Worldwide, engaging children in physical activity to promote health and fitness is a year-round initiative. For many parts of the world where countries experience the four seasons, physical activity remains steadfast both indoors and outdoors. As seasons change from spring, summer, and fall into winter, enjoying activities that celebrate the season of winter, with and without snow are limitless.

Various American states experience a winter season with little to no snow due to a warmer regional climate, yet play to celebrate the season is very much alive. The health benefits of winter time play can reduce the growing epidemic of childhood obesity. In general, climbing a hill pulling a sled or snow tube raises the heart rate, increases respiration and perspiration. Slipping on a pair of ice skates to skate indoors or outdoors promotes increased circulation, muscular strength, and a greater sense of balance. More specifically, let’s examine the benefits of snow sports as identified by Winter Feels Good (more about this program below) for a 110 pound child participating at a moderate level of activity.

- Snowshoeing burns 378 calories per hour and also strengthens the quadriceps and hip flexor muscles.
- Cross country skiing burns 377 calories per hour while providing a full body workout.
- Snowboarding burns 283 calories per hour while strengthening the quadriceps and calf muscles.
- Alpine skiing burns 283 calories per hour and strengthens the quadriceps and hamstring muscles.

Introducing any of these winter sports to children promotes increased flexibility, balance, muscular strength and endurance, and cardiovascular endurance. Children are also simultaneously expending over 250 calories per hour which helps them to maintain a developmentally appropriate body composition.

Children who play in the snow finish their play hungry and tired from the vast amount of calories burned by the body to remain warm. What’s more, children's play involving winter season physical activities are performed with others such as with family and friends, thus providing increased use of socialization skills which are important to relating with others. Winter season activities to promote health, fitness, and socialization can begin in the elementary school physical education program as early as the kindergarten grade.

Celebrating Winter Season in School...

...Through Games. The elementary school physical education program can provide opportunities for children to experience fun and enjoyment of playing seasonal games to celebrate wintertime, indoors.

Resources, such as the books Holiday Games and Activities and Celebration games: Physical activities for every month by Barbara Wnek, provide teachers with various physical fitness activities, skills, games, and rhythm and dance activities for grades K-6 that are centered around holidays and seasonal themes during a school year. Winter season games and activities can get children excited about physical education, and motivate them to want to participate in enjoyable learning experiences. Incorporating manipulatives that encourage children’s imagination, such as fleece balls as snowballs or pillow pole sticks as ski poles, adds to the seasonal celebration of such games. The nature of many of these games promotes the enhancement of health-related physical fitness while also learning to get along with others.

Through Sport-Related Movement: Indoors. For students in the middle to upper elementary grades indoor winter season sports can be promoted through floor hockey fundamentals and developmentally appropriate modified game play. Creating a culture of students adopting a professional men and/or women's ice hockey team may spark greater interest and enthusiasm to designing your indoor winter sports season. Quite often during the winter season, elementary schools will conduct roller skating programs, such as the Skate-In-School program to simulate an indoor and outdoor ice skating opportunity. Extended tasks may involve students researching, for a small extra credit project, a recognized winter sport athlete.

Through Special Program Initiatives: Taken together, offering physical activities that correspond with the winter season, regardless if they are indoor games and sport or outdoor winter sport, are opportunities which can be built into the curriculum. These opportunities are not limited to the curriculum itself. Creative initiatives developed by teachers to promote health and fitness through winter season activities may extend to extra-curricular events. This may include teachers who organize, for their school, annual special events such as a Winter Festival Day, Winter Arts Festival, Fun Fridays of Sledding, to name a few. Typically these events create an atmosphere of winter celebration based upon various themes engaged in by teachers and students school-wide.

These events may involve parents/guardians of the school community fulfilling a role as helpers and/or participants. They may involve using students from the district high school to participate as assistants to the younger children. They may involve guest speakers with expertise in a winter sport to help facilitate excitement about getting involved in their sport. Through these types of events, physical educators have used these opportunities to educate others about the health, fitness and social benefits of winter time play. Hopefully, this education will transition to a student’s family becoming more active and developing a healthy lifestyle together. What is important to know is that the elementary physical education program can be an important catalyst to educating children upon the value and benefits of learning and regularly participating in an
Resorts that offer school-based winter physical activity in remaining sports, the more findings from a study, entitled Growing depending upon elementary grade level (e.g. grade 4).

Each snow sport unit is organized into developmentally appropriate units containing 4-5 day lessons. The many elements available for planning and instructional purposes include:

- Interactive learning tools featuring animated characters that show how to dress, gear up, and physically prepare for snow sports.
- Lesson plans for alpine skiing and snowboarding to be used in conjunction with interactive tools.
- Extensive lesson plans for snowshoeing and cross country skiing (XC skiing).
- Informative flyers that can be sent home to parents.
- Videos of children talking about snow sports that encourage excitement about snow sports.
- Posters to promote skiing or snowboarding field trips.

Teachers can use all or part of these resources depending upon the teaching situation. All materials are based on standards set by the Professional Ski Instructors Association (PSIA) and the National Association for Sport and Physical Education (NASPE). In schools where winter sports are already in place as part of the physical education curriculum or as an extended physical activity program in conjunction with local resorts that effectively run school-based learning programs, these resources may help bridge school curriculum to community resort snow sport education.

Each snow sport unit is organized into a series of 4-5 day developmentally appropriate 30-60 minute lesson plans organized for grades K-5, with snowshoeing plans clustered for grades K-3 and grades 4-5. Each lesson includes the following documentation:

- NASPE National Content Standards for Physical Education
- Unit goals which are aligned with specific NASPE standards
- Equipment needs, parts identification, and how to dress
- A lesson introduction
- Cognitive content for learners to acquire from the lesson
- Safety, warm-up, and core activities
- Sequentially organized scope and sequence of skills
- An interactive exercise tool
- Assessment examples applicable to each lesson
- References, terminology, and a list of resources

Within each lesson students can be informed about various health-related physical fitness principles, muscles involved, and a rationale for the activity choice. Teachers have information on how to guide students to set goals for technique, timing, distance, and a grade for learning and participating in and out of school. In addition, a folder called Extras contains two Quicktime movies on safety and gear, as well as a series of animated interactive quizzes for each snow sport taught in the curriculum.

What is important for physical education teachers to realize is if one is in a situation where he/she has a desire to either introduce a snow sport into the elementary physical education curriculum or enhance one that is already in place, the Winter Feels Good program, which directly documents the NASPE standard, is a free quality resource that can be used as a good starting point.

Another developmentally appropriate resource for teachers interested in initiating or expanding their winter snow activity experiences, originating in the state of Maine is WinterKids, a nonprofit organization committed to helping children develop lifelong habits of health, education, and physical fitness through outdoor winter activity. To help accomplish this goal, WinterKids offers 7 programs, some of which include:

- WinterKids Welcome to Winter: Targets schools and communities with large numbers of immigrant and refugee populations to help them embrace winter and develop healthy living habits.
- WinterKids Snow School: Takes the classroom to the mountain to provide opportunities for students to learn an academic lesson while having fun and enjoying a healthy lifestyle.

While aligned with the Maine Learning Results and National Education Standards, this curriculum can also be aligned with other state academic learning standards. This curriculum offers over 100 pages of lesson plans, assessments, games, safety information, and more. Interdisciplinary lessons vary in subjects for students in grades K-12, including an adapted component for students with special needs. While specific to the state of Maine, interested elementary physical education teachers may explore the WinterKids resources at www.winterkids.org then select what may be applicable to their program and adjust it accordingly. Coupled with knowing your school district's policy for going outdoors during the winter months, designing developmentally appropriate quality learning experience involving a snow sport may expand a child's horizons to all of the possible opportunities to be physically active outdoors, year round.

An emerging trend to supplement, not replace, physical education is the notion of schools examining how they may extend physical activity opportunities to connect to outside resources. As previously mentioned, many school districts across the United States partner with local recreational organizations and resorts to establish school-base learning programs. Many states have programs that involve participating ski resorts offering ski and snowboard school programs for middle elementary grade levels and up (e.g. grades 3-12) or targeted to a specific elementary grade level (e.g. grade 4). These programs offer field trips, after school programs, learn to (ski) programs for one or more days, depending upon the program. Children having the opportunity to participate in such programs may become more proficient at a snow sport. Findings from a study, entitled Growing the Snow Sports Industry, indicated that the more proficient children and adults become at snow sports, the more frequently they participate (SIG, 2000). As a result, children can have a better disposition about the importance of regular physical activity in remaining healthy and happy, while having fun.

Resorts that offer school-based winter programs (including ice skating) quite often promote group participation. Knowing that an important
feature of educating the "whole child" includes their ability to learn to relate to others in a socially appropriate manner, as well as learn the rules for responsibility and respect. Grouping for snow sport experiences can provide opportunities for social development, involving peers and family members alike. As well, with any winter sport activity, safety in numbers is important. In addition to safety in numbers, personal safety begins with dressing appropriately for cold temperatures to remain warm and dry while outdoors, with or without snow.

**Dressing for Winter Activity.** Education on appropriate dress for cold weather is important for a school-based or community-based program where children will be outdoors for physical activity. When planning for winter activity events, teachers can prepare a letter to go home to the parent/guardian accompanied with a handout identifying and explaining what is known as the **1-2-3- Layer System**.

1. The first layer is worn next to the skin, typically long underwear of a polyester or other synthetic fabric that "wick"s away moisture from perspiration from the skin.
2. The second layer is the insulating layer, including turtlenecks, polar fleece or wool sweaters or vests. These trap body heat in generated by physical activity.
3. The third layer is known as the shell. This layer consists of an outer jacket and pants that should block the wind and repel snow and sleet and optimally would be breathable and waterproof. Fabric of this nature keeps outside moisture out and allows moisture from the inside, your sweat, to escape. This is wicked away from the skin and released, while permitting cooler air to flow through in order to maintain an even body temperature.

As equally important are a hat, gloves or mittens, wool socks, sunglasses and a sunscreen with a minimum of SPF 30. If skiing or snowboarding, a helmet of proper fit is important. Wearing more than one pair of socks may reduce circulation to the feet causing them to feel colder. Cotton clothing, including jeans, should be avoided for winter activity wear because when damp you will end up feeling cold and wet.

A growing body of research reports that by the time children reach the third grade they have already made a decision and formed an opinion about their desire to engage in regular physical activity. Children, as young as kindergarten, can learn and experience the fundamentals of various winter sports, such as alpine skiing, when provided developmentally appropriate instruction. In a school setting, the management and organization of having a kindergarten class prepare to go outside on a winter's day is not likely; however, physical education teachers can plant the seed of thought about being active outdoors in the winter by talking about it in class with the children and providing parents useful information about community resources.

With a goal of physical education to provide developmentally appropriate movement experiences that will excite children to become and remain active and healthy for a lifetime, the catalyst may be for school-based programs to link with community resources in order to increase opportunities for physical activity beyond the school day. In turn, extending physical activity opportunities for children and their family’s results in active parents modeling to their children a practice of healthful living, including snow sports and winter leisure play.

We as a society can move beyond a dormant existence during the winter months. Becoming informed about the outdoor winter season essentials, starting with appropriate dress, proper nutrition, and safe activities for learning and play, may be a gateway to combating the growing obesity epidemic and its associated threats to health.

Get healthy, get fit, and get outdoors!

**references:**


*(pelinks4u home)*