at the end of the activity guide. At the least, be sure to process this activity and relate to a real life adventure you have had. Use an "I learned" statement/exit slip or similar processing sheet.

Activity Description

Teams start at a common start line and proceed to checkpoint number one. At the checkpoint teams must solve the challenge. Once the challenge is solved members change positions and continue on to the next checkpoint. Use at least 7 checkpoints so each member gets to be the musher at least once. Follow safety rules as outlined earlier in Sled Dog Sprints. Examples of challenges are listed below. Add some challenges of your own. Better yet, have your students come up with some, if not all, of the challenges. This assimilates the student’s involvement with the activity.

Challenge # 1: The musher and sled roll down an embankment. The musher breaks his/her leg. You must splint the two legs together with the strips of cloth provided, with one piece used for upper legs and one piece for lower legs (be careful not to over tighten). All team members must carry musher to first aid station and back (10-15 yards). Once back remove splints and continue.

Challenge # 2: Your team gets lost and goes off course. Your team must unscramble the letters at your station checkpoint (use those letters designated for your team) and spell a word that is related to your fitness vocabulary. If your team is successful (check under cone for answer) you may continue on to next checkpoint. If not successful your team runs up around first aid station and back to checkpoint. You may now continue.

Challenge # 3: Your team chose sled runners that were waxed to slow causing you to loose serious time. Your team must perform 100 push ups before continuing on.

Challenge # 4: Your team comes to fallen trees that have totally blocked the trail. In order to continue you must get all team members and equipment up and over the challenge wall. Once you have made it to the other side you may continue on. * If you do not have a challenge wall you can use a set of parallel bars draped with mats or something similar that is stable and safe.

Challenge # 5: Your team is to cross a lake that has melted out. Get all members across a 30’ stretch using scooters and plungers (paddles). Each team has three scooters and three plungers. If any body part touches the floor you must return and try again. Don’t forget your equipment. You may also substitute an “All Aboard” challenge activity.
The Serum Run

The real life Iditarod event covers a vast 1300 miles during some of the worst weather human beings can be exposed to. The Iditarod got its start by replicating a voyage from Nome, AK to Anchorage, AK in an effort to get a much needed serum to a village of children who were sick and needed the serum to survive. In this activity each participant will take turns at the various positions while following a serpentine course (using no markers) and being careful not to cross paths with another team or sled. Teams may use any strategy to accomplish their goal of having each team member record a minimum of 1300 steps on their step counter. Once your team has accomplished that goal your team is to total your actual counts and place your team score on a chart provided in the front of the gym. There will be a time limit to accomplish this goal and every team member must reach the minimum in that time limit in order for your team score to be recorded. Be sure to discuss your strategy and ask questions in your team meeting prior to the start of the event. Be sure to process the results afterwards and come up with solutions or validations as to what your results were.

Sled Dog Obstacle Course

In your gym set up a number of obstacles that each team must negotiate in order to complete their objective. Set up tunnels, bridges, “S” turns, mini-challenges (skate jumps, jumping jacks etc.), locomotor challenges (skip, gallop, power walk) and music (speed changes to match tempo changes). All of the options presented here can also be done outside in the snow. In the snow add bicycle bumps (uneven mounds of snow) and small ups and downs. Address any safety issues with these options and predict ahead of time issues and challenges your students may face. It is best to use a shotgun start when using obstacles and challenges with younger students and use completion of the activity as the goal rather than speed. A shotgun start means everyone starts at the same time but at different locations. Remember that all activities done inside can also be done outside if you have snow or sand.

ASSESSMENT IDEAS

What other activities also involve a total body (upper/lower) workout?

Using heart rate monitors have your students do the same activity using an empty sled but control the time period (same as with a student on the sled/carpet). Compare your heart rate pulling empty vs. pulling a student. Explain the differences/similarities.

Have students make up checklists for muscle strength, muscle endurance and aerobic activities and compare to the sled dog activity. Where does the sled dog activity belong? List a few, aerobic, muscle strength and muscle endurance activities and have your students categorize those based on the checklists.
Do manual pulse checks during the activity and record at each checkpoint using the six second method/heart rate monitors. Have students determine target zone and decide where this activity falls. Compare other activities that involve two oxygen transport systems (upper body and lower body). Consider relationships to sports like cross-country skiing, rowing, running, cycling, swimming, paddle boarding etc. What are the similarities and differences?

Here is a multi-level assessment rubric that you can use with your classes the problem solving/cooperative aspects of the activity:

### Standard # 5 Assessment Rubric

<table>
<thead>
<tr>
<th>Descriptors</th>
<th>Beginning Team</th>
<th>Rookie Team</th>
<th>Veteran Team</th>
<th>Professional Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team Building Qualities</td>
<td>Did not work together with other team members</td>
<td>Worked together most of the time</td>
<td>Worked together with team members all of the time</td>
<td>Worked with team members 100% and offered assistance to other team members</td>
</tr>
<tr>
<td>Fitness Attributes</td>
<td>Did not adjust speed to help in team success; either too fast or too slow all of the time</td>
<td>Adjusted speed most of the time to help team succeed</td>
<td>Adjusted speed all of the time for overall team success</td>
<td>Demonstrated leadership qualities by adjusting speed and helping team mates to adjust their speed</td>
</tr>
</tbody>
</table>