

Worksheet 6.2 – Student Self-Assessment Reflection Sheet

Discover how your 21st century skills connect to Queensland's evolving manufacturing sector. As technology transforms industries—from aerospace to renewable energy—employers seek adaptable, creative problem-solvers. This worksheet helps you assess your strengths, understand how technological, economic and societal factors are reshaping careers, and prepare for future opportunities in innovative manufacturing. Map your unique capabilities to tomorrow's workplace needs.

PART 1: Reflection on 21st-Century Skills

21st-Century Skills Assessment

1. Rate yourself on the following 21st-century skills
(1 = *Needs Improvement*, 5 = *Excellent*)

Skill	Rating (1-5)
Critical Thinking	
Communication	
Creativity	
Collaboration	
Digital Literacy	
Problem-Solving	
Adaptability	

2. Which 21st-century skill is your strongest? How do you use this skill in your daily life?

Strongest skill	
Your example	

PART 2: Technological Change and the Future of Work

Factors Shaping Manufacturing Industries

Draw a line connecting each manufacturing scenario on the left to the correct influencing factor on the right. Some scenarios may connect to more than one factor!

Manufacturing change scenario	Influencing Factor
A Queensland textile manufacturer shifts to producing recycled polyester sportswear	SOCIETAL NEEDS Changes in consumer demand and priorities shape industries
A Brisbane electronics factory installs collaborative robots that work alongside human employees	
A Bundaberg beverage company doubles production during a tourism boom	
A Gold Coast medical device manufacturer creates virtual training simulations for new equipment	
A Toowoomba metals fabricator lays off workers during an economic downturn	ECONOMIC CONDITIONS Recessions, pandemics and elections effect job availability
A Cairns boat builder uses 3D printing to create custom parts	
A Mackay mining equipment manufacturer sees increased orders after government infrastructure announcement	
A Brisbane food processor converts production lines to plant-based alternatives	
A Sunshine Coast furniture maker uses augmented reality to help customers visualise products in their homes	TECHNOLOGY CHANGES Automation, robotics, VR, AR and AI are changing how people work
A Rockhampton meat processor invests in automated packaging systems	
A Townsville chemical plant reduces plastic packaging in response to consumer environmental concerns	
A Gladstone manufacturer pivots to producing emergency supplies during a natural disaster	

Choose one scenario from above and explain:

3. How could a business prepare for this type of change?

4. What new skills might workers need to develop?

5. How might this change create new job opportunities?

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Looking Ahead – Technological Impact on Careers

Choose a career you are interested in.

6. How do you think technological changes (such as automation or AI) will affect this career in the future? What about other factors?

Career	
Impact of technology	
Impact from other factors	

7. With these technological changes or other factors in mind, how will your strongest 21st-century skill help you in this career?

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