



ACTIVITY: Para-Sport

ACTIVITY OVERVIEW

This activity allows your students to create a more inclusive classroom and solve movement challenges from Health & PE, while using the 'Investigate' and 'Generate' parts of the design process to modify sports equipment and rules.

SYNOPSIS

Take your ordinary PE class and turn it into the Paralympics, with events for competitors who are vision-impaired, hearing-impaired and in wheelchairs. Not every class includes a child with a disability, although many will. It is important for children to consider those who have different abilities and how to make school life inclusive for everyone.

This design activity will work especially well at the same time as the Commonwealth or Paralympic Games take place, while children are already engaged in viewing these para-sporting events. Consider working with your school PE teacher to conduct this activity.

This activity allows your students to create a more inclusive classroom and solve movement challenges from Health & PE, while using the 'Investigate' and 'Generate' parts of the design process to modify sports equipment and rules.

Foundation – Year 2

- Explore needs or opportunities for designing, and the technologies needed to realise designed solutions (VCDSCD018)
- Visualise, generate, and communicate design ideas through describing, drawing and modelling (VCDSCD019)
- Describe ways to include others to make them feel that they belong (VCHPEP075)
- Explore actions that help make the classroom a healthy, safe and active place (VCHPEP078)
- Propose a range of alternatives and test their effectiveness when solving movement challenges (VCHPEM086)

Year 3 – 4

- Critique needs or opportunities for designing and explore and test a variety of materials, components, tools and equipment and the techniques needed to create designed solutions (VCDSCD028)
- Generate, develop, and communicate design ideas and decisions using appropriate technical terms and graphical representation techniques (VCDSCD029)
- Describe strategies to make the classroom and playground healthy, safe and active spaces (VCHPEP095)
- Apply innovative and creative thinking in solving movement challenges (VCHPEM103)

Year 5 – 6

- Critique needs or opportunities for designing, and investigate materials, components, tools, equipment and processes to achieve intended designed solutions (VCDSCD038)
- Generate, develop, communicate and document design ideas and processes for audiences using appropriate technical terms and graphical representation techniques (VCDSCD039)
- Investigate how celebrating similarities and differences can strengthen communities (VCHPEP114)
- Apply critical and creative thinking processes in order to generate and assess solutions to movement challenges (VCHPEM121)

ACTIVITY, MATERIALS AND INSTRUCTIONS

Activity

Let's make our PE class more accessible to all kids!

Materials for 30 students (working in 5 groups)

- large pieces of paper (for brainstorming)
- pencils/markers
- assorted sports equipment (from your PE storeroom) (e.g. balls, hoops, rubber chickens)
- blindfolds x 5 (for simulating vision-impairment)
- earmuffs x 5 (for simulating hearing-impairment)

Instructions

1. Your task is to modify an existing game from your PE class, so that students with a disability can participate.

Students work in groups to generate ideas for this activity.

2. Allocate each group (could be randomly, all the same, choice) one of these disabilities:
 - vision-impairment (blind)
 - hearing-impairment (deaf)
 - physical disability, can't use legs (in wheelchair)
3. On your page, brainstorm ideas for changes to equipment and changes to rules that will help students with these disabilities to join in your PE class.
4. Hints or examples can be given to help younger children. Here are some examples:

Blind bowling

For bowling in a school hall or classroom, not an actual 10-pin bowling alley. The blind bowler has a team-mate at the end with the pins. Team-mate calls out to them, so they can work out which direction to bowl ball.

Equipment – no change

Rules – add an extra person, bowler gets three turns to bowl

Sit-down volleyball

This is an actual Paralympic sport.

Equipment – lower net position

Rules – you must keep your bottom on the floor

Deaf Captain's Coming

Change the way that you communicate the instructions in this game by taking out the voice commands and replacing with picture signs.

5. Groups present their para-sport idea to the whole class. Class votes on which sport should be played in the next PE lesson.

HOW TO USE THIS ACTIVITY WITH YOUR STUDENTS

Ideally, time this activity to fit in with the Paralympic or Commonwealth Games occurring, as these provide a great introduction to the topic.

This activity is not just about producing a product, it also includes modifying the processes (or game rules) to ensure that children with disabilities can participate in PE class.

When we think about engineering and design, it is easy to overlook the design of a procedure, in favour of designed solutions that are products.

An opportunity exists here to invite members of your school community with a disability (teachers, parents, older students) to visit your classroom and answer questions from your students about how easy or hard it is for them to move around your school.

Foundation – Year 2

Younger students may need more guidance with this activity, such as suggesting games or sports that you know they play during PE.

Alternatively, suggest a game that you play in the classroom that you know would be difficult for someone blind, deaf or in a wheelchair to play (e.g. duck, duck, goose).

Years 3/4

Students in Years three and four may be better introduced to this activity by testing out what it would be like to have different disabilities around your classroom.

You may need to show the students some photos of athletes or children with disabilities at the beginning. Try out regular classroom activities with a disability. For example, students must enter the classroom as if they are in wheelchairs (crouch and push wheels with your arms). Can you get in the door? Can you fit around the chairs and tables? Or try marking the class roll with a hearing-impairment, covering your ears. How will you know that the teacher is saying your name? Or try finding your way to your seat with your eyes closed (or wearing a blindfold).

Ask students to suggest ways to help classmates with disabilities to get around your classroom. From this, you can progress to the accessible PE activity.

Years 5/6

If you are not conducting this activity during a Paralympic or Commonwealth Games period, you can also introduce the topic using Dylan Alcott – 2022 Australian of the Year. He is an inspirational speaker, and you can find out more about him in this short clip from the ABC: <https://www.youtube.com/watch?v=jlb1rjm3yv4>.

After completing this activity, extend students' learning by broadening the topic. Sport is only one part of our school life. What would it be like to have one of these disabilities and spend a day at your school? What would be difficult? Where would you play? Can you find your way to your classroom? Can you get to your desk? Where would you play at lunchtime?

DISCUSSION SECTION AND KEY THEMES

KEY THEMES

What is a disability?

A disability is any condition that restricts a person's mental, sensory or mobility functions. It may be caused by accident, trauma, genetics, or disease.

A disability may be temporary or permanent, total, or partial, lifelong or acquired, visible or invisible.

Disability arises from the way people with disability interact with the world. Individuals encounter physical barriers, digital barriers and barriers of attitudes and communication. These barriers impact on an individual's ability to equitably participate in society. (Australian Network on Disability)

Para-sports

After World War Two, sports for people with disabilities were introduced widely around the world, particularly to support injured veterans. In 1960, the first Paralympic Games were held in Rome, with 400 athletes from 23 countries taking part. Australia won three gold medals at the first Paralympic Games! We have been most successful in sports from athletics, swimming and cycling.

The Paralympic Games are held every four years, directly following the Olympic Games. At the Commonwealth Games, para-sport is fully integrated into the program, with all athletes contributing to a nation's medal tally. Sports played are modified to suit people with disabilities and, within each sport, there are different classifications so that people are only competing against others with similar disabilities.

Para-sports played at the Paralympic and Commonwealth Games include boccia, five-a-side football, goalball, para-skiing, para-archery, para-athletics, para-badminton, para-biathlon, para-canoë, para-equestrian, para-ice hockey, para-judo, para-powerlifting, para-rowing, para-shooting, para-snowboard, para-swimming, para-table tennis, para-taekwondo, para-triathlon, sitting volleyball, wheelchair basketball, wheelchair curling, wheelchair fencing, wheelchair rugby and wheelchair tennis.

Technology and para-sports

Technology and engineering in para-sports is improving all the time. Here are a few examples of technology used at the Tokyo Paralympics:

Wheelchair badminton – athletes need to be able to lean backwards in their chairs without tipping over. A backrest and extra small wheels at the back of the chair made it possible for athletes to lean back, racquet stretched out, and remain stable.

Cycling – athletes competing have a variety of impairments, meaning that bikes need to be modified for each individual competing. For example, some athletes have modified handlebars, while others attach their prosthetic feet to the pedals.

Archery – athletes without arms are still able to compete in archery, with the assistance of a special release brace, strapped on to their bodies and arrow release controlled by the foot.

Running – athletes with parts of their feet and legs amputated wear a prosthetic (artificial) limb. Originally these were made from wood, but now these running blades are J-shaped, made from carbon fibre and replace the calf and ankle of athletes. They are strong and lightweight, and used in running and jumping (e.g. high jump, long jump).

Wheelchair basketball – chairs in this sport are modified to make playing basketball easier for each player. Different athletes have different chair designs. Athletes with less mobility have lower seats and a backrest, while athletes with more mobility might have extra small wheels, so they can safely reach in all directions (like the badminton players).

These chairs look different from the racing wheelchairs, as they need to change direction easily and allow the player to handle the ball.

Racing wheelchairs – these need to be lighter chairs, so that the athlete is not wasting energy pushing more weight. Materials used include carbon fibre and aluminium. Athletes wear 3D-printed gloves, to make their pushing as effective and safe as possible.

Wheelchair rugby – this is a tough sport! Wheelchairs need to be able to handle bumps and bangs and are made out of materials including aluminium and titanium. Some chairs have added hooks and wings, to aid in attack or defence.

Swimming – vision-impaired athletes use the assistance of a tapping pole, held by a team-mate, to let them know when they are about to reach the wall. This is not made from high-tech materials or an amazing design but is simply a pole, with a soft section on the end, that can be safely tapped on the athletes head, shoulder or back.

Dylan Alcott

Dylan Alcott is an athlete, Paralympian, philanthropist, media commentator and advocate, who was awarded Australian of the Year in 2022. Dylan is most famous for his wheelchair tennis, having won 23 tennis Grand Slam titles during his career. He works to provide scholarships and grants to Australians with disabilities, co-founded a fully accessible music festival and has roles on TV and radio. What a champion for Australians with a disability!

QUESTIONS AND ANSWERS

How many people in Australia have a disability?

In 2018 there were 4.4 million Australians with a disability. This was 17.7% of the population. One in nine people under the age of 65 have a disability. (Australian Bureau of Statistics)

Why is it called 'para'?

The word Paralympic puts the Greek word 'para' in front of Olympic. Para means beside or alongside, showing that the Paralympics exist side-by-side with the Olympics. From the Paralympics, the word 'para' has spread to encompass sports played by people with a disability at any time.

Is there anyone who has competed in Paralympic and Olympic Games?

Before the introduction of the Paralympic Games, all athletes competed together. Since 1960, there have been eleven athletes with a disability who have competed in both Games, including Australian table tennis player, Melissa Taylor, who competed in both Games in 2016 and 2021. There have also been four athletes who competed in the Olympic Games, then competed in the Paralympics after acquiring a disability. This gives a total of 15 athletes who have competed at both Games.

Where and when are the next Paralympic Games?

Summer Paralympics: Paris (France) 2024, Los Angeles (USA) 2028

Winter Paralympics: Milano Cortina (Italy) 2026

How many countries compete in the Paralympics?

162 National Paralympic Committees (most of these are countries) competed at the Tokyo 2020 Paralympics (actually held in 2021).

Who are some of our best Australian Paralympians?

Paralympics Australia has been awarding an Australian Paralympian of the Year since 1994. These athletes have been recognised for their outstanding achievements in sport and include:

- Ben Tudhope – snowboarding
- Madison de Rozario – athletics (400 – 1500m)
- Dylan Alcott – tennis (and basketball before this)
- Jacqueline Freney – swimming
- Cameron Rahles-Rahbula – skiing
- Matthew Cowdry – swimming

Why aren't there more kids with disabilities at our school?

Children with disabilities have several options for school including mainstream, specialist, home-schooling, distance education or community school.

The choice is not always an easy one and includes factors such as type of disability, support available, siblings, religious beliefs, and location.

You can read a bit more about this complicated issue here:

- <https://www.abc.net.au/news/2022-06-06/disability-education-inclusion/101117186>
- <https://raisingchildren.net.au/disability/school-play-work/school/primary-school-options-disability>

What are some special features of schools to help students with disabilities?

There are standards and legislation that require an inclusive approach to the education of students with a disability.

You can read more about this from an adult's perspective here <https://www.aitsl.edu.au/research/spotlights/inclusive-education-teaching-students-with-disability>.

However, if a student was asked this question, their answer may include things like a lift, ramps, earmuffs, favourite toys, a break-out room, attending for only part of the school week and the support of teaching assistants.

Is there an inter-school para-sports program for primary school kids in Australia?

School Sport Victoria has three major events for children with a disability, called Multiclass. Primary school students can compete in swimming, cross country and athletics (track and field).

It's not the regular inter-school sport that Grade 5 and 6 at your school do every week, but the next level up (the District competition). These can be students from special schools, or students attending mainstream schools.

<https://www.ssv.vic.edu.au/Pages/Multiclass.aspx>

How do I find out more about playing para-sports in Australia?

Access for All Abilities is a service for people with a disability, helping to find sport and recreation opportunities in a local area and to suit specific needs.

There are many sporting associations all over Australia ready to welcome more participants in their para-sports including AFL, snow sports, dance, weightlifting and wheelchair sports.

<https://www.aaqplay.org.au/>

OUTSIDE OR SUPPLEMENTARY READING

Australian Network on Disability

<https://www.and.org.au/>

Paralympics Australia

<https://www.paralympic.org.au/>

International Paralympic Committee

<https://www.paralympic.org/>

Commonwealth Games Para-Sport

<https://thecgf.com/our-relevance/para-sports>

Disability Sport & Recreation

Helping Victorians living with disability to be active by providing greater choice, access, and participation. Includes programs for kids (DSR kids and Variety Activate Inclusion Sports Days)

<https://www.dsr.org.au/>

Deaf Sports Australia

<https://deafsports.org.au/>

Wheeltalk, wheelchair awareness and inclusion sports program

<https://www.dsr.org.au/wheeltalk>

Sport Inclusion Australia

<https://sportinclusionaustralia.org.au/>

Little Athletics Victoria

<https://lavic.com.au/>

Athletics Victoria – para search

<https://athsvic.org.au/?s=para>

TOPIC WORDS

- Para-sport
- Disability
- Impaired
- Accessible
- Wheelchair
- Blind
- Vision
- Hearing
- Deaf
- Athletes



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