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Inclusion of Students of All Abilities in School-Based Physical Activity Experiences

A Guidebook

Acknowledgements

About Physical and Health Education Canada (PHE Canada)

PHE Canada champions healthy, active kids by promoting and advancing quality physical and health education opportunities and healthy learning environments. Supporting community champions with quality programs, professional development services, and community activation initiatives, PHE Canada inspires all to live healthy, physically active lives. Find out more at www.phecanada.ca.

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Introduction

Physical and Health Education Canada (PHE Canada) is dedicated to ensuring that all students are given an equal opportunity to engage in physical activity experiences. For students with diverse abilities, barriers and limitations to participation often result in unequal opportunities to engage in physical activity. Additionally, students with diverse abilities have little to no leadership and mentorship opportunities in physical activity settings (Lieberman & Houston-Wilson, 2009). These opportunities are important for building life skills, and for supporting community involvement, positive peer relationships, and employment opportunities.

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To identify and address these issues, PHE Canada partnered with schools and community partners on the Game Changers program. The goals of the Game Changers program are to:

- Reduce and/or eliminate barriers to participation in school-based sport and physical activity for students of all abilities
- Support youth of all abilities in becoming physical activity leaders in their own schools
- Increase the participation, motivation, and confidence of students of all abilities in school-based physical activities

The insights from the Game Changers program, along with wise and evidence-based practices for the **inclusion** of students of all abilities in physical activity, informed this guidebook. Educators can use this guidebook to design **school-based physical activity** programs that are inclusive to students of all abilities.

Barriers to physical activity participation for students of all abilities are outlined, along with recommendations to address these barriers. Four major types of barriers are examined:

- Intrapersonal
- Interpersonal
- Structural
- Sociocultural

A description of each barrier, along with examples and recommendations for educators to address these barriers, are provided to support educators in developing and delivering quality, inclusive, and student-centered school-based physical activity programming.

Throughout the guidebook, a handful of terms are bolded, and their definitions can be found in the glossary on .

Students of All Abilities *and* Students with Diverse Abilities

The terms *students of all abilities* and *students with diverse abilities* are utilized throughout the guidebook. PHE Canada has chosen to use these terms to recognize the abilities present in all students and inform programming form an *ability* versus *disability* perspective.

Intersectional Awareness

It is important for educators to familiarize themselves with the term intersectional awareness which is the acknowledgement that every individual is multidimensional and has various identities that make up who they are. These identities influence an individual's position of power and privilege and can act as either a barrier or facilitator to participation. This can be a combination of their physical, social, and mental characteristics, and their lived experiences. For example, students of all abilities also come from various racial, ethnic, religious, and socioeconomic backgrounds, and have varying ages, gender identities, and sexual orientations.

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The Wheel of Power/Privilege

The Wheel of **Power/Privilege** illustrated below provides a simplified understanding of intersectional identities. Each person can locate a part of their identity on each slice of the wheel below. Those who associate with an identity closer towards the center are considered to have a more privileged identity. Those who associate with an identity further outward are considered to have a more marginalized identity. For instance, on the disability slice of the wheel, persons who are able-bodied tend to hold more privilege in society and therefore are found closer to the center of the wheel, whereas persons with a disability can be found on the outer edge of the wheel, and in turn, are often marginalized within society.

Each identity part intersects with all the others, thus producing an **intersectional identity**. However, the specific experience of an individual differs depending on how much power/privilege is associated with their identity. For example, a person who has a disability, is racialized, and identifies as Queer, has a different experience than a person who has a disability, is Caucasian, and identifies as heterosexual. Although they both identify as |a person with a disability, their respective races and sexual orientations will produce dissimilar lived experiences. Therefore, both individuals in this instance will have different needs.
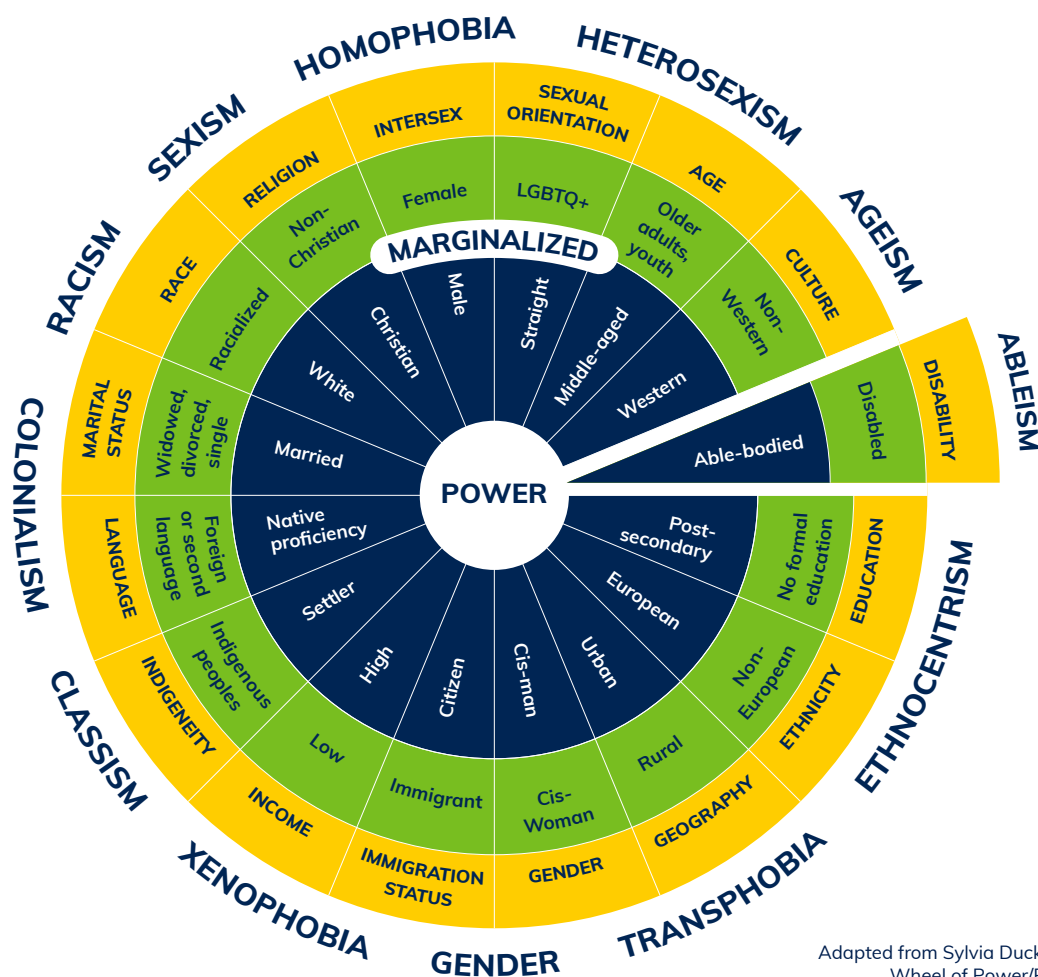
Adapted from Sylvia Duckworth's
Wheel of Power/Privilege

The Umbrella of Disability

Disability is often described as an umbrella term because it is one term that is used for many things including a wide variety of diagnoses, descriptions of impairments, and associated accommodations. The following section provides definitions and examples of different types of disabilities, language, and history of disability in order to examine this umbrella term in more detail.

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What is Disability?

The United Nations Youth with Disabilities defines disability as,

> "any impairment, including a physical, mental, intellectual, cognitive, learning, communication or sensory impairment—or a functional limitation—whether permanent, temporary or episodic in nature, or evident or not, that, in interaction with a barrier, hinders a person's full and equal participation in society" (UNICEF | Youth with Disabilities, 2012).

Disability is a complex phenomenon, reflecting an interaction between features of a person's body and mind and the features of the society in which they live (Shakespeare, 2004).

A disability can occur at any time in a person's life; some people are born with a disability, while others develop a disability in their lifetime.

It can be permanent, temporary, or episodic. Disability can steadily worsen, remain the same, or improve. It can be very mild or very severe. It can be the cause, as well as the result, of disease, illness, injury, or substance use.

Disability in Canada

Disability is more common than people may believe. In fact, 96,060 youth aged 15 to 19 in Canada were living with a disability in 2006, which was 4.6% of the youth population (Government of Canada, 2022). By 2017, the prevalence of disability in youth ages 15-24 years in Canada rose to 13% (Morris et al., 2018).

Understanding Types of Disability

Disabilities are often categorized as, developmental, behavioural, physical, and sensory. It is important to note, however, that many people have multiple disabilities and more than one type of disability. This can mean, for example, that they have a physical disability such as spina bifida as well as a behavioural disability such as **Attention-Deficit/Hyperactive Disorder (ADHD)**.

It is important not to generalize individuals with a disability, but rather acknowledge each individual with a disability as unique. Individuals with the same disability are not necessarily affected in the same way and can have differing characteristics. While some individuals may take pride in and celebrate their disability, others may be hesitant to share or label their disability, and this should be respected. Acknowledge that people's lived experiences differ, and many continue to feel stigmatized by their disability.

Developmental and Behavioural Disability

Developmental and behavioural disability is an impairment in cognitive function that is present at birth or that develops generally before adulthood and lasts throughout one's life. It can also be the result of illness, disease, or injury at any point in one's life.

It can result in a mental impairment, a physical impairment, or a combination of mental and physical impairments.

Individuals with developmental disabilities may have substantial functional limitations related to the following:

- Self-care
- Receptive and expressive language
- Learning
- Mobility
- Self-direction
- Capacity for independent living

(Active Living Alliance for Canadians with a Disability, 2020).

Examples of common developmental disabilities include: **autism spectrum disorder (ASD)**, **Down Syndrome**, and behaviour disorders, such as **oppositional defiant disorder (ODD)**, **conduct disorder (CD)**, and **Attention Deficit Hyperactivity Disorder (ADHD)**.

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Physical Disability

Physical disability is a loss of or a limitation to a physical function that may affect an individual's mobility, dexterity, or stamina on a long-term basis. Physical disabilities can be acquired before or during birth or be caused by external factors (e.g., accidents, infection, or other illnesses).

Examples of common physical disabilities include: **cerebral palsy**, spinal cord injuries, amputations, **spina bifida**, and **musculoskeletal injuries**.

Sensory Disability

Sensory disability affects one or more senses—sight, hearing, smell, touch, taste, or spatial awareness. These are often referred to as sensory impairments. An individual does not have to have full loss of a sense to be sensory impaired.

Examples of common sensory disabilities include, **blindness or vision impairment**, **deafness or hard of hearing**, and **Autism Spectrum Disorder (ASD)**.

Congenital and Acquired Disabilities

Congenital disabilities are disabilities individuals are born with and have experienced their entire lives.

Acquired disabilities are disabilities individuals were not born with but have developed at some point in their lives. They can be caused by disease (e.g., acute encephalitis), an accident (e.g., car accident) or other outside factors (e.g., substance use).

High Support Versus Low Support Needs

Persons with disabilities are all unique, and therefore their disabilities and the way in which they require support are also unique. Disabilities range in intensity and need, which are typically categorized on a continuum from high to low **support needs**. Support needs are defined as the pattern and intensity of support that a person needs to participate in **activities of daily living** (Thompson et al., 2009).

The Support Model emphasizes the idea that everyone requires support, but the level of support each person needs to participate in activities of daily living may differ based on their abilities (Thompson et al., 2009).

Reasons for individuals having different support needs typically include having additional medical and behavioural needs or the existence of inaccessible environments for participation in activities of daily living (Arias et al., 2020). In contrast, individuals with increased access to resources and fewer medical and behavioural needs may have lower support needs (Arias et al., 2020).

Example of the Support Model Continuum

Supporting Persons with Autistic Spectrum Disorder (ASD):

One example of a disability where individuals have differing support needs is those with autism. Autism is a spectrum disorder which means that people can have varying support needs (National Autistic Society, 2022). There are three levels of autism, including:

- **Level 1**: requires support
  (e.g., difficulty initiating social interactions)
- **Level 2**: requires substantial support
  (e.g., social interactions limited to narrow special interests)
- **Level 3**: requires very substantial support (e.g., severe deficits in verbal and nonverbal social and communication skills)

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Person-First Language

As noted, disability can be part of a person's identity, but it does not need to be a defining factor of one's overall identity. Educators must consider all aspects of what makes a person human. To support this, it is important to use **person-first language** when referring to persons with diverse disabilities. This means the person comes before the disability when being described. For example, we can say students of all abilities, students with diverse abilities, an individual with a disability, a student with a physical disability, or a child with a learning disability.

However, it is important to learn from the individuals themselves, or from their communities, the most appropriate language to use, as some individuals may identify differently or prefer different terms in reference to their disability. It should also be common practice to identify an individual by their name and get to know them personally, rather than making assumptions about their identity and their personal relationship with their disability. In fact, the term disability is even currently being debated as useful or not, with terms such as all abilities or differing abilities becoming increasingly favoured terms by some.

UN Convention on the Rights of Persons with Disabilities

The United Nations Convention on the Rights of Persons with Disabilities was adopted in 2006 and enabled a paradigm shift in how persons with disabilities were regarded in society (CRPD, 2006). The purpose of the Convention is to "promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity" (The Office of the High Commissioner for Human Rights , 2006). The Convention has laid out specific rights to be followed, including the rights of persons with disabilities to participate in sport, recreation, leisure, and play (Stein, 2009).

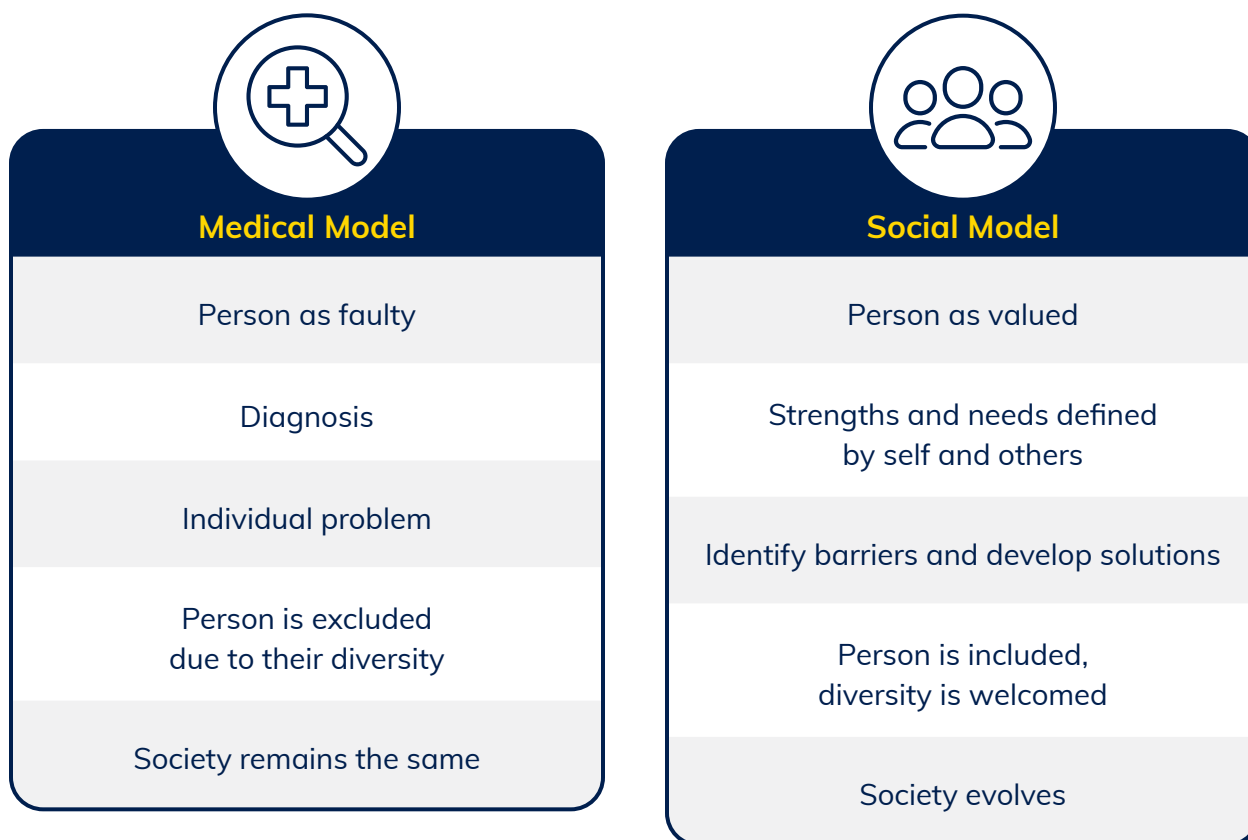# Medical Model vs. Social Model of Disability

A further paradigm shift occurred when the social model of disability replaced the medical model of disability in both research and practice. This section will define and compare the medical versus the social model of disability in general, and the specifically within a physical activity setting.

Medical Model of Disability

Prior to the development of the social model of disability, the **medical model of disability** was used in practice (and in some cases is still being used) by medical professionals, policy makers, and others (Marks, 1997; Shakespeare, 2004). The medical model of disability considers disability as a "problem," views an individual in "deficit," and see the goal as curing or fixing the disability (Shakespeare, 2004). The medical model is problematic, as it views disability as an individualistic problem, rather than considering the problem as societal.

Social Model of Disability

In 1976, the Union of the Physically Impaired Against Segregation, proposed the **social model of disability** (Siminski, 2003). Prior to this, the Fundamental Principles of Disability document first published in the mid-1970s (UPIAS, 1976) argued against the medical model of disability stating that individuals are not disabled by their impairments, but rather by the disabling barriers they face in society (Oliver, 2013). Examples of these barriers may include, but are not limited to: financial barriers, barriers to transportation, and facilities that are not accessible. The social model highlights that an individual impairment is different from the social construction of disability that might surround that impairment (Shakespeare, 2004).

Medical Model	Social Model
Person as faulty	Person as valued
Diagnosis	Strengths and needs defined by self and others
Individual problem	Identify barriers and develop solutions
Person is excluded due to their diversity	Person is included, diversity is welcomed
Society remains the same	Society evolves

(Adapted from Rieser, 2000).

The social model of disability is essential in order for persons with disabilities to feel valued and included. By adopting this way of thinking, educators can help identify barriers that students of all abilities face, including in relation to physical activity, and then help to create solutions.

Example of Medical vs. Social Model in School Environments

Medical Model

Student cannot participate in the physical activity because they have a disability

Educator views the student's disability as a "deficit"

Peers view the student with a disability as a "problem" and excludes them

Social Model

The activity is adapted or modified so all students can participate

Educator recognizes that barriers exist and must be addressed in order for the student to participate

Peers recognize the importance of including students of all abilities

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Stigma Surrounding Disability

Stigma is common and can even be a defining aspect in the lives of people with diverse abilities (Bogart et al., 2018). Stigma is defined broadly as social devaluation based on a discrediting difference or identity (Grinker, 2020). Research has shown that people without disabilities are the least stigmatized, followed by those with physical disabilities, then developmental disabilities, and finally behavioural disabilities (related to mental health) being the most stigmatized group (Bogart et al., 2018).

Many people with diverse abilities find it difficult to participate in activities among their peers due to their behavioural and social needs (Jones, 2003). A common perception is to view their behaviour or social skills as deficient (i.e., using the medical model) versus creating an environment that fosters and embeds inclusion (i.e., social model). When students of diverse abilities are not accepted by their peers and excluded from activities, it results in a cycle of social exclusion, and prevents them from participating in activities that support their behavioural and social needs (Grinker, 2020). Specific to the school environment, it is important for all members of a school community to understand their role in decreasing stigma and increasing inclusion of persons with diverse abilities.

Approaches to Inclusion

The following section defines inclusion and provides examples of ways educators can embed inclusion into their school-based physical activity programs. Factors that promote inclusion will also be described, such as physical literacy, adaptive physical activity, student-centered learning, and the STEP framework. Additionally, the role of leadership for students of all abilities in school-based physical activity programs will also be examined.

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What is Inclusion?

The term inclusion captures an all-embracing idea that everyone matters equally and should be treated as such. Inclusion secures opportunities for students with diverse abilities to learn alongside other students in their school and allows these students to be active participants in the classroom and school community.

Inclusion is important in the context of physical activity because all children and youth have a right to access and participate in these activities to help build their confidence, increase their sense of belonging, and lead healthy, happy, and active lives.

Facilitating Inclusion in Physical Activity Environments for Students of All Abilities

- Ask the students how they would like to be challenged and how they would define success
- Develop an understanding of the type of support they require (e.g., communication, physical, social)
- Define safety and how safety measures will be applied
- Select activities that provide all students an opportunity to develop their knowledge and skills
- Offer various activity stations for varying skill levels (e.g., competitive and non-competitive stations)

- Balance both skill level and complexity of the activity to allow for challenge and success
- Evaluate the success of the activity based on the purpose of the activity (e.g., development of social skills, improvement of physical skills, participation, teamwork skills)

Physical Literacy

Physical literacy is the motivation, confidence, physical competence, knowledge, and understanding to value and take responsibility for engagement in physical activities for life (International Physical Literacy Association, 2014).

Everyone has varying learning preferences, such as being a **visual learner**, an **auditory learner**, or a **kinesthetic learner**. The same can be said for physical literacy, as all children and youth develop physical literacy differently, in different contexts and environments, at different times of their lives, and in different ways.

Physical literacy is about an individual's relationship with physical activity, including their understanding of the importance of developing the knowledge and skills to be active throughout their lives.

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Participating in multiple activities, in a variety of environments, in ways that are age- and stage-appropriate, and in relation to their personal development, can help children and youth develop confidence and competence, and lead to an increased level of enjoyment, as well as the likelihood of repeating the activity.

Physical literacy development is equally as important for children and youth of all abilities. As children develop physical literacy, they become more confident when participating in physical activity and using their motor skills to navigate the environment around them. They also develop an understanding of activities they enjoy doing so they continue doing them over their lifetime. Having children of all abilities participate in physical activity from a young age can support their physical literacy development. Therefore, it is important to give children of all abilities the opportunities to engage in a variety of physical activities, regardless of their abilities.

Adaptive Physical Activity

Educators can facilitate inclusion in school-based physical activity programs by providing opportunities for students to engage in adaptive physical activity. **Adaptive physical activity** is the adaptation of an activity for an individual who requires modifications for participation in the context of physical activity (Hutzler & Sherrill, 2007).

Adaptive physical activity promotes

- an attitude of acceptance towards individual differences
- cooperation, leadership and empowerment for students of all abilities
- physical activity opportunities and an active lifestyle for students of all abilities

Adaptive physical activity can be activities that all students can participate in regardless of their ability. It can also include the modification of an activity for those with disabilities, to allow for everyone to participate.

Adaptive sport is defined as competitive or recreational physical activities for people of all abilities. Adaptive sports often run parallel to typical sport activities; however, they allow modifications necessary for people with disabilities to participate. In fact, many sports use a classification system that puts individuals with physical challenges on an even playing field with each other (Calgary Sport Council Society, 2022).

Examples of adaptive sports that can be implemented in school-based physical activity programs include:

- Wheelchair Basketball
- Boccia
- Goalball
- Sitting Volleyball

For more information and specific instructional strategies for fostering physical literacy for students of all abilities, check out PHE Canada's Physical Literacy webpage.

The STEP Framework

The STEP Framework guides educators and leaders to adapt activities appropriately to support the inclusion of all students in physical activity. The STEP Framework describes four main activity components: Space, Task, Equipment, and People. Each component can be modified to meet the needs of each participant and provide a supportive learning environment (Kiuppis, 2018). All students are unique in their abilities, so it is essential to get to know them, and their abilities, before making modifications.
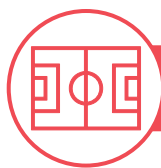
Space

Space refers to where the activity is taking place. To make modifications to the space you can:

- Alter the size and shape of the playing area (e.g., smaller field, larger targets, etc.)
- Change the direction and pathways the participants use

Task

Task refers to how students participate in the activity. To make modifications to the task you can:

- Vary the actions or tasks you give the participants and how they are performing them
- Link the changes to other dimensions (such as timing or duration)

Equipment

Equipment refers to objects that are used when performing the activity. To make modifications to the equipment you can:

- Use different forms of sporting equipment (larger balls, jingle bell balls, softball tees)
- Use information and communication technology (cameras, interactive whiteboards, software)

People

People refers to the other individual students are participating in the activity with. To make modifications to people you can:

- Organize the groupings by ability or learning style
- Adjust the level of support you give the participants

Leadership

In order to help overcome stigma surrounding disability, it is important to amplify the voices of students of all abilities, and to encourage them to take on leadership roles within school-based physical activity programs. Leadership opportunities for students of all abilities are dependent on school leaders, including their peers and teachers, as they are advocates and provide natural support in fostering students' leadership development (Tan & Adams, 2021). Students of all abilities have a right to participate in and lead activities as their peers do, as this will help prepare them for life after school (Tan & Adams, 2021).

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Students of all abilities can take a leadership role by:

- Brainstorming and suggesting activity ideas
- Supporting the planning of programming (e.g., scheduling, permissions, equipment)
- Organizing the equipment at the start and end of programming
- Leading peers in an activity
- Supporting the evaluation and enhancement of programming (e.g., what worked well and what can change)

Educators should consider how they will foster leadership opportunities for students of all abilities in school-based physical activity programs. These leadership opportunities develop important communication skills, teamwork skills, and overall life and employability skills, as well as demonstrate to students of all abilities that they are valued and respected.

Student-Centered Learning Approach

While school-based physical activity programming is developed with students in mind, students are often overlooked or not involved in the planning and delivery of programming. A **student-centered learning** approach provides participants with the opportunity to engage in decision-making processes and share their opinions. Student-centered learning is an approach where students are provided with an authentic task with the goal of creating relevant learning experiences (Elen et al., 2007). It is important to recognize that students are knowledge holders and should be provided with the opportunity to share their thoughts, opinions, and ideas about their participation in school-based programming. Allowing students to inform the programming and share their knowledge will build their sense of belonging and autonomy, and will likely increase their motivation to participate (Edwards et al., 2021).

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The student-centered learning approach utilized by PHE Canada uses a design thinking process which involves the following three steps:

1 **Inspiration:** identifying, understanding, and defining the problem(s) you are trying to solve.

2 **Ideation:** conceptualization and presentation of new solutions to the problem(s) using design thinking methods.

3 **Implementation:** launching, testing, and adjusting the solutions to the problem you are trying to solve.

Game Changers: An Example of Student-Centered Learning using Design Thinking

With PHE Canada's Game Changers program, students of all abilities and teacher champions were brought together for a brainstorming workshop. Students were asked to list the barriers to participation that they face when engaging, or seeking to engage, in physical activity, in order to identify and understand the problem (**Inspiration**). Next, students brainstormed the various ways they would like to engage in physical activity, including leadership roles they could take on throughout the design and implementation process of the program. Workshop facilitators also asked students to sketch the activities they would like to see as a part of their school's programming (**Ideation**). The various ideas were then discussed amongst students and teacher champions, and the group came to a consensus of which activities they would like to include in their programming.

The group then created an action plan to consider the facilities, equipment, and any logistical details needed for the program. Finally, the program was launched with the support of teacher champions and school administrators and made available for students to participate in (**Implementation**).

Learn more about the Game Changers program here.

For more information and ideas about design thinking visit PHE Canada's Student-Centered Learning webpage or IDEO's Co-Designing Schools Toolkit page.

Barriers and Recommendations to Physical Activity Participation

Children and youth with diverse abilities face increased barriers to participating in school-based physical activity programming. These barriers include intrapersonal, interpersonal, structural and sociocultural barriers (Moore & Phelan, 2021). The following section provides insight into these barriers when accessing or participating in physical activity, recommendations for how to address or overcome these barriers, and examples of how educators can apply this in school-based physical activity programming.

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" *My disability is that I cannot use my legs. My handicap is your negative perception of that disability, and thus me.* "

-Rick Hansen

Intrapersonal Barriers

Intrapersonal barriers to participation can include negative feelings about oneself and one's body, thoughts about one's inability to participate in physical activity, or feelings of being considered less than others. It can result in discouragement and fear of participating in physical activity (Moore & Phelan, 2021). The main intrapersonal barriers to physical activity that people with diverse abilities face are related to stress, depression, anxiety, their perceived skill levels, and their lack of self-confidence (Crawford & Godbey, 1987). Specific types of intrapersonal barriers that students of all abilities face in accessing or participating in physical activity include:

- **Self-confidence:** Students may experience negative feelings about their body's appearance and abilities due to their disability and feel different from their peers, discouraging them from participating in physical activity.

- **Embarrassment:** Students may require extra time to perform tasks or to understand the task, this may cause increased embarrassment and decreased participation in physical activity.

- **Anxiety:** Students may have anxiety about participating in physical activity due to past negative experiences. For example, being picked last for an activity or being completely excluded from activities due to their disability.

- **Fatigue or Decreased Stamina:** Some students of all abilities experience increased fatigue compared to other students, so they may not be able to participate in the same duration or intensity of physical activity as their peers.

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Recommendations for Addressing **Intrapersonal Barriers**:

Communicate with students. Take time to talk with them and ask about their strengths and areas of need. For example, you can ask:

- How can we make physical activity more enjoyable for you?
- What are your personal goals for this activity (e.g., increase skill level, more social interaction, etc.)?
- Can you identify any specific barriers to participation that you face?

Focus on students' abilities and strengths.

- Choose activities that focus on skills or strategies that students are familiar with. This can include new activities that use the same or similar skills or strategies.
- Ask students to demonstrate a familiar skill or activity, if they feel comfortable.
- Communicate to the group that physical activity is about more than physical skills. Discuss and provide positive feedback when students demonstrate skills like teamwork, communication, and fair play.

Create an environment where **new experiences are encouraged in a supportive and inclusive way.**

- Talk with students about how they can support each other and create a community of acceptance—especially during new or challenging activities.
- Implement non-competitive games (skill-focused or co-operative tasks).
- Observe and check in with students and then adjust the activity if they appear or communicate that they are anxious or uncomfortable.

Modify the activity to prevent fatigue. Not all students can perform activities at the same intensity as others. Consider modifying the activity by:

- Decreasing the amount of time or space required.
- Allowing for frequent water breaks for the entire group.
- Breaking up high-intensity activities with light movement (e.g., yoga, stretching).
- Encouraging students to participate in different capacities (e.g., referee, keeping score).

Interpersonal Barriers

An **interpersonal barrier** to participation can include negative feelings or attitudes from other students, teachers, or parents/guardians about an individual's ability to participate in physical activity (Pinello, 2020). Interpersonal barriers relate to formal and informal social networks and support systems, such as the lack of support from teachers, parents, and peers (Gyurcsik et al., 2006). Negative attitudes held by the general public towards people with diverse abilities is one of the most powerful barriers preventing students from being included in the community and accessing and participating in physical activity (Ryuh et al., 2019). Specific types of interpersonal barriers that students of all abilities face in accessingor participating in physical activity include:

- **Focusing on a person's disability**: Others may feel inclined to change the activity or assume a student with a disability would prefer to not perform an activity solely based on them having a disability.

- **Oversimplifying and lack of challenge**: Educators may plan activities that lack complexity and challenge for students of all abilities.

- **Shaming, stigmatizing, or bullying**: Other students complaining about having to participate in the same activities as student with diverse abilities.

- **Lack of education and information**: Peers or educators may lack knowledge and experience in planning or participating in physical activity programming with student of all abilities.

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Recommendations for Addressing **Interpersonal Barriers:**

Provide activities with different levels of challenge.

- Create different participation options available to all students in the group. Students can choose the option that they feel provides them with the most challenge or allows them to feel the most enjoyment.
- Apply the STEP Framework to programming, which considers: the Space, Task, Equipment, and People.
- When introducing a new physical activity that involves competition, create an area where those who want to participate non-competitively can perform fundamental or cooperative skills (e.g., dribbling, passing, etc.).

Normalize and convey the importance of people having different abilities.

- Regularly discuss the importance of acceptance and inclusion, noting that it is our differences that make us unique individuals and that they should be celebrated.
- Allow for different ways of performing skills rather than just one approach (e.g., adjust motor skill cues for throwing).
- Include adapted activities as a regular part of your programming such as sitting volleyball, goalball, or boccia.

Be flexible.

- Be open to modifying or adjusting an activity if needed.
- Understand that not everyone needs to participate in the same way in order to have a quality experience.
- Allow student voice and choice in the selection of activities.

Structural Barriers

Structural barriers refer to obstacles that collectively affect a group of people that perpetuate and maintain the inaccessibility of physical activity participation (Simms et al., 2015). Barriers can include the characteristics, design, and layout of built and natural environments (Law et al., 2007), accessibility to transportation and facilities to access physical activity (Shields et al., 2012), financial resources, climate and seasons, or availability of programming (Crawford et al., 1991). Specific types structural barriers that students of all abilities face in accessing or participating in physical activity include:

- **Cost of adapted programming and equipment**: Not all schools are able to provide adequate funding for adaptive equipment and programming.

- **Physical barriers**: Curbs or uneven surfaces in schools can be limiting to some students' physical activity experiences.

- **Lack of appropriate changing facilities**: Some students may require extra space and help when changing. The space and time allotted to other students may not be accessible for all students.

- **Lack of adequate transportation**: If transportation is required, financial requirements or inadequate accessible options for transportation may be barriers to participation.

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Recommendations for Addressing **Structural Barriers**:

Ensure the space is accessible.

- Assess the activity space to ensure it is accessible to all students, including those using **mobility aids**.
- Consider accessibility for students with behavioural disabilities, such as noise level, distractions, etc.
- Organize additional supports or equipment that may be needed for the activity to be inclusive.

Allow students to participate without changing clothing.

- The requirement to change into physical activity clothing (i.e., shorts, t-shirt) may deter students of all abilities from participating as they require extra assistance or space. To increase engagement and make physical activity more accessible, make changing into physical activity clothing optional for students.

Choose appropriate equipment.

- Use equipment that will support the optimum participation of everyone (e.g., ball with bell in it, light up balls, ropes taped to the floor for tactile lines, etc.).
- In order to reduce the cost of expensive adaptive equipment, perform activities that require minimal equipment that all students can participate in.
- Seek out community grants that could cover the costs of adapted equipment, or see if your community has an adapted equipment loaning program.

Use accessible transportation.

- If the activity requires transportation, book accessible transportation in advance.
- If transportation is not accessible or affordable, choose an activity that can be accessed without transportation.

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Sociocultural Barriers

Sociocultural barriers refer to societal constructs that originate from social norms and cultural values (Gyurcsik et al., 2006). These can include stereotypes, stigma, social norms, and expectations regarding people living with a disability that are culturally relevant at a given time. These barriers may change over time and are considered to be fluid based on the culture and society in which they are found. They are influenced by the norms, attitudes, and expectations determined and reinforced by educators, peers, and other influential people within an individual's life. Specific types sociocultural barriers that students of all abilities face in accessing or participating in physical activity include:

- **Lack of cultural respect and inclusive language**: The use of inappropriate language describing an individual with a disability. This may also include leaders and educators being unwilling to adapt activities for students of all abilities.

- **Ability segregation**: Separating students of all abilities during physical activity programming.

- **Lack of leadership opportunities for students of all abilities**: No opportunities or support for students of all abilities to take on leadership roles in physical activity programming.

- **Inexperience in physical activity environments**: Students with diverse abilities are less likely to have participated in physical activity earlier in life compared to others, due to their disability.

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Recommendations for Addressing **Structural Barriers**:

Be mindful of language: Avoid using **ableist language** to describe physical activity.

- Do not refer to a person with a disability as "disabled" or "handicapped," but rather use person-first language (e.g., a person with diverse abilities).
- Avoid the use of the words such as normal/abnormal.
- Use language that emphasizes the need for accessibility versus the presence of disability (e.g., accessible restroom versus disabled restroom).

Seek professional development or partnership opportunities to further enhance programming.

- Research additional learning opportunities in your school district or local teachers' associations.
- Connect with local organizations that support physical activity programming for individuals of all abilities (e.g., Special Olympics chapters or ParaSport clubs).
- Check out PHE Canada's resources and the resources provided by the other organizations in the Resources section of the guidebook.

Begin with the basics.

- At the beginning of each year or semester, find ways for students to demonstrate their current level of ability with various types of activities without them feeling like they're on display to their peers (e.g., through cooperative games or interactive warm-ups).
- Recognize that older students of all abilities may have not had physical activity experiences that have developed their fundamental movement skills. Focus on fundamental movement skill development first before moving to combine movements or strategies related to physical activities.

Provide leadership opportunities. Embed opportunities for students of all abilities to take on leadership roles in classroom.

- Encourage them to be team leader for an activity.
- Ask them to lead the warm-up or cool-down.
- Ask them if they'd like to help organize the set-up and take-down of the activities.

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Conclusion

Intrapersonal, interpersonal, structural, and sociocultural barriers to physical activity negatively impact students of all abilities in school-based programming. This guidebook has provided a description of these barriers, as well as recommendations for how to address or solve them in order to support educators in developing and delivering physical activity programming that increases and enhances participation for all students. Through embedding these inclusive practices into programming, the hope is that students of all abilities will further develop their motivation, intention, and confidence in school-based physical activity programming.

This includes allowing students to have a voice in the choice of activities that are delivered, as well as an opportunity to build important leadership skills through their participation in physical activity programming. It is essential for the well-being of students of all abilities that educators work to support, challenge, and encourage them to discover and expand on the many ways in which they can move their bodies, so they can develop an understanding of activities they enjoy, as well as support them with establishing healthy habits, both now and over their lifetime.

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" People with disabilities must have opportunities to choose and participate in quality activities that are appropriately challenging, safe, meaningful, inclusive, and also provide dignity of risk and a sense of belonging. "

- Active Living Alliance for Canadians with a Disability

Glossary of Terms

Ableist Language: words or phrases that devalues people with a disability and can associate disability with undesirable and characteristics and qualities.

Acquired Disabilities: disabilities that individuals were not born with but have developed at some point in their lives. They can be caused by disease (e.g., acute encephalitis) or be the result of an accident (e.g., car accident).

Activities of Daily Living: fundamental skills required to independently care for oneself.

Adapted Physical Activity: physical programming or activities that allow students of all abilities to participate with their peers.

Attention Deficit Hyperactivity Disorder (ADHD): one of the most common neurodevelopmental disorders of childhood. Children with ADHD may have trouble paying attention, controlling impulsive behaviors (may act without thinking about what the result will be), or be overly active.

Auditory Learner: a learning style where the learner learns through listening and hearing information presented vocally.

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Autism Spectrum Disorder (ASD): a developmental disability caused by differences in the brain which may result in problems with communication and interaction, as well as restricted or repetitive behaviours.

Blindness or vision impairment: the absence or loss of vision, encompassing a broad spectrum of severity, from an impairment that inhibits certain activities of daily living, to a significant loss such that any activity requiring sight is not possible.

Cerebral Palsy: a group of disorders that affect the development of motor control and posture, occurring as a result of a non-progressive impairment to the developing central nervous system.

Conduct Disorder (CD): a disorder where children show pattern of aggression toward others, and serious violations of rules and social norms in all aspects of life.

Congenital Disabilities: disabilities that individuals are born with and have experienced their entire lives.

Deafness or Hard of Hearing: people with profound hearing loss, with very little to no hearing.

Disability: a complex phenomenon, reflecting an interaction between features of a person's body and mind and features of the society in which they live. A disability can occur at any time in a person's life; some people are born with a disability, while others develop a disability later in life. It can be permanent, temporary, or episodic. Disability can steadily worsen, remain the same, or improve. It can be very mild to very severe. It can be the cause, as well as the result, of disease, illness, injury, or substance abuse.

Down Syndrome: a condition in which a person has an extra chromosome resulting in delays in mental and physical development, as well as increased risk for health problems.

Hard of hearing: people with hearing loss ranging from mild to severe. Hearing loss can be mild to severe and can affect one or both ears. Those who cannot hear 20 dB or better are said to have hearing loss.

Inclusion: the act or practice of providing equal access and opportunities to students of all abilities.

Intellectual Disability: a term used when there are limits to a person's ability to learn at an expected level and therefore function in daily life.

Interpersonal Barriers: relate to formal and informal social networks and support systems, such as the lack of support from teachers, parents, and peers (i.e., negative feelings or attitudes from other students, teachers, or parents/guardians about an individual's ability).

Intersectional Identity: the complex way in which the effects of multiple forms of discrimination (e.g., racism, sexism, classism, ableism) combine, overlap, or intersect in the experiences of marginalized or non-marginalized individuals or groups (Crenshaw, 1989).

Intrapersonal Barriers: obstacles within oneself that prevent them from participating in activities (i.e., negative feelings about oneself and one's body, thoughts about one's inabilities to participate in physical activity, or feelings of being considered less than others).

Kinesthetic Learner: a hands-on learning style, where the learner learns through "doing."

Musculoskeletal Injuries: injuries or disorders of the muscles, nerves, tendons, joints, cartilage, and spinal discs. They can range from mild to severe.

Mobility Aid: a device used to assist individuals with walking or to improve the mobility of people with mobility impairment (e.g., wheelchairs, scooters, walkers, canes, prosthetic devices, or orthotic devices).

Oppositional Defiance Disorder (ODD): a behaviour disorder where children are uncooperative, defiant, and hostile toward peers, parents, teachers, and other authority figures.

Person-First Language: places the person before the disability when speaking or writing.

Physical Literacy: the motivation, confidence, physical competence, knowledge and understanding to value and take responsibility for engagement in physical activities for life.

Power/Privilege: an advantage someone has over another because of their identity.

School-Based Physical Activity: physical activity programs that occur at school, during school hours, or in affiliation with the school (i.e., physical education class, recess, school sports, intramurals).

Sociocultural Barriers: societal constructs that originate from social norms and cultural values (i.e., stereotypes, stigma, social norms, and expectations regarding people living with a disability that are cultural relevant at a given time).

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Spina Bifida: a condition in which an area of the spinal column doesn't form properly, leaving a section of the spinal cord and spinal nerves exposed through an opening in the back.

Stigma: a strong feeling of disapproval that most people in a society have about something.

Structural Barriers: obstacles that collectively affect a group of people that perpetuate and maintain the inaccessibility of physical activity participation (i.e., characteristics, design, and layout of built and natural environments).

Student-Centered Learning: a learning approach where students are provided with an authentic task in order to create relevant learning experiences.

Support Needs: psychological construct referring to the pattern and intensity of supports necessary for a person to participate in activities linked with normative human functioning.

The Medical Model of Disability: mainstream public and professional perceptions of disability, and views disability as a problem that exists within a person's body, only to be solved by medical doctors.

The Social Model of Disability: model that approaches disability in a way that if society were set up and constructed in a way that was accessible to people with disabilities, those individuals would not be restricted from full participation in the world around them.

The STEP Framework: a framework that describes how the Space, Task, Equipment, and People can be modified to meet the needs of each individual participant in a physical activity setting.

Visual Learner: a learning style where the learner learns through clear pictures such as graphic depiction, such as arrows, charts, diagrams, symbols, and more.

Resources and Organizations

The following resources provide additional information about inclusion and physical activity programming for individuals of all abilities.

- Active Living Alliance for Canadians with a Disability (https://ala.ca/)
- Canadian Blind Sports Association (https://canadianblindsports.ca)
- Canadian Cerebral Palsy Sports Association (https://ccpsa.ca)
- Canadian Disability Participation Project (https://cdpp.ca/resources-and-publications/physical-activity-active-living-and-sport-resource-catalogue)
- Coaching Kids of All Abilities (https://jumpstart.canadiantire.ca/pages/coaching-kids-of-all-abilities)
- Canadian Paralympic Committee (https://paralympic.ca/fundamentals-resource)
- Canadian Therapeutic Riding Association (https://cantra.ca/en/)
- Easter Seals (https://easterseals.ca/en/)
- Jooay (https://jooay.com/)
- PHE Canada (https://phecanada.ca)
- Propeller Dance - Digital Dance Class (https://propellerdance.com/education/events/)
- Rick Hansen Foundation (http://www.rickhansen.com)
- Special Olympics Canada (https://www.specialolympics.ca)

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