

Regional Rail Revival Design Challenge 2050

Evaluation Criteria: Levels 7 & 8

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 VCDSCD049		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 VCEBW017		presents the user-needs and their choice of technologies and for their regional rail design solution	explains how they identified user needs, the choice of technologies and new opportunities for their regional rail design solution	evaluates how they identified user-needs, choices of technologies and new opportunities for their regional rail design solution		
Design and Technologies VCDSTS044						
	N	1	2	3	4	5

Competition Criteria	Evaluation of Performance & Understanding					Shortlisting Panel Comments (based on evidence provided)
	Not Shown	Novice		Intermediate		
Ideate Teams develop a range of regional rail transport ideas that would meet the needs of their users Design and Technologies VCDSCD050 Critical and Creative Thinking VCCCTQ034	No evidence of ideation was shown.	lists a few ideas that meet some user needs using creative thinking processes		generates several ideas that meet the needs of users utilizing creative thinking processes, then selects the most suitable ideas		generates an extensive range of ideas that meet user needs using creative thinking processes and uses critical thinking to select the most suitable ideas
			identifies or researches other possible designs		acquires data through research to improve the design or modifies existing designs	
	N	1	2	3	4	5

Competition Criteria	Evaluation of Performance & Understanding					Shortlisting Panel Comments (based on evidence provided)
	Not Shown	Novice		Intermediate		
Prototype Teams create a prototype of their regional rail design solution Design and Technologies VCDSCD051 Science VCSIS108	No prototype was shown	safely manipulates technologies and materials to produce a prototype		safely and independently manipulates technologies and materials to produce a quality prototype		safely, independently and innovatively manipulates technologies and materials to produce a high-quality prototype and considers alternatives to reduce waste or time
			considers how research could help them build their prototype		effectively researches using the internet, observations, simulations or experiments to help build their prototype	
	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 VCAMAM036 Design and Technologies VCDSCD052	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 user's needs	the video explains the success of their designed solution in meeting the user's needs and changes which could be made through iteration		the video evaluates the success of their designed solution in meeting the user's needs and how changes were made to improve their design through testing and iteration, as well as future changes to be made	
	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 VCSIS112 Digital technologies VCDTDI039	No project reflection was submitted	outlines methods used to solve the user problem and notes that improvements could be made	describes the effectiveness of methods used to solve the user problem and explores different improvements to be made		evaluates the effectiveness of methods used to solve the user problem with evidence such as test data and investigates different improvements to be made	
		description of teamwork and evidence that they followed instructions for collaborative group work	evidence of effective teamwork and project management processes which followed timelines and sequences for completing tasks on time with assistance		evidence of excellent teamwork and independent project management which followed timelines and sequences for completing tasks on time	
	N	1	2	3	4	5

Strand	Code	Descriptor
Design and Technologies	VCDSCD049	Critique needs or opportunities for designing and investigate, analyse and select from a range of materials, components, tools, equipment and processes to develop design ideas
	VCDSCD050	Generate, develop and test design ideas, plans and processes using appropriate technical terms and technologies including graphical representation techniques
	VCDSCD051	Effectively and safely use a broad range of materials, components, tools, equipment and techniques to produce designed solutions
	VCDSCD052	Independently develop criteria for success to evaluate design ideas, processes and solutions and their sustainability
	VCDSTS044	Investigate the ways in which designed solutions evolve locally, nationally, regionally and globally through the creativity, innovation and enterprise of individuals and groups
Digital Technologies	VCDTDI039	Manage, create and communicate interactive ideas, information and projects collaboratively online, taking safety and social contexts into account
Science	VCSIS108	Collaboratively and individually plan and conduct a range of investigation types, including fieldwork and experiments, ensuring safety and ethical guidelines are followed
	VCSIS112	Reflect on the method used to investigate a question or solve a problem, including evaluating the quality of the data collected, and identify improvements to the method
Economics and Business	VCEBW017	Describe the nature and investigate the influences on the work environment
Media Arts	VCAMAM036	Plan, structure and design media artworks for a range of purposes that engage audiences using media elements, technologies and production processes
Critical and Creative Thinking	VCCCTQ034	Synthesise information from multiple sources and use lateral thinking techniques to draw parallels between known and new solutions and ideas when creating original proposals and artefacts