

Regional Rail Revival Design Challenge 2050

Evaluation Criteria: Levels 9 & 10

The Regional Rail Revival Design Challenge 2050 asks young people to submit their ideas to improve the rail experience in 2050. Whether your ideas are about the on-board experience, improving the way people get around the station or using smart and sustainable tech for a more enjoyable journey, we'd love to hear them.

Through this competition, students will use design thinking processes **to develop a prototype in response to the competition brief**, and will receive professional assistance with prototyping and pitching their solution.

Team: _____ **School:** _____ **Year level:** _____

Prototype (circle): *Technology or app-driven transport solution/ Communications campaign/ Product prototype/ Building or system design*

Prototype Description: _____

Competition Criteria	Evaluation of Performance & Understanding					Shortlisting Panel Comments (based on evidence provided)
	Not Shown	Novice	Intermediate	Expert		
Empathise and Define Teams identify the regional rail transport needs of a user or group of users	No evidence of user needs is shown.	identifies an individual user or community regional rail need	explores the individual user or community regional rail needs	researches, analyses and evaluates the end-user or community regional rail needs		
Design and Technologies VCDSCD060		summarises different influences on the ways people work, such as technological change	explores different influences on the ways people work, such as technological change and predicts changes to work in future	researches and evaluates different influences on the ways people work, such as technological change and predicts changes to work in future		
Economics and Business VCEBW025		presents the user needs and their choice of technologies for their RRR design solution	explains how they identified user needs, the choice of technologies and new opportunities for their RRR design solution	evaluates how they identified user needs, choices of technologies and new opportunities for their RRR design solution in relation to preferred futures		
Design and Technologies VCDSTS055						
	N	1	2	3	4	5

Competition Criteria	Evaluation of Performance & Understanding					Shortlisting Panel Comments (based on evidence provided)
	Not Shown	Novice	Intermediate		Expert	
Ideate Teams develop a range of regional rail transport ideas that would meet the needs of their users Design and Technologies VCDSCD061 Critical and Creative Thinking VCCCTQ045	No evidence of ideation was shown.	Uses design thinking to develop different ideas	utilizes design thinking and creativity to develop different design ideas, then selects the most suitable ideas		Applies design thinking and enterprise skills to creatively develop and modify design ideas, then uses critical thinking to select the most suitable ideas	
		generates a design that meets the users' needs	explores different ideas to generate new designs that meet the users' needs	investigates ideas that shift perspectives and cross boundaries, to generate new designs that innovatively meet the users' needs		
	N	1	2	3	4	5

Competition Criteria	Evaluation of Performance & Understanding					Shortlisting Panel Comments (based on evidence provided)
	Not Shown	Novice	Intermediate		Expert	
Prototype Teams create a prototype of their regional rail design solution Design and Technologies VCDSCD062 Science VCSIS135	No prototype was shown.	safely manipulates technologies and materials to produce a prototype	safely and flexibly manipulates technologies and materials to produce a quality prototype		safely, flexibly and innovatively manipulates technologies and materials to produce a high-quality prototype and justifies the processes and technologies used	
		considers how research could help them build their prototype	effectively researches using the internet, observations, simulations or experiments to help build their prototype	effectively researches using the internet, observations, simulations or experiments to collect reliable data to help build their prototype and evaluates strengths and limitations of their investigations		
	N	1	2	3	4	5

Competition Criteria	Evaluation of Performance & Understanding					Shortlisting Panel Comments (based on evidence provided)
	Not Shown	Novice		Intermediate	Expert	
Communicate Teams create a video pitch to promote their regional rail design solution Media Arts VCAMAM043 Design and Technologies VCDSCD063	No pitch video was submitted.	presents a pitch video utilising a media feature to enhance the pitch presentation		presents a pitch video utilising one or two media features to convey meaning and enhance the pitch presentation	presents a pitch video that creatively utilises multiple production and editing features such as camera angle, framing, colour filters, text and sound to effectively convey meaning and enhance the pitch presentation	
			the video presents the success of their designed solution in meeting the users' needs	the video explains the success of their designed solution in meeting the users' needs and changes which could be made through iteration	the video evaluates the success of their designed solution in meeting the users' needs and how changes were made to improve their design through testing and iteration, as well as future Improvements based on factors such as sustainability	
	N	1	2	3	4	5

Competition Criteria	Evaluation of Performance & Understanding					Shortlisting Panel Comments (based on evidence provided)
	Not Shown	Novice		Intermediate	Expert	
Reflect Teams reflect and evaluate on the processes used to develop their design and the effectiveness of teamwork and project management Science VCSIS139 Digital Technologies VCDTDIO49	No project reflection was submitted.	outlines methods used to solve the users' problem and notes that improvements could be made		describes the effectiveness of methods used to solve the users' problem and explores different improvements to be made	evaluates the effectiveness of methods used to solve the users' problem with evidence such as analysis of test data and information collected, then investigates different improvements to be made	
			describes the process for collaborative group work	explains how online tools supported effective teamwork and project management processes	evaluates the use of online tools for interactive sharing of ideas and information with evidence of excellent collaborative project management and teamwork	
	N	1	2	3	4	5

Strand	Code	Descriptor
Design and Technologies	VCDSCD060	Critique needs or opportunities to develop design briefs and investigate and select an increasingly sophisticated range of materials, systems, components, tools and equipment to develop design ideas
	VCDSCD061	Apply design thinking, creativity, innovation and enterprise skills to develop, modify and communicate design ideas of increasing sophistication
	VCDSCD062	Work flexibly to safely test, select, justify and use appropriate technologies and processes to make designed solutions
	VCDSCD063	Evaluate design ideas, processes and solutions against comprehensive criteria for success recognising the need for sustainability
	VCDSTS055	Explain how designed solutions evolve with consideration of preferred futures and the impact of emerging technologies on design decisions
Digital Technologies	VCDTDI049	Manage and collaboratively create interactive solutions for sharing ideas and information online, taking into account social contexts and legal responsibilities
Science	VCSIS135	Independently plan, select and use appropriate investigation types, including fieldwork and laboratory experimentation, to collect reliable data, assess risk and address ethical issues associated with these investigation types
	VCSIS139	Use knowledge of scientific concepts to evaluate investigation conclusions, including assessing the approaches used to solve problems, critically analysing the validity of information obtained from primary and secondary sources, suggesting possible alternative explanations and describing specific ways to improve the quality of data
Economics and Business	VCEBW025	Research the way the work environment is changing in contemporary Australia and analyse the implications for current and future work
Media Arts	VCAMAM043	Plan, structure and design media artworks for a range of purposes that challenge the expectations of specific audiences by particular use of media elements, technologies and production processes
Critical and Creative Thinking	VCCCTQ045	Challenge previously held assumptions and create new links, proposals and artefacts by investigating ideas that provoke shifts in perspectives and cross boundaries to generate ideas and solutions