

Australian Curriculum – General Capabilities – Links to the Sports Tech suite of activities

Analytics and Wearables	Critical and Creative Thinking	Students use wearable technology to critically analyse movement data (heart rate, speed, steps) and creatively explore ways to improve performance by adjusting training strategies based on insights gained from the metrics.
	Digital Literacy	Students interact with wearable devices and their software, learning to collect, analyse, and visualize data such as heart rate, movement, and other performance indicators.
	Ethical Understanding	Students explore ethical considerations related to data privacy, informed consent, and the responsible use of personal data in sports settings.
	Data Literacy	Students develop skills in reading and interpreting real-time performance data, such as movement speed and heart rate, to inform decisions about training effectiveness.
	Intercultural understanding	Students reflect on how different cultures value sports data, and how wearables are used differently across sports globally, fostering a deeper understanding of varied approaches to physical performance and well-being.
	Personal and Social Capability	Students develop self-awareness by analysing their own physical performance data, understanding their strengths and areas for improvement while collaborating with others to compare results.
Virtual Golf	Critical and Creative Thinking	Students critically assess their golf swing and technique, using the virtual simulation to creatively explore different approaches to improving their performance in various virtual course conditions.
	Digital Literacy	Students interact with virtual golf technology, learning to control simulations, interpret real-time feedback, and analyse swing metrics like ball speed, angle, and distance.
	Ethical Understanding	Ethical discussions around fair play in simulated environments are explored, including the implications of using technology to replicate real-life golf experiences.
	Data Literacy	Students interpret data from virtual golf simulations (swing speed, ball trajectory), using the information to adjust their technique and enhance performance.
	Intercultural understanding	Students explore how golf is played across cultures and regions, reflecting on how virtual golf can simulate experiences from different parts of the world.

	Personal and Social Capability	Students improve self-regulation and goal setting by analysing their performance and comparing it to peers, while developing resilience and collaboration skills during the activity.
Esports	Critical and Creative Thinking	Students analyse gameplay, strategizing and problem-solving within the game to develop creative solutions for achieving objectives in competitive esports environments.
	Digital Literacy	Students engage with gaming software and hardware, improving their ability to navigate digital environments, communicate with teammates online, and track performance data such as reaction time and coordination.
	Ethical Understanding	Students discuss the ethical aspects of online gaming, including fair play, behaviour in digital communities, and the impact of gaming on mental health.
	Data Literacy	Students learn to read and analyse esports performance metrics (e.g., reaction time, decision speed), using this data to enhance their strategies and improve gameplay.
	Intercultural understanding	Students interact with players from different cultures and countries in esports competitions, developing empathy and understanding through these cross-cultural exchanges.
	Personal and Social Capability	Students develop collaboration and teamwork skills as they engage with others in competitive esports, fostering leadership, emotional regulation, and decision-making under pressure.
Reaction Training	Critical and Creative Thinking	Students critically assess how to improve their reaction times, creatively exploring different strategies for responding to Blaze Pod lights in various physical settings.
	Digital Literacy	Students use Blaze Pods and related apps to track and analyse their reaction times, enhancing their ability to use digital tools in physical training.
	Ethical Understanding	Students reflect on the fairness and accuracy of reaction-based assessments and how these metrics might impact competition results or training decisions.
	Data Literacy	Students interpret the data collected from reaction tests (e.g., time to react, accuracy), using this information to evaluate their cognitive and physical performance.

	Intercultural understanding	The activity can lead to discussions on how different cultures value reaction training and cognitive agility in sports and how technology is adapted to meet various cultural needs.
	Personal and Social Capability	Students enhance their emotional control and self-awareness while competing against peers, fostering perseverance and focus through fast-paced reaction drills.
Virtual Cycling	Critical and Creative Thinking	Students analyse virtual cycling performance data (e.g., speed, power output), critically assessing how to adjust their technique to improve efficiency and endurance in different virtual terrains.
	Digital Literacy	Students engage with digital cycling platforms (e.g., Zwift) to track and improve performance, learning to navigate virtual worlds while controlling and analysing performance data.
	Ethical Understanding	Students explore ethical questions around the accuracy of virtual cycling competitions, including fairness and the authenticity of performance metrics in a virtual environment.
	Data Literacy	Students interpret data such as heart rate, power output, and speed from virtual cycling simulations, using this data to optimize their physical performance and training regimens.
	Intercultural understanding	Students can reflect on how cycling is valued and practiced in different parts of the world, exploring how virtual cycling brings diverse global communities together.
	Personal and Social Capability	Students build endurance, perseverance, and goal-setting capabilities as they work to improve their personal performance on virtual courses, often engaging in friendly competition with peers.
Oculus Virtual Reality Sport	Critical and Creative Thinking	Students think critically about how to adapt their physical movements in virtual sports environments, creatively exploring different strategies to maximize their performance in immersive VR settings.
	Digital Literacy	Students engage with Oculus VR technology, learning how to operate and navigate virtual environments while collecting data about their physical movements and performance.

	Ethical Understanding	Students consider the ethical implications of immersive environments, including the potential for addiction, data privacy concerns, and the fairness of virtual competition.
	Data Literacy	Students analyse movement data from VR sports sessions, interpreting how their physical performance in a virtual world compares to real-life abilities.
	Intercultural understanding	Students can explore the cultural significance of sports represented in VR, reflecting on how different sports traditions are simulated and appreciated worldwide.
	Personal and Social Capability	Students enhance their physical and emotional resilience, adaptability, and collaboration skills through immersive VR sports experiences, encouraging both personal and social growth.
Motorsport	Critical and Creative Thinking	Students critically evaluate their virtual racing techniques, analysing data on speed and control to improve their lap times and overall performance in racing simulations.
	Digital Literacy	Students interact with racing simulators, learning to control digital interfaces and analyse performance data such as speed, cornering efficiency, and reaction times.
	Ethical Understanding	Students explore ethical questions surrounding the fairness of using technology in competitive motorsport simulations and the impact of simulation-based training on real-world competition.
	Data Literacy	Students interpret racing data, such as lap times, acceleration, and braking performance, using the data to make informed decisions about how to improve their virtual racing techniques.
	Intercultural understanding	Students reflect on the cultural aspects of motorsport and how it is represented and valued globally, discussing how different countries approach racing and simulation training.
	Personal and Social Capability	Students develop emotional regulation, focus, and perseverance through the intense focus required for virtual racing, often working in teams to compare data and improve performance.

Sports Metrics – Timing Gates	Critical and Creative Thinking	Students critically assess their speed and acceleration times, using creative thinking to develop strategies for improving their sprinting techniques and reaction times during competitive drills.
	Digital Literacy	Students engage with digital timing systems to record sprint times, learning how to use software to capture and analyse data, and understanding the role of technology in enhancing athletic performance.
	Ethical Understanding	Timing gates introduce discussions about fairness in measuring speed and performance, considering how technology can ensure accuracy and equity in competitive environments.
	Data Literacy	Students interpret speed data captured by the timing gates, analysing their performance and identifying patterns that highlight areas for improvement in acceleration and reaction times.
	Intercultural understanding	Students can explore how speed and agility are valued in different sports cultures worldwide, gaining insight into the varied approaches to training and performance enhancement across global sporting traditions.
	Personal and Social Capability	Through competition and self-analysis, students develop resilience, goal-setting, and perseverance while working to improve their personal best times and collaborating with others in group activities.
Sports Metrics – Force Decks	Critical and Creative Thinking	Students critically analyse their vertical jump data or force output, exploring how biomechanics and muscle engagement influence performance, leading to creative strategies for improving their results.
	Digital Literacy	Students use the Force Deck Plates to measure and analyse their jump height, power output, and ground reaction force, developing digital literacy by navigating the technology and interpreting the results.
	Ethical Understanding	Ethical considerations arise in how athletes use performance data to make informed training decisions, with discussions around transparency, fairness, and the responsible use of performance-enhancing technologies.

	Data Literacy	Students interpret complex performance data, such as ground reaction forces and jump height, gaining insights into their strength and conditioning, and using this data to make informed adjustments to their training plans.
	Intercultural understanding	Discussions can focus on how different cultures approach strength and conditioning, providing insight into global perspectives on power training and how technologies like Force Deck Plates are utilized in various sports.
	Personal and Social Capability	The Force Deck Plates provide opportunities for self-reflection and improvement, helping students set personal goals, regulate their emotional responses to competition, and support teammates through encouragement.
Sports Metrics – Dynamo	Critical and Creative Thinking	Students critically assess their grip strength and upper body endurance using The Dynamo, applying creative thinking to explore ways to improve strength and endurance through targeted exercises.
	Digital Literacy	Interacting with The Dynamo technology allows students to capture grip strength data, learning to navigate the software, input results, and analyse performance trends over time.
	Ethical Understanding	Ethical discussions may focus on how personal strength data is used, considering privacy, fairness, and the implications of sharing or comparing physical performance data among peers.
	Data Literacy	Students learn to read and interpret grip strength and endurance data from The Dynamo, making connections between their physical conditioning and performance, and using this information to improve their training routines.
	Intercultural understanding	The activity fosters understanding of how different cultures value grip strength and endurance, discussing the role these metrics play in various sports across the world, from martial arts to climbing
	Personal and Social Capability	Students reflect on their grip strength progress and use this knowledge to set personal fitness goals, while also collaborating with peers to challenge themselves and develop social skills through teamwork and competition.

Virtual Rowing	Critical and Creative Thinking	Students critically assess their rowing form, stroke efficiency, and pacing strategies, using creative thinking to adjust their technique and improve endurance and power output during rowing sessions.
	Digital Literacy	Students engage with the digital displays on the Ergo machine, learning to monitor and analyse key performance metrics such as stroke rate, split times, and distance covered in real time.
	Ethical Understanding	Ethical considerations include discussions around fairness in competitive rowing, the use of performance-enhancing technology, and the ethical implications of sharing personal performance data among peers.
	Data Literacy	Students interpret performance data from the Ergo, including metrics like power output and stroke rate, to identify strengths and areas for improvement, making data-driven adjustments to their rowing technique.
	Intercultural understanding	Students explore how rowing is valued and practiced across different cultures, learning about global rowing traditions and how rowing technology is used in various countries to enhance athletic training.
	Personal and Social Capability	Through individual and group rowing challenges, students develop perseverance, goal-setting, and emotional regulation as they push themselves to meet personal performance goals while supporting and collaborating with others.
Critical and creative thinking	<p>The integration of sport technology fosters creative and critical thinking capabilities by providing a platform for inquiry and exploration. Through the development of questions, students are prompted to inquire about the possibilities and applications of various sports technologies, sparking curiosity and driving investigation. This curiosity leads to the identification, processing, and evaluation of information as students analyse data collected from wearables, virtual simulations, and esports tournaments.</p> <p>As they engage with different technologies, students are encouraged to create possibilities by imagining new ways to utilise them, whether it's designing innovative virtual sports activities or exploring alternative methods for training and performance assessment. They are challenged to consider alternatives, thinking outside the box to solve problems and optimise outcomes.</p>	

	<p>Putting ideas into action involves collaborative planning and implementation, where students experiment with different approaches and strategies. Through this process, they interpret complex concepts and problems, drawing connections between technology and sports performance, biomechanics, and cognitive processes. Ultimately, students draw conclusions and provide reasons based on evidence and critical reflection, evaluating actions and outcomes to iteratively improve their understanding and application of sport technology.</p> <p>As they engage in this cycle of inquiry, they develop metacognitive skills, learning to think about their own thinking processes and transfer knowledge gained from sports technology experiences to other contexts, preparing them for future challenges and opportunities.</p>
Digital Literacy	<p>Sport technology serves as a catalyst for developing digital literacy capabilities, empowering individuals to navigate the digital landscape with confidence and responsibility. By engaging with sport technology, individuals learn to manage online safety by recognising potential risks and employing strategies to mitigate them, ensuring a secure digital environment for participation.</p> <p>Through the collection and analysis of data from wearables and virtual simulations, users acquire and collate data, honing their skills in locating and interpreting information to inform decision-making. Planning and creating digital content, whether it's designing virtual sports activities or collaborating on esports tournaments, foster skills in communication and collaboration, while instilling a respect for intellectual property rights.</p> <p>Furthermore, individuals learn to manage digital privacy and identity, understanding the importance of safeguarding personal information in online interactions, thus promoting digital wellbeing. As they select and operate various digital tools, users also learn to manage content effectively, protecting it from unauthorised access or manipulation. In essence, sport technology not only enhances athletic performance but also cultivates essential digital literacy skills necessary for thriving in today's interconnected world.</p>
Ethical understanding	<p>Engagement with sport technology provides a rich context for cultivating ethical understanding capabilities, guiding individuals through a thoughtful exploration of ethical concepts and dilemmas inherent in the intersection of sports and technology.</p>

	<p>By examining values, rights, and responsibilities in the context of wearable technology, virtual simulations, and esports tournaments, users develop a nuanced understanding of ethical norms governing their use. They learn to recognise influences on ethical behaviour and perspectives, acknowledging the societal, cultural, and economic factors that shape their decisions and actions.</p> <p>Through the exploration of diverse ethical perspectives and frameworks, individuals gain insight into the complexities of ethical issues such as data privacy, fair competition, and access to technology. This exploration empowers users to make informed and reflective ethical decisions, considering the consequences of their actions on themselves and others.</p> <p>Ultimately, sport technology serves as a platform for ethical inquiry and growth, fostering a deeper appreciation for the ethical dimensions of sports participation and technological innovation.</p>
Intercultural understanding	<p>Sport technology serves as a conduit for developing intercultural understanding capabilities by facilitating cross-cultural interactions and fostering empathy and respect for diverse perspectives. Through the lens of sport, individuals are encouraged to reflect on the relationship between cultures and identities, recognising the rich tapestry of traditions, beliefs, and values that shape human experiences.</p> <p>By examining cultural perspectives and worldviews embedded within sports technology, users gain insight into the diverse ways in which technology intersects with different cultural contexts. Through exploration of how cultures influence interactions in virtual sports simulations or esports tournaments, individuals develop an appreciation for the complexities of intercultural exchanges.</p> <p>Effective communication in these contexts requires responsiveness to cultural nuances and the ability to develop multiple perspectives, fostering empathy and understanding across cultural divides. As users engage with diverse communities through sport technology, they learn to recognise and respond to biases, stereotypes, prejudices, and discrimination, promoting inclusivity and equity in intercultural interactions.</p> <p>The use of sport technology enables individuals to adapt and thrive in intercultural exchanges, fostering a global mindset and appreciation for the richness of human diversity.</p>

<p>Personal and Social Capability</p>	<p>Sport technology serves as a powerful tool for fostering personal and social capabilities by providing individuals with opportunities for self-awareness, emotional regulation, and reflective practice.</p> <p>Through engagement with wearable technology and virtual simulations, users develop a heightened awareness of their physical abilities and limitations, as well as their emotional responses to challenges and successes in sports contexts.</p> <p>Reflective practice is encouraged as individuals analyse their performance data and adjust their strategies accordingly, setting and revising goals to strive for continuous improvement.</p> <p>Emotional regulation and perseverance are nurtured as users navigate setbacks and obstacles, learning to adapt their approach and maintain focus on their objectives.</p> <p>Empathy and relational awareness are cultivated through collaborative endeavours such as esports tournaments, where effective communication, collaboration, and leadership skills are essential for success.</p> <p>Decision-making processes are honed as individuals weigh competing priorities and consider the needs and perspectives of others, fostering a sense of community awareness and responsibility. In essence, the use of sport technology facilitates holistic personal and social development, equipping individuals with the skills and attributes needed to thrive both on and off the field.</p>
<p>Data Literacy</p>	<p>Through engagement with wearable technology and virtual simulations, individuals are exposed to a plethora of data, ranging from performance metrics to user feedback. By interacting with tables, line graphs, scatter plots, and infographic data embedded within sports technology applications, users develop proficiency in reading and understanding visual representations of data.</p> <p>They learn to interpret trends, patterns, and correlations, extracting valuable insights to inform decision-making and enhance performance. Moreover, the integration of data literacy within the sports technology framework promotes critical thinking and problem-solving skills as users analyse complex datasets and draw evidence-based conclusions.</p>

The use of sport technology provides a hands-on learning experience that empowers individuals to navigate the data-rich landscape of the digital age with confidence and proficiency.