

BSBCRT511

**DEVELOP
CRITICAL
THINKING
IN OTHERS**

BSBCRT511

Develop critical thinking in others

Release 1

Learner Guide

Aspire Version 1.1



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Level 1, 464 St Kilda Road
MELBOURNE VIC 3004 AUSTRALIA
Phone: (03) 9820 1300

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Contact details

Participant
Name:
Start date:
Phone number:
Email:
Work location
Name:
Address:
Postal address:
Workplace supervisor name:
Phone number:
Fax:
Email:
Registered Training Organisation (RTO)
Name:
Address:
Postal address (if different):
Phone number:
Fax:
RTO contact name:
Mobile:
Email:

CONTENTS

Before you begin vi

Topic 1 | Assess individual and team critical and creative thinking skills 1

1A	Research models of critical and creative thinking.....	2
1B	Develop questions to identify knowledge gaps in your team	11
1C	Facilitate learning opportunities	16
1D	Articulate key features of critical and creative thinking concepts.....	20
	Summary	27
	Learning Checkpoint 1: Assess critical and creative thinking skills.....	28

Topic 2 | Establish an environment that encourages critical and creative thinking 33

2A	Analyse current organisational systems to identify gaps or barriers to critical thinking.....	34
2B	Create a safe environment for critical and creative thinking	44
2C	Facilitate opportunities for team members to apply critical and creative thinking skills	50
2D	Provide feedback to team members.....	57
	Summary	62
	Learning Checkpoint 2: Establish an environment that encourages critical and creative thinking	63

Topic 3 | Monitor and improve critical thinking practices 67

3A	Collect and analyse feedback.....	68
3B	Identify support needs of individuals and teams	76
3C	Recommend improvements to future learning arrangements	82
	Summary	85
	Learning Checkpoint 3: Monitor and improve critical thinking practices....	86

Before you begin

This learner guide is based on the unit of competency *BSBCRT511 Develop critical thinking in others*, Release 1. Your trainer or training organisation must give you information about this unit of competency as part of your training program. You can access the unit of competency and assessment requirements at: www.training.gov.au.

How to work through this Learner Guide

This learner guide contains a number of features that will assist you in your learning. Your trainer will advise which parts of the learner guide you need to read, and which Practice Tasks and Learning Checkpoints you need to complete. The features of this learner guide are detailed in the following table.

Feature of the learner guide	How you can use each feature
Learning content	<ul style="list-style-type: none"> Read each topic in this learner guide. If you come across content that is confusing, make a note and discuss it with your trainer. Your trainer is in the best position to offer assistance. It is very important that you take on some of the responsibility for the learning you will undertake.
Examples	<ul style="list-style-type: none"> These highlight key learning points and provide realistic examples of workplace situations.
Practice Tasks	<ul style="list-style-type: none"> Practice Tasks give you the opportunity to put your skills and knowledge into action. Your trainer will tell you which Practice Tasks to complete.
Summaries	<ul style="list-style-type: none"> Key learning points are provided at the end of each topic.
Learning Checkpoints	<ul style="list-style-type: none"> There is a Learning Checkpoint at the end of each topic. Your trainer will tell you which Learning Checkpoints to complete. These checkpoints give you an opportunity to check your progress and apply the skills and knowledge you have learnt.

Foundation skills

As you complete learning using this guide, you will be developing the foundation skills relevant for this unit. Foundation skills are the language, literacy and numeracy (LLN) skills and the employability skills required for participation in modern workplaces and contemporary life.

The following table provides definitions for each foundation skill.

Foundation skill area	Foundation skill description
Learning	<ul style="list-style-type: none"> Transfers skills and knowledge to a variety of team development contexts Evaluates own performance and outcomes of learning processes to identify opportunities for improvement
Oral communication	<ul style="list-style-type: none"> Identifies and articulates ideas and requirements clearly and persuasively using techniques appropriate to audience and environment Participates in a verbal exchange of ideas and elicits the views and opinions of others by listening and questioning
Reading	<ul style="list-style-type: none"> Researches, analyses and evaluates textual information, from a wide range of sources, to identify information relevant to systems that support critical thinking and learning
Writing	<ul style="list-style-type: none"> Develops complex strategies using language and format appropriate to the audience and purpose
Teamwork	<ul style="list-style-type: none"> Looks for ways of establishing connections and building genuine understanding with a diverse range of people Uses inclusive and collaborative techniques to negotiate, influence and elicit the views and opinions of a wide range of stakeholders
Initiative and enterprise	<ul style="list-style-type: none"> Identifies implications of legal and regulatory responsibilities on own work
Planning and organising	<ul style="list-style-type: none"> Accepts responsibility for planning and implementing systems and strategies to achieve organisational goals, negotiating key aspects with others
Navigate the world of work	<ul style="list-style-type: none"> Identifies implications of legal and regulatory responsibilities on own work Adheres to implicit and explicit organisational policies and procedures, seeking advice from others if necessary

What do you already know?

Use the following table to identify what you may already know. This may assist you to work out what to focus on in your learning.

Topic	Key outcome	Rate your confidence in each section
Topic 1: Assess individual and team critical and creative thinking skills	1A Research models of critical and creative thinking	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	1B Develop questions to identify knowledge gaps in your team	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	1C Facilitate learning opportunities	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	1D Articulate key features of critical and creative thinking concepts	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
Topic 2: Establish an environment that encourages critical and creative thinking	2A Analyse current organisational systems to identify gaps or barriers to critical thinking	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	2B Create a safe environment for critical and creative thinking	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	2C Facilitate opportunities for team members to apply critical and creative thinking skills	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	2D Provide feedback to team members	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
Topic 3: Monitor and improve critical thinking practices	3A Collect and analyse feedback	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	3B Identify support needs of individuals and teams	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	3C Recommend improvements to future learning arrangements	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident



Topic 1 | Assess individual and team critical and creative thinking skills

- 1A Research models of critical and creative thinking
- 1B Develop questions to identify knowledge gaps in your team
- 1C Facilitate learning opportunities
- 1D Articulate key features of critical and creative thinking concepts

1A Research models of critical and creative thinking

Employees who are critical and creative thinkers can identify and evaluate issues, and develop solutions.

Critical thinking is the ability to analyse facts and data to reach a sound and logical conclusion. When you think critically you do not take things at face value or blindly accept ideas – you question and analyse them. When you think creatively you think ‘outside the box’. Creative thinking encourages innovation and helps people challenge the status quo. When combined, creative and critical thinking lead to more productive ways of working. They are the raw materials for effective decision-making, planning and problem-solving.

In the business sector critical and creative thinking are especially important because of the demands, complexity and fast-paced nature of business environments.

Critical thinking

The critical thinking process involves applying intellectual standards that will lead to the development of intellectual traits.

To understand critical thinking, it is necessary to appreciate three key concepts:

1. The critical thinking process
2. Intellectual standards
3. Intellectual traits.

The critical thinking process involves the interpretation of data, facts and experiences in order to answer questions and solve problems. The process encourages people to widen their perspective, examine assumptions, and generate logical and sound solutions.

Various models are used to describe the critical thinking process; however, all incorporate three key tasks:

1. Analysing information
2. Synthesising (combining) information
3. Evaluating information.

Here are some examples of what each of these tasks might involve when applying them to a workplace problem:

Analysing	<ul style="list-style-type: none"> investigating the nature of a problem interpreting data relevant to a problem examining the implications of various solutions to a problem
Synthesising	<ul style="list-style-type: none"> generating ideas based on multiple sources of information bringing together diverse forms of expertise to develop solutions reaching conclusions based on a range of considerations
Evaluating	<ul style="list-style-type: none"> determining whether information is credible evaluating arguments, interpretations, beliefs and theories using values and standards to assess the feasibility of solutions

Critical thinking involves the application of nine intellectual standards. These standards are used to assess what one thinks, hears, reads, sees and writes.

Intellectual standards are fundamental to critical thinking because they support rational and sound thinking, as opposed to thinking that is based on unreliable beliefs or flawed assumptions.

The nine intellectual standards are listed below, along with some examples of what these standards might look like for an individual or team working through a problem.

Intellectual standard	Description	Example of the standard when working through a problem
Clarity	Clear and understandable	The problem can be clearly expressed and is understandable to others.
Accuracy	Free from errors and distortion	The information being used to inform decision-making is accurate.
Precision	Exact to the necessary level of detail	The various implications of the problem have been examined to a necessary level of detail.
Relevance	Relevant to the matter at hand	The information being gathered to explore the problem is relevant.
Depth	Containing complexity	The difficulties surrounding the issue have been explored.
Breadth	Takes multiple viewpoints into account	The viewpoints of multiple people or groups have been considered when weighing up potential solutions.
Logic	Each part makes sense	There is a logical relationship between what we know about the problem and the proposed solution.

Intellectual standard	Description	Example of the standard when working through a problem
Significance	Considers the most important ideas and concepts	The problem we have settled on is the most important for now.
Fairness	Justifiable – not self-serving or one-sided	Efforts have been made to avoid personal and vested interests when making decisions.

Applying intellectual standards will lead to the development of certain intellectual traits that are important to critical thinking. These traits define how someone learns, communicates and sees the world. These traits include:

- Intellectual independence: figuring things out independently, listening to others but deciding yourself who and what to believe
- Intellectual courage: speaking up for what is right, even if it is not popular; examining your own thoughts and being willing to question your beliefs
- Intellectual empathy: trying to understand how other people think and feel, trying to see something from another point of view.

Creative thinking

Many jobs require creative thinking, which is the mental process of imagining something new.

While critical thinking is about analysing existing data, facts and evidence, creative thinking is about identifying possibilities. The goal of creative thinking is to make something out of nothing. It is often described as thinking ‘outside the box.’ It requires you to look at something in a fresh way.

Creative thinking requires us to be open-minded and non-judgmental. Although it comes easier to some people than others, everyone can think creatively. Creative people have the ability to devise new ways to carry out tasks, solve problems and meet challenges.

Often, creativity in this sense involves what is called lateral thinking, or the ability to perceive patterns that are not obvious. In one famous story, the fictional detective Sherlock Holmes uses lateral thinking when he realises that an important clue is that the dog *did not* bark, therefore the victim must have known the murderer.

The key factor that encourages creative thinking is intrinsic motivation. When we are intrinsically motivated, we are driven by our own desire to achieve a goal, rather than being driven by the promise of an external reward or recognition.

For example, a person who studies Italian because they are interested in Italian culture is driven by an intrinsic motivation. On the other hand, a person who studies Italian because they want to impress their partner is driven by an extrinsic motivation.

Models of critical and creative thinking

A number of critical and creative thinking models have been identified and can be used in your own work and personal life.

Although there is common agreement on the basic definition of critical and creative thinking, various models have been developed to explain them further. One example of a model for each type of thinking follows.

The Elder and Paul model of critical thinking

This model of critical thinking is used in a range of different disciplines including engineering, education and medicine.

This critical thinking model comprises:

- Elements of thought – questioning assumptions, information, points of view
- Intellectual standards – applied to evaluate elements of thought
- Important intellectual traits, or critical thinking skills – developed by applying intellectual standards to elements of thought.

The Wallas model of creative thinking

According to Wallas, there are four stages to creative thinking:

Stage	Creative thinking
Preparation	<ul style="list-style-type: none"> ▪ Define the problem or need ▪ Gather information ▪ Identify criteria for solutions
Incubation	<ul style="list-style-type: none"> ▪ Process ideas unconsciously ▪ Allow the mind to wander
Illumination	<ul style="list-style-type: none"> ▪ Identify ideas ▪ Gain insights ▪ Develop a response or solution
Verification	<ul style="list-style-type: none"> ▪ Ask if it provides the solution ▪ Check the solution meets all required criteria

More information is available on this model at: www.brainpickings.org/2013/08/28/the-art-of-thought-graham-wallis-stages/

Researching models of critical and creative thinking

Critical and creative thinking both involve researching and gathering information, and finding the appropriate model for your team also requires research.

With all the different critical and creative thinking models that exist, it is worthwhile researching ones that you can apply yourself and use with your team.

When researching models of critical and creative thinking, it is important to access a wide range of sources; if you rely on one single source your search will be too limited, and you may miss important information.

Potential sources of information are listed below:

- government websites
- legislation
- books
- journal articles
- industry and trade magazines
- websites and blogs
- experts in the field.

As part of your research, you should investigate current best practices in your industry to help you develop the critical and creative thinking skills of your staff. This will help to ensure that the proposals and recommendations around applying a particular model are relevant, current and effective.

Reliable sources

In business, and life in general, decisions based on unreliable information can have undesirable consequences.

When you are gathering information to inform planning and decision-making in your work, it is a good idea to ensure the sources you are using are reliable. This is part of the process of analysing and evaluating information.

Reliable sources are:

- **unbiased:** opposing ideas, arguments and explanations are considered
- **expert:** authored by people with relevant qualifications or expertise
- **current:** contains up-to-date information
- **in-depth and comprehensive:** considers or is informed by a range of relevant theories and concepts; case studies and examples address various aspects of the issue
- **accurate:** the information is correct, and the conclusions are informed by sound and reasonable arguments.

Example

Accessing reliable sources

Bronte is the manager of a small group of customer service consultants at Kettle King, a wholesale home appliances company. Bronte understands the benefits of critical and creative thinking and wants to learn how to build these skills in her team to help them effectively solve workplace problems.

Bronte undertakes some research on models of critical and creative thinking. She begins with a general Google search to identify some basic information about models of critical and creative thinking. She identifies a number of relevant articles and blogs, discarding articles that were published more than 10 years ago and blogs authored by people who do not appear to have relevant qualifications or expertise.

Now that she has a better understanding of a few models of critical and creative thinking that appear relevant to the work her team undertakes Bronte does a search on a well-respected business-related website for information about critical and creative thinking in customer service industries.

Practice Task 1

Question 1

Identify the three activities that are common to models of critical thinking. Then identify three questions to ask when carrying out these activities.

Activity	Questions

Question 2

Which of the following are intellectual standards to apply when thinking critically? Select all that apply.

- Depth
- Precision
- Logic
- Charity
- Commitment

Question 3

You have been asked to develop a policy aimed at protecting customer and employee information.

Identify three credible sources of information you will access before developing the workplace policy. Provide reasons for your selection.

Question 4

Research one model of critical thinking and one model of creative thinking. Give a brief summary of each model. Make sure you gather information from three sources and include details of where you sourced this information in your response.



1B Develop questions to identify knowledge gaps in your team

Critical and creative thinking skills are valued by employers and, like all skills, can be learned.

However, sometimes people need support to develop their critical and creative thinking abilities. The first step is to identify what each team member's existing skills are and where there are gaps.

Potential gaps

Assessing the critical and creative thinking skills of a team involves asking questions.

One of the ways you can identify where there are gaps in a team's skills and knowledge is to ask questions. Potential gaps include:

- understanding the meaning of critical and creative thinking
- realising the importance of critical and creative thinking to a specific role, team or business
- knowing how to think critically and creatively.

The questions you develop could be for an individual team member or for the whole team. Where feasible and appropriate, you might ask staff who are not part of your team – such as previous team leaders – about potential skills and knowledge gaps in your team.

When developing questions to determine your team's existing skills and knowledge, it is useful to reflect on what it means to understand a concept such as critical or creative thinking. According to Grant Wiggins and Jay McTighe (2005) a person truly understands something when they can:

- explain a theory or concept
- interpret what they learn by using stories, metaphors and images
- apply skills and knowledge to new situations
- demonstrate perspective by considering different points of view and alternative explanations
- show empathy by seeking to understand different perspectives
- demonstrate self-knowledge and identify their own lack of knowledge, biases and beliefs.

These 'six facets of understanding' provide a potential starting point for the questions you develop. For example, you could ask an individual or a team: 'How would you explain the concept of critical thinking? What is creative thinking in your view?'

Or, to determine whether they can interpret what they learn, you could ask: ‘I’m interested in examples of critical or creative thinking in the workplace. Can you think of one?’

To determine self-knowledge, you could ask: ‘What do you struggle with when it comes to critical thinking at work? Do you find it difficult to ask managers questions? Do you find it difficult to speak up when you think something is not going to work? Do you ever have potential solutions to problems that you do not share because they seem too “out there”?’

How to ask questions

When asked in the right way, questions help to build relationships of trust and provide opportunities for meaningful connections.

Here are some tips for how to ask questions:

Provide information upfront	<ul style="list-style-type: none"> Begin by telling the respondent why you are asking them questions. Tell them how the information they give you is going to be used (e.g. to develop a learning strategy).
Get the tone right	<ul style="list-style-type: none"> Use a casual, rather than a formal tone, when you are asking questions. A casual tone encourages people to be more forthcoming. Ask questions using a curious rather than critical tone.
Use mostly open-ended questions	<ul style="list-style-type: none"> Most of your questions should be open-ended but you may need to ask closed-ended questions to clarify something the respondent has said.
Thank people	<ul style="list-style-type: none"> Thank people for their time and let them know what is going to happen next.
Use the skills of active listening	<ul style="list-style-type: none"> Active listening involves five key strategies, each of which can be demonstrated through verbal and non-verbal communication: <ul style="list-style-type: none"> pay attention show you are listening provide feedback respond appropriately defer judgment
Give team members an opportunity to ask questions	<ul style="list-style-type: none"> When you are in a position of leadership and you ask your team questions, it is important to give them an opportunity to ask questions of you. You do not need to have the answer to every question. Showing that you are open to questions and that you take those questions seriously sends a powerful message.

Be sure to follow organisational policies and procedures when asking questions and identifying gaps in knowledge and skills. For example, your company may have standard processes for monitoring employees' professional development needs and conducting a training needs analysis.

The process of identifying an individual or team's development needs should be inclusive and collaborative. The table below includes some examples of this might look like:

The meaning of inclusion and collaboration	Examples of inclusive and collaborative approaches
<p>Inclusive techniques make people feel valued, welcome and part of the group regardless of their background or perspective.</p>	<ul style="list-style-type: none"> ▪ Let the team know that you want to learn more about their knowledge and skills. Invite them to ask you questions about why you are undertaking the task. ▪ Ask the team what they think would be the best way of identifying gaps in knowledge among their team. ▪ For example, would it better to have private discussions with individuals or would they prefer to have a group discussion? ▪ When you are speaking with an individual or team about potential gaps in skills and knowledge, acknowledge their strengths, rather than focusing only on areas for improvement. ▪ Create the opportunity for dialogue where both you and your team will gain something.
<p>Collaborative processes involve people with diverse expertise working together to accomplish common goals.</p> <p>When working collaboratively, colleagues aim to think deeply, consider alternatives, actively participate and gain consensus.</p>	<ul style="list-style-type: none"> ▪ Encourage and acknowledge the input of all team members during group discussions, regardless of their role or level of experience. ▪ When you have gathered information about opportunities for development, present your findings to the group and work together to identify the areas they would most like to improve. ▪ When asking people questions about their knowledge and skills, show that you are willing to work with them on their professional development.

Example

Questioning the team

Sandro works at OzFX, a medium-sized business that creates visual effects for film studios. He has recently been appointed as team leader for the graphic design team. Sandro wants to help his team to build their creative thinking skills but first he needs to identify what they do and do not know.

In their regular team meeting, Sandro talks about why he is interested in creative thinking and why he wants to learn more about the team's creative thinking knowledge and skills. He asks the team how they would prefer to do this. The team decide they would like to have this discussion as a group.

A week later, when the team gathers, Sandro reminds them why he is asking them questions. As they discuss the issue, Sandro notices that the team tends to focus on their shortcomings, rather than their strengths. Sandro reminds the team what they do well. At the end of the session, Sandro thanks the team for their time and asks if they have any questions for him.

Practice Task 2

Question 1

Regarding critical thinking, two of three potential gaps within a team were identified as:

- 1) Understanding the meaning of critical thinking.
- 2) Identifying the importance of critical thinking to a specific role, team or business.

You have been asked by a team member to explain the meaning of critical thinking and how it relates to their team's work. What will you say?

Question 2

When you are asking an individual or team questions, what is the best tone to use?

- Casual and courteous
- Curious and captivated
- Casual and curious
- Cunning and curious
- Casual and curt

Question 3

Which of the following statements are correct? Tick all that apply.

- When asking someone questions in the workplace, it is good practice to begin by telling them why you are asking them questions
- Active listening involves five key strategies
- A team leader should only encourage the team to ask questions if the leader is certain of the answers
- Inclusive techniques make people feel as if they are part of a group
- Collaborative techniques involve people with similar levels of expertise working together to achieve common goals

1C Facilitate learning opportunities

A great deal of research has proven that critical and creative thinking skills can be learned.

Critical and creative thinking are skills that can be learned. However, helping people build these skills takes time, for they are learned by being applied and practised.

Critical and creative thinking are processes, rather than a list of facts that can be memorised. Therefore, neither critical nor creative thinking can be taught in a single session or short course. Both forms of thinking develop over time and require patience, perseverance and commitment.

Formal and informal learning opportunities

Critical and creative thinking skills can be learned in the workplace.

The process of acquiring and building skills and knowledge in the workplace can occur through formal and informal learning opportunities:

- Formal learning opportunities are typically led by educators and guided by a curriculum. They are provided by organisations or institutions, such as schools, universities and TAFEs.

Some advantages of formal learning opportunities are that they lead to recognised qualifications, the accuracy of course content can be closely monitored, and large groups of people can learn at the same time.

- Informal learning opportunities occur in everyday working situations. When learning informally, the learner takes responsibility for their own development. Informal learning includes coaching, mentoring, shadowing, job rotation, and group discussions with colleagues.

Some advantages of informal learning opportunities are that it is easier to apply the knowledge and skills immediately, the pace of learning can be adjusted to the person's needs and requirements, and the content can be delivered in a more flexible way.

Informal learning in a workplace, through a colleague or mentor, means the information provided has immediate relevance to the task or problem being tackled. Individuals can ask questions and receive feedback promptly from their mentor, coach or manager. Learning informally through mentoring, coaching and team activities supports the development of a culture of critical and creative thinking.

Facilitating learning

Opportunities for teams to learn and apply thinking skills need to be planned and actioned.

Here are some ways team leaders can facilitate formal and informal learning opportunities to encourage and promote critical and creative thinking in their teams:

Examples of how to facilitate formal and informal learning opportunities	
Formal learning	<ul style="list-style-type: none"> ▪ Source and share information about training courses designed to enhance critical and creative thinking skills. ▪ Support team members who want to attend relevant training courses or undertake further study. ▪ Organise an on-site training session led by a qualified educator with expertise in critical or creative thinking.
Informal learning	<ul style="list-style-type: none"> ▪ Provide opportunities for role-play that require people to think on their feet, solve problems and make decisions in real time. ▪ Coach or mentor junior staff members. ▪ Provide opportunities for staff to learn from each other (e.g. organise a discussion group, encourage constructive debate in meetings). ▪ Encourage and facilitate the use of social learning platforms that allow staff to elicit feedback from each other, discuss ideas and debate solutions.

Organisational policies and procedures

The learning opportunities you promote and encourage must align with your organisation's policies and procedures.

For example, your workplace may have a policy about how funding for professional development is allocated to a team or how many days employees can spend undertaking training off-site. If you are unsure of these policies and procedures, ask a colleague or relevant staff member for advice.

Once you have a clear understanding of relevant organisational policies and procedures, ask the team and individual team members about their views and opinions on learning opportunities.

You could ask what types of learning opportunities they prefer, or which ones work especially well in the environment where you all work (e.g. an open-plan office, a department store, a manufacturing plant). Use the inclusive and collaborative techniques described earlier to elicit the team's views and opinions.

Example

Facilitating team learning

Ivan is the manager of a small IT team at BigKev, an equipment hire company. He wants to give his staff more opportunities to improve on and build their critical and creative thinking skills.

His team has already used most of their allocated professional development budget for that year, so Ivan focuses on informal learning opportunities. He consults with some members of his team about the types of informal learning they prefer. Opportunities that allow team members to learn from each other are especially popular but techniques such as role-play are generally not supported.

Ivan gets the ball rolling by setting aside some time at every team meeting to talk about a problem they are experiencing with their work. Building on the principles of critical and creative thinking, Ivan encourages his team to clearly express the problem in a sentence, then consider the problem from different perspectives.

Having trialled these techniques for a few weeks, and mindful of the importance of inclusive and collaborative approaches, Ivan asks his team, 'What is working well about this new approach to raising and discussing workplace problems? What is not working well? What questions do you have for me?'

Practice Task 3

Question 1

Which of the following are examples of informal learning opportunities? Tick all that apply.

- Coaching
- Mentoring
- A short course
- Discussions with colleagues
- Shadowing

Question 2

Identify three ways that a team leader can facilitate formal learning opportunities in the workplace.

Question 3

What are four advantages of using informal learning to train team members in creative thinking compared to attending a formal course?

1D Articulate key features of critical and creative thinking concepts

Promoting critical and creative thinking helps develop an organisational culture that values these skills.

The fast-paced nature of today's workplaces means critical and creative thinking are often overlooked as we focus on completing a task and meeting a deadline. If you want to support critical and creative thinking in your team and your organisation, you need to be able to clearly describe and explain these concepts. The models of critical and creative thinking you have researched will help you do this.

Audience and method

Advocating for critical and creative thinking to be introduced into an organisation can be done in a variety of ways.

When describing and explaining the concepts of critical and creative thinking, the main audience is likely to be your own team. However, there may be other people in your organisation who could benefit from your knowledge; for example, members of other teams or senior managers.

There are numerous methods you could use to articulate these concepts, such as:

- a presentation to your own team, or to another department
- a brief article in the organisation's newsletter
- a blog on the organisation's intranet.

Alternatively, you could explain these concepts in a less formal way, such as highlighting key points during a routine team meeting or including information in a regular email update. Your organisation may have policies or procedures for how employees share their skills and knowledge. For example, some businesses have regular forums where staff can present and discuss ideas with each other.

The decision about the audience and the method you use to explain these concepts should be based on considerations of what is feasible and appropriate to your role and your workplace. Ask a colleague or supervisor for ideas if you are uncertain.

Articulating ideas clearly and persuasively

No matter the audience, your presentation must be planned, your ideas clearly expressed, and opportunities for two-way communication encouraged.

Regardless of whether you articulate your ideas verbally or in writing, it is important to do some planning beforehand.

During the planning phase, you need to consider the main ideas you want to communicate. Try writing them in a few sentences or dot points. Change them several times until you are sure of the essential information. You could also consider how to order the material. Each point should follow logically from the previous one, otherwise the presentation or document may be difficult for the audience to understand.

Articulating ideas verbally

Here are some tips for articulating ideas clearly and persuasively in an oral presentation:

Model critical and creative thinking	<ul style="list-style-type: none"> ▪ Show you are applying what you are promoting. ▪ Have a clear and logical structure to your presentation. ▪ Demonstrate you have considered a range of opinions. ▪ Outline how you have come to your conclusions.
Use visual aids	<ul style="list-style-type: none"> ▪ Use visual aids, such as graphics, photos or graphs, to convey your ideas and generate audience interest.
Use an appropriate tone	<ul style="list-style-type: none"> ▪ Tone is the mood or attitude suggested by a presentation. ▪ Certain tones are always inappropriate, including forcing your ideas onto the audience or using a mocking or sarcastic tone. ▪ The safest tone is calm, objective and courteous.
Emphasise the evidence for your view	<ul style="list-style-type: none"> ▪ The most important factor is not the clear and forceful statement of your view but the evidence that supports it.
Consider timing	<ul style="list-style-type: none"> ▪ Present your solution to stakeholders when they are not distracted by other pressing concerns.
Look at your audience	<ul style="list-style-type: none"> ▪ Try to give your audience the sense that you are speaking to them: shift your gaze from the front of the audience to the back, and from each side of the group.
Speak loudly and express yourself clearly	<ul style="list-style-type: none"> ▪ Be aware of any mannerisms of speech that may impact on your ability to communicate with your audience – such as mumbling, whispering or slurring your words – and try to avoid them as much as possible.

Channel your energy	<ul style="list-style-type: none"> ▪ Giving a presentation can be nerve-racking. Instead of trying to eliminate your anxiety, channel your energy into enthusiasm for critical and clear thinking.
Pay attention to your body language	<ul style="list-style-type: none"> ▪ Stand straight and use gestures freely and in natural way. ▪ Avoid body language that indicates defensiveness.
Allow for questions and feedback	<ul style="list-style-type: none"> ▪ Communication should be two-way. Allow time for questions and comments. We all learn from receiving feedback.

Articulating ideas in writing

Although organisations have different expectations, policies and requirements for written communication, there are general principles that are applicable to most businesses. Here are some tips for articulating ideas clearly and persuasively in a written format, such as a newsletter article or a report, based on those principles:

Principles for clear and persuasive business writing	How to apply the principles
Demonstrate critical and creative thinking	<ul style="list-style-type: none"> ▪ Use compelling evidence to support your argument. ▪ Identify the alternatives you considered. ▪ Identify any sources you have consulted. ▪ Summarise how you have come to your conclusion.
Structure it logically	<ul style="list-style-type: none"> ▪ Have a clear and logical structure to your document. ▪ Include your recommendations or decision at the start of the document.
Include all relevant information	<ul style="list-style-type: none"> ▪ Think of who your audience is and what they already know. ▪ Think of who your audience is and what they need to know. ▪ Anticipate questions the audience might have and answer them in the document.
Keep it brief	<ul style="list-style-type: none"> ▪ Use short sentences. ▪ Cut out unnecessary words (e.g. do not say 'the issue was carefully considered'; just say 'the issue was considered'). ▪ Only include important and relevant information.
Use simple, concrete language	<ul style="list-style-type: none"> ▪ Do not use long words when a shorter word can be used instead (e.g. 'use' instead of 'utilise'). ▪ Be precise: avoid vague terminology, such as 'the current circumstances'. ▪ Avoid 'flowery' or pretentious language (e.g. 'theoretical constructs').

Principles for clear and persuasive business writing	How to apply the principles
Avoid jargon	<ul style="list-style-type: none"> ▪ Unless you are sure people understand what a word or expression means, avoid the use of jargon; that is, words or expressions that would not be familiar to people outside your organisation or sector. ▪ Jargon can 'cloud the message' you're trying to impart, (e.g. 'let's unpack this').
Use an active instead of a passive voice	<ul style="list-style-type: none"> ▪ When the subject of a sentence is <i>performing the action</i>, you are using an active voice (e.g. Jane chaired the meeting). ▪ When the subject of a sentence <i>is acted upon</i>, you are using a passive voice (e.g. the meeting was chaired by Jane). ▪ Sentences written in an active voice are easier to understand than those written in a passive voice.
Use formatting	<ul style="list-style-type: none"> ▪ Use headings, tables and bullet points so the document is easy to read. ▪ Use graphs to present numerical information.

Responding to questions and comments

When you are presenting new concepts to your colleagues, it is important to provide them with opportunities to ask questions and make comments.

Here are some tips for responding effectively and confidently to questions and comments:

- If you are not sure you understand a question, repeat it and check that your interpretation is correct.
- If you do not know the answer to a question, say so and offer to find out. If the person asking the question accepts your offer, make sure you follow through.
- If the question or comment is being made face-to-face, employ the skills of active listening.
- If a question or comment comes across as critical or hostile, keep your tone calm, objective and courteous.
- If you are delivering an oral presentation indicate when you would prefer to take questions – during or after the presentation.

Example

A workplace presentation

Nerida leads a team of sales representatives for The Grape Group, a medium-sized boutique winery that supplies Australian and international retailers. To help develop her team's critical thinking skills, Nerida wants to share some information with them about critical thinking. She mentions her plan during a meeting with the management group, who encourage her to share this information with all company staff.

Nerida decides that the best way to communicate with staff is to make a brief presentation during the quarterly all-staff meeting. Staff are unlikely to engage with written material and the all-staff meeting provides an opportunity to reach as many staff as possible.

Nerida plans her presentation carefully, putting thought into the main points she wants to communicate. To engage the audience, she begins with a scenario of a workplace problem. She then invites questions from the audience about how they might approach the problem, and then goes on to describe how the concept of critical thinking applies to the problem.

Nerida concludes her presentation by talking about the benefits of critical thinking, using two different case studies of companies like The Grape Group, and providing ample time for questions and comments from her audience.

Practice Task 4

Question 1

When making an oral presentation in the workplace, which of the following are the safest tones to use? Tick all that apply.

- Calm
- Confrontational
- Objective
- Reactive
- Courteous

Question 2

When writing a business document, what are three things you can do to ensure your language is simple and concrete?

Question 3

Which of the following statements are correct? Tick all that apply.

- Before you start writing a document or preparing a presentation, it is a good idea to write the main points you want to communicate.
- Sentences written in an active voice are easier to understand than those written in a passive voice.
- It is important to immediately come up with an answer to every question you are asked after you have made an oral presentation.
- If someone asks a question in a hostile manner after you have given a workplace presentation, your manner and tone should match the level of hostility they are demonstrating.

Question 4

The HR manager has asked you to provide information to all staff on the benefits of creative thinking. He is planning to offer a training program in creative thinking to all staff.

- a) What would be the most appropriate method of providing this information? Give reasons for your choice.

- b) What are three pieces of information you could include?

Summary

- Critical thinking involves analysing facts and data, and examining the way we think and what we think, i.e. our biases or preconceived ideas.
- Creative thinking is often described as thinking ‘outside the box’.
- Although there is common agreement on the basic definition of critical and creative thinking, various models have been developed to explain them.
- All critical thinking models incorporate three basic tasks: analysing, synthesising and evaluating.
- When undertaking research on critical and creative thinking, it is important to ensure the sources you are using are reliable.
- To better understand a team’s needs regarding critical and creative thinking, team leaders need to identify the team’s existing skills and where there are gaps in their knowledge.
- When asking questions about gaps in knowledge, it is important for team leaders to be inclusive and collaborative.
- Formal and informal learning opportunities in the workplace can help build a team’s critical and creative thinking skills.
- Numerous methods can be used to communicate information about critical and creative thinking within the workplace, including oral presentations or a blog on an internal staff website.
- When articulating concepts in a formal way, such as an oral presentation or a written report, one of the most important first steps is to clarify the key messages you want to communicate.

Learning Checkpoint 1

Assess critical and creative thinking skills

Part A

1. Compare Pearson's RED model of critical thinking with Hurson's productive thinking model. Identify at least four features of both models.

Pearson's RED model	Hurson's productive thinking model

2. When undertaking research, identify four criteria to apply when evaluating if information is credible and reliable.

3. When a team leader is developing questions to identify gaps in the team's critical thinking skills and knowledge:

a) What are four questions they can ask team members to identify their learning needs?

b) What are four things they can do to ensure the process is inclusive and collaborative?

4. You have asked to write a brief proposal for the management team on why it would be useful for your organisation to invest in professional development opportunities that focus specifically on creative thinking.

What are four things you could do to ensure your written proposal is clear and persuasive?

Part B

Case study

Ivan, the manager of a small IT team at an equipment hire company, has initiated a new approach to the IT team's regular team meetings.

Ivan asks one staff member at every staff meeting to identify a problem they are experiencing with their work. To help them understand the critical thinking process, Ivan then encourages his team to provide examples of how they would use the critical thinking process to work through that problem.

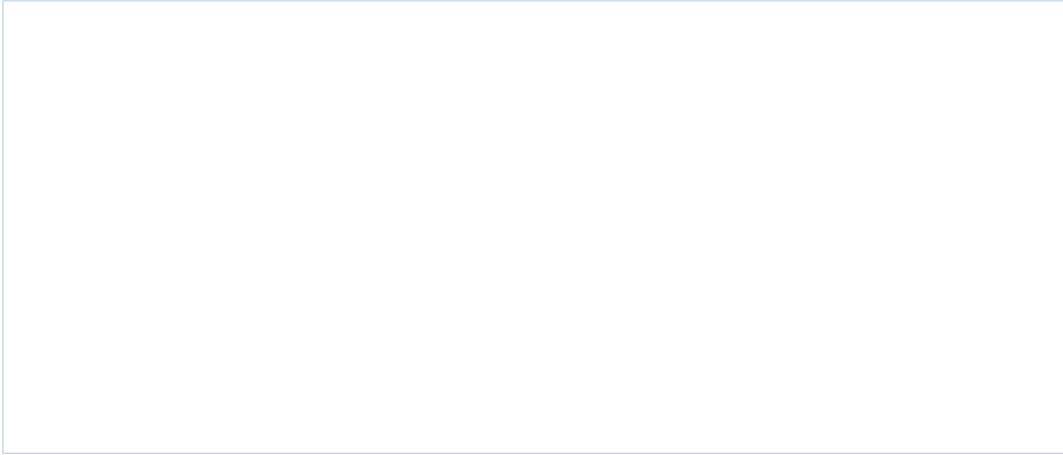
Ally, a member of Ivan's team, identifies a problem with a project she is working on. Due to other urgent tasks, Ally cannot complete the project on time.

1. Provide two activities for each of the following questions that would be involved when analysing, synthesising and evaluating this problem.
 - a) Analysis

- b) Synthesis

- c) Evaluation

2. Identify two other strategies Ivan could use to facilitate informal learning opportunities in critical thinking for his team.





Topic 2 | Establish an environment that encourages critical and creative thinking

- 2A Analyse current organisational systems to identify gaps or barriers to critical thinking
- 2B Create a safe environment for critical and creative thinking
- 2C Facilitate opportunities for team members to apply critical and creative thinking skills
- 2D Provide feedback to team members

2A Analyse current organisational systems to identify gaps or barriers to critical thinking

Before developing critical thinking skills in an organisation, you must analyse and determine where gaps or barriers exist.

Critical thinking skills are essential to development and improvement across an organisation. They are vital to solving issues or problems efficiently. Careful analysis can be used to determine if an organisation has gaps or barriers that restrict its ability to practice critical thinking.

Gaps and barriers to critical thinking

An organisation's performance or success can be affected by existing gaps and barriers to critical thinking.

There are many potential barriers to critical thinking in an organisation. Following are eight common examples:

Barrier	Description
Confirmation bias	Bending evidence to fit your beliefs.
Attribution bias	The belief that good things happen because of internal factors and bad things happen because of external factors.
Trusting testimonial evidence	Believing what someone says, even without evidence.
Memory lapses	Filling gaps in memory with information that may or may not be true.
Accepting authority unquestionably	The blind acceptance of people who are (or who present themselves as) experts.
Generalising	Acting as if the views and opinions of a small number of people represent the views and opinions of a large group of people.
Ignorance	Reluctance to admit a lack of knowledge and coming up with an explanation that seems to be true.
Coincidence	Believing there is a relationship between two things when they are, in fact, coincidental.

It is important to note that biases and behaviours are not barriers when they are demonstrated by one person on a single occasion. For example, if an employee on one occasion believes what their colleague tells them without evidence, this is not an organisational barrier. Rather, it is an example of an individual's failure to employ critical thinking.

Biases and behaviours, such as those described above, are barriers when they are part of the culture of an organisation. For example, if staff are routinely expected or encouraged to trust what one expert (or one group of experts) says without evidence, that is a barrier to critical thinking. If a CEO routinely bends evidence to fit their beliefs, that is a barrier to critical thinking.

Similarly, if staff are afraid to ask questions about how or why things are done, this suggests there is a barrier to critical thinking in that workplace.

Groupthink

One of the barriers to critical thinking is 'groupthink'. This is the tendency to make decisions in a group based upon consensus and without critical reasoning. It usually occurs in workplace situations where questions and constructive criticism are silenced or discouraged.

One of the most tragic cases of groupthink occurred on 28 January 1986 when the space shuttle Challenger exploded a little over a minute after launch, killing all seven crew members. The explosion was caused by a failed O-ring in the rocket booster fuel cells. An inquiry found that flawed decision-making was a major contributor to the incident.

On the morning of the launch, NASA was informed about the O-ring safety concern and engineers advised it was not safe to proceed with the launch. Anxious to launch the *Challenger* according to schedule, management ignored this advice and gave the all clear, with disastrous consequences.

Barriers to creative thinking

Numerous factors can pose a barrier to creative thinking.

Some of the most common workplace barriers are described below:

Barrier	Description
Inflexible rules and procedures	To think and collaborate in a creative way people need the flexibility and freedom to consider and express new ideas. In environments where inflexible rules and procedures limit thinking and expression, creative thinking will be difficult.

Barrier	Description
Micromanaging and constant surveillance	When people are micromanaged or under constant surveillance, they are less likely to explore or take risks. Exploration and taking risks are both essential for generating and enhancing creative thought.
Shutting down conflict and debate	Healthy conflict and debate can inspire creativity. Shutting down conflict and debate limits people's ability to bounce off and build on each other's ideas.
Highly critical evaluation of ideas	Fair and supportive evaluation of ideas is necessary and useful in the creative process. However, highly critical or threatening evaluations undermine creativity.
Lack of diversity	Bringing together people with diverse perspectives, backgrounds and viewpoints encourages creative thinking. This is because their differing expertise and experience can generate hybrid ideas and new approaches. Diversity of cultural background, gender, age and ability are all important, as is diversity in terms of level of skill (e.g. junior staff and senior staff) and interpersonal style (e.g. introverts and extroverts).

Analysing organisational systems

Identifying gaps or barriers in critical thinking requires close examination of the business's organisational systems.

There are various models, tools and techniques that can be used to analyse organisational systems, including McKinsey's 7S Framework and a SWOT analysis:
<https://aspirelr.link/mckinsey-7-s-framework>

Regardless of which model you use, there are three key factors you need to investigate as part of your analysis. These are the organisation's:

- objectives: the medium- to long-term priorities of the organisation
- processes: the series of steps that convert inputs into outputs
- resources: the people and things an organisation needs to undertake organisational processes, such as staff, equipment, time and money.

To determine if gaps or barriers to critical thinking exist in an organisation's objectives, processes and resources, you can use the following questions:

Questions to consider	Examples of questions
How are decisions made?	<ul style="list-style-type: none"> ▪ Is there a tendency to base decisions on the views and opinions of a limited number of people? ▪ Whose views and opinions are considered when decisions are made? For example: <ul style="list-style-type: none"> – Who is involved in making decisions about purchasing equipment? – Who is involved in making decisions about new company policies? – Who is involved in making decisions about plans for staff professional development?
What is the process for solving problems?	<ul style="list-style-type: none"> ▪ Whose views and opinions are considered when examining problems? ▪ Are diverse perspectives and viewpoints included in discussions about potential solutions to problems? ▪ Are there opportunities for creative thinking when exploring solutions?
Which beliefs are accepted without question?	<ul style="list-style-type: none"> ▪ Are some beliefs accepted without question? ▪ Are any practices, processes and procedures commonly justified by saying 'that's just the way we do things here', or 'that's always the way we've done it'?
Who can ask questions?	<ul style="list-style-type: none"> ▪ Do people in the organisation feel comfortable asking questions? ▪ Do staff feel safe asking questions about things that do not make sense, such as a commonly used jargon, e.g. 'Let's use a strawman approach'?
How are people who ask questions treated?	<ul style="list-style-type: none"> ▪ Are people who ask questions rewarded or overlooked? ▪ Are people who ask questions viewed as troublemakers? ▪ What are the criteria for awards and promotions? Which behaviours are rewarded?
Are there opportunities for risk-taking and experimentation?	<ul style="list-style-type: none"> ▪ Are staff given opportunities to try new approaches and experiment? ▪ Are staff given the opportunity to decide how to undertake their work?

Questions to consider	Examples of questions
How are mistakes treated?	<ul style="list-style-type: none"> ▪ If a process does not work or is not successful, how is it explained or justified? Is there an attribution bias? ▪ Are there processes and opportunities that allow individuals, teams or the organisation to genuinely learn from mistakes? <ul style="list-style-type: none"> – For example, are there opportunities for teams to reflect on why a project was not successful and how it could be done better the next time?
How is diversity encouraged and promoted?	<ul style="list-style-type: none"> ▪ Does the organisation have any plans or initiatives to increase the diversity of staff? ▪ Do staff feel comfortable expressing viewpoints that are different to other people's?

Sources of information

When undertaking an analysis of an organisation, it is important to examine a wide range of internal and external information sources. The sources should include people (e.g. employees, external coaches) and documents (e.g. legislation relevant to your organisation's operation, policies, manuals).

Examples of information sources are provided below:

Internal sources of information	<ul style="list-style-type: none"> ▪ Employees ▪ Managers and supervisors ▪ Policy and procedure manuals ▪ Workplace instruction documents ▪ Workplace induction materials ▪ Annual reports
External sources or information	<ul style="list-style-type: none"> ▪ External coaches ▪ Journals and books ▪ Blogs and social media ▪ Websites, including government and other organisations ▪ Legislation ▪ Industry standards ▪ Industry reports

Critical reading

When you are analysing written information to identify gaps and barriers in critical and creative thinking, it may be useful to apply the skill of critical reading. Critical reading involves active, thoughtful reading, as opposed to passive acceptance.

Critical reading helps you determine whether the information you read is reliable, accurate and reasonable. It is most relevant when you are reading something that is meant to persuade you.

For example, perhaps you are reviewing a report on your company's approach to diversity. The report is intended to persuade people that the company is doing a good job at encouraging and supporting diversity in the workplace. To effectively evaluate this source, it is necessary for you to be an active and thoughtful reader, rather than passively accept what it is saying.

Here is an example of a critical reading strategy:

Skim	Glance at the document to get an overview of its contents. Consider the issue the author is writing about, their position on the issue and the evidence provided to support their view.
Reflect	Consider your own views: what ideas do you have about the issue that could encourage you to accept or reject the author's view? Be aware of your potential biases.
Read	Read the entire work carefully. Keep a pen or pencil in hand and underline the most importance sentences. Add your questions and thoughts in the margin.
Evaluate	Ask questions to help you avoid passive acceptance of the information: <ul style="list-style-type: none"> ▪ Are there a lot of vague or ambiguous terms in the document? The document should be clear and understandable. ▪ Does the author use 'emotionally charged' language? A document that makes you feel but not think may not be accurate or reliable. ▪ Is there data or evidence to support the claims within the document? If the document is based merely upon opinion, it may not be accurate or reliable.

Example

Analysing to identify gaps and barriers

Greg was recently employed as Operations Manager at Minji, a medium-sized furniture design and manufacturing company. Greg is keen to help the company meet its goal of expanding its range of products and increasing business. He is passionate about using critical and creative thinking in the workplace, and he wants to know if some gaps or barriers may be limiting or discouraging his team from using these forms of thinking.

To begin, Greg uses the SWOT analysis technique to identify strengths, weaknesses, opportunities and threats. He chooses to speak to a range of people and read all the relevant company documents available. He speaks with each member of his team about their views and experiences of the workplace culture at Minji. He also talks with the Human Resources Manager, the CEO and an external consultant, who have all worked with numerous teams at Minji over the previous few years.

He then examines company policies and procedures, the results from the latest employee satisfaction survey, and a series of articles he has collected from credible websites about how to promote critical and creative thinking in the workplace.

On analysing the information Greg finds:

- individual teams at Minji have a culture of supporting each other. Staff in teams have been working together for years, they know how others in their team think and they know how to behave so everyone gets along without any major problems
- Minji does not have a diverse workforce. Most employees have been at the company for a long time and most come from similar backgrounds. The design staff are mostly in their 40s, with tertiary qualifications in industrial design or business. The manufacturing staff are all mostly long-term employees. Out of 87 staff, 84 staff members are male, only two staff members speak a language other than English, and no one is under the age of 32
- there is little collaboration or discussion between the design and manufacturing areas
- Minji's upper management strongly believe it is their absolute right to independently make decisions to manage the company.

Greg's analysis identifies several possible areas in which critical and creative thinking could be improved to the benefit of the company.

Practice Task 5

Question 1

Which of the following statements are correct? Tick all that apply.

- Attribution bias is the belief that bad things happen because of internal factors and good things happen because of external factors
- Groupthink is the tendency, within a group, to put forward ideas that are not supported by evidence
- One of the important things to examine when undertaking an analysis of organisation systems is the organisation's resources
- When undertaking an analysis of organisational systems, one source of relevant information is the employees themselves
- Critical reading involves three steps: skim, read and evaluate

Question 2

Which of the following are potential barriers to creative thinking in an organisation? Tick all that apply.

- Shutting down debates
- Lack of diversity
- Complex team structures
- Micromanaging
- Lack of transparency in decision-making

Question 3

Identify the three factors that need to be considered when undertaking an analysis of an organisational system.

Question 4

Identify gaps or barriers to critical thinking in an organisation by asking questions of a family member, friend or associate who is currently employed. The types of organisation can vary widely: small, medium or large businesses; government or private; for profit or not-for-profit; service or manufacturing sectors.

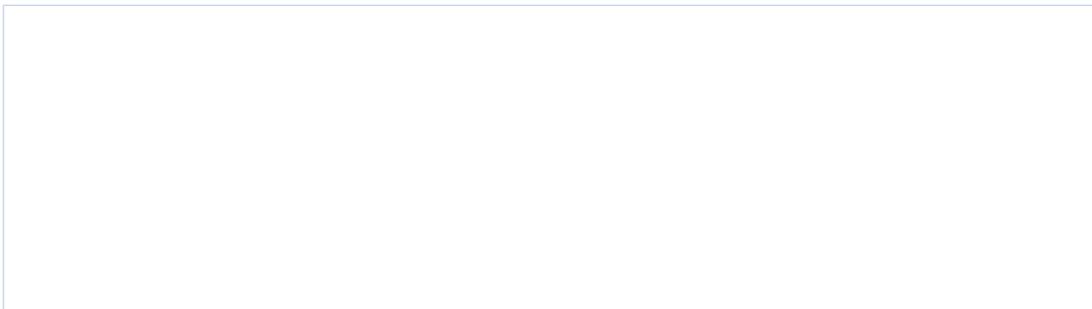
- a) Ask them to briefly describe the organisation's objectives, processes and resources and record their responses.

- b) Decide on three open-ended questions you will ask that will help you identify gaps or barriers to critical thinking in their workplace. Write the questions below.

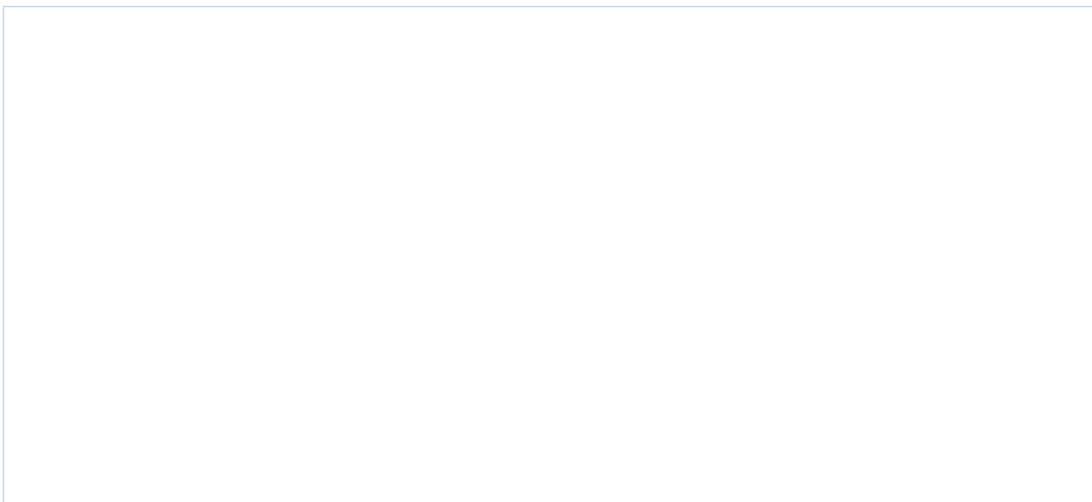
c) Ask each question and record the response in the space under the question.



d) Analyse the information you have gathered. State your thoughts on where gaps or barriers to critical thinking in the organisation may occur, or areas that you think display good use of critical thinking skills.



e) Write a brief summary of your thoughts identifying any further questions you would ask.



2B Create a safe environment for critical and creative thinking

When people are in an environment where they feel trusted and respected, they will be more willing to share thoughts and information with others.

Even when staff members have the relevant skills and knowledge to think critically or creatively, that kind of thinking might not be practiced in their workplaces. People need to feel safe to think critically and to think ‘outside the box.’

Safe environments

Safe environments allow people to speak freely, and to share ideas and opinions.

Environments that are safe for critical and creative thinking:

- allow people to ask questions, and explore ideas, concepts and solutions without fear of judgment
- provide opportunities for people to explore decisions and problems (rather than focusing solely upon answers and solutions)
- encourage people in different roles, teams, branches and departments to collaborate and share ideas
- allow for respectful debate, disagreement, healthy scepticism, uncertainty and discomfort
- support processes for generating new ideas and experimentation
- encourage and promote respect, trust, openness, diversity and empathy.

Developing processes to create safe environments

Here are some practical examples to help create safe environments for critical and creative thinking.

Before you use any of these strategies, make sure they align with the policies and procedures of your organisation. For example, there may be an organisational policy around when and how team members share information and collaborate on tasks or projects.

If you are unsure about whether a strategy aligns with your organisation’s policies or procedures, ask for advice from a relevant staff member.

Characteristics of safe environments	Practical examples of what you can do to create safe environments
<p>Allow and encourage people to ask questions and explore ideas, concepts and solutions without the fear of judgment</p>	<ul style="list-style-type: none"> ▪ Encourage team members to ask questions like: <ul style="list-style-type: none"> – Why? – Where is the evidence? – What does that mean? ▪ At the beginning of every meeting, remind team members that questions are welcome. ▪ Ask for questions in a manner that shows you really want to hear them and thank people when they ask questions. ▪ When someone asks a good question, do not just say 'that's an interesting question', say why it is an interesting question and ask them what they want to do with the question now it has been asked. ▪ Avoid using jargon and slogans. Ask your team to call you out when you use terms and phrases that are meaningless or unclear.
<p>Provide opportunities and encourage teams to explore decisions and problems</p>	<ul style="list-style-type: none"> ▪ Institute a 'no judgment rule' when you are discussing problems and potential solutions – this helps people 'think outside the box' and pose new ideas. ▪ Hold 'pre-mortem' meetings. Rather than meeting after a project has been completed to talk about what went well and what could be improved, meet before the project has started and talk about what could go wrong. Identify the top five potential problems and come up with strategies for avoiding them.
<p>Provide opportunities and encourage people in different roles, teams, branches and departments to collaborate and share ideas</p>	<ul style="list-style-type: none"> ▪ When discussing potential solutions to workplace problems, bring in relevant staff from other teams to provide a fresh perspective. ▪ Help staff to share information and collaborate with other teams in the organisation.
<p>Allow for and encourage respectful debate, healthy scepticism, uncertainty and discomfort</p>	<ul style="list-style-type: none"> ▪ Appoint a devil's advocate when your team is making important decisions. (Team members could take turns). That person's job is to ask tough questions, poke holes in arguments and challenge consensus beliefs and opinions. ▪ Challenge self-limiting beliefs. These are evident in statements such as, 'I do not have a creative bone in my body', 'I never come up with good ideas' and 'You can't teach an old dog new tricks'.

Characteristics of safe environments	Practical examples of what you can do to create safe environments
<p>Support processes for experimentation and generating new ideas</p>	<ul style="list-style-type: none"> ▪ Clearly identify the expected outcomes of a task but give staff the freedom to choose how they are going to do it. ▪ Bring in external experts to talk about a topic unrelated to team members' everyday work: this gives people time to think and reflect and broadens their perspective. ▪ Openly acknowledge and reward team members who demonstrate innovative thinking. ▪ When a member of your team puts forward a new idea, look for reasons to explore the idea further, rather than looking for reasons not to pursue it. Encourage other team members to do the same. ▪ Commit to demonstrating critical and creative thinking wherever you possibly can. Do this when working in your team and when working with other people in the organisation. When team leaders demonstrate critical and creative thinking, it helps to create an environment of 'psychological safety'. ▪ When a new staff member is appointed, harness their fresh perspective and ask them questions like: <ul style="list-style-type: none"> – What surprised you when you started working here? – What do you feel is different about this workplace when compared to other places where you have worked? ▪ Learn from outsiders. Invite someone from outside the organisation to come and observe what is happening and report back to you about what they have observed. ▪ Become an outsider. Go and observe another organisation and observe how they do things. By doing so, you might see your own organisation and team in a new light.
<p>Encourage and promote the values of respect, trust, openness, diversity and empathy</p>	<ul style="list-style-type: none"> ▪ As a team, develop a list of shared team values and include examples of what these values look like in the course of your everyday work. ▪ Discourage infighting and gossip. These behaviours damage respect and trust within the team.

Example

Creating a safe environment

Johannes is the Marketing Manager at Juggle, a company that specialises in social media records management. He wants to create an environment for his team that supports and encourages creative thinking.

One of the challenges Johannes has identified in his team is their tendency to be highly critical of each other's ideas. Although Johannes wants to encourage healthy debate, he knows that highly critical evaluations can discourage creative thinking. Johannes discusses the problem with his team and floats the idea of a 'no judgment rule' in meetings, especially when they are developing potential solutions to problems.

The team agrees to trial the 'no judgment rule' and in a few weeks some members of the team are already showing a willingness to explore alternative ideas and viewpoints.

Practice Task 6

Read the example of Johannes the Marketing Manager at Juggle on p. XX, then answer the following questions.

Question 1

Johannes has introduced a 'no judgment rule' during meetings to encourage critical and creative thinking. List four other actions Johannes can take at Juggle to create a safe environment for critical and creative thinking.

Question 2

Develop a list of 'Dos' and 'Do Nots' that must be observed during meetings so they are safe environments for staff to use critical and creative thinking.

Do	Do Not

Question 3

Which of the following values help to create a safe environment for critical and creative thinking? Tick all that apply.

- Accountability
- Respect
- Trust
- Cooperation
- Openness
- Empathy

Question 4

What is the job of a 'devil's advocate'?



2C Facilitate opportunities for team members to apply critical and creative thinking skills

Allowing teams to think critically and creatively helps individuals develop their skills and benefits the organisation.

By giving your team the opportunity to apply critical and creative thinking skills, you are helping them develop their ability to use those skills in their work every day.

Providing practical opportunities is especially important because critical and creative thinking skills cannot be taught via rote learning; they need to be practised and applied.

Encouraging the application of critical thinking skills

All team members can develop critical thinking skills when provided with the opportunity.

Here are some examples of how you could facilitate opportunities for your team to apply critical thinking skills to workplace problems. For each example, a brief description of how the opportunity might build critical thinking skills is provided.

Examples of opportunities	How this might build critical thinking skills
When a potential workplace problem has emerged, ask the team to express the problem clearly and precisely in one or two sentences.	Clarity and precision are two of the intellectual standards that underpin critical thought. People who think critically seek to understand the question they are trying to answer.
Encourage the team to consider how a workplace problem would be described by a number of different stakeholders, such as a customer, the CEO, or a new employee.	Considering multiple viewpoints demonstrates breadth of thought. People who think critically routinely examine problems and issues from different points of view and are able to imagine themselves in the position of others.
Encourage the team to reflect on the ethical implications of different solutions and approaches.	People who think critically are fair-minded and demonstrate empathy.
Encourage the team to reflect on how their own values and beliefs might influence their thinking.	People who think critically recognise that they did not choose the point of view that has developed. People who think critically can identify their own assumptions.

Examples of opportunities	How this might build critical thinking skills
At the conclusion of a meeting with important stakeholders, ask a team member to summarise the most important points from the meeting.	<p>People who think critically distinguish between relevant and irrelevant information.</p> <p>Synthesising information is a key aspect of the critical thinking process.</p> <p>Clarity is an intellectual standard underpinning critical thought.</p>
Ask the team to consider what information or data they would need to better understand a problem.	People who think critically distinguish relevant from irrelevant information when reasoning through a problem.
When discussing potential solutions to a problem, encourage team members to talk through the implications of each solution – both positive and negative.	<p>This encourages deep and complex thought.</p> <p>People who think critically consider the likely implications before they act.</p>
When working on potential solutions to a problem, ask team members to find evidence that supports their position and evidence that does not support their position.	People who think critically actively search for information for and against their own position.
Pose a range of solutions to a problem and, without indicating which solutions you support, ask your team to work through the positives and negatives of each option.	This encourages intellectual courage – they may be critiquing a solution that their team leader (you) support.
When a team member proposes a solution to a problem, ask them to elaborate on the evidence that supports their idea.	<p>People who think critically can come to logical conclusions based on evidence rather than assumptions.</p> <p>People who think critically can state evidence to support their views clearly and fairly.</p>
When a task, project or initiative has been completed, ask a team member to explain what they did, how they did it and why they did it that way.	<p>People who think critically can assess and describe their own thinking and decision-making processes.</p> <p>People who think critically base their decisions and conclusions on facts and sound reasoning.</p>

Techniques for critical and creative thinking

Another way you can facilitate opportunities for teams to apply critical and creative thinking skills is to use established techniques. Some examples of these are described below:

<p>Brainstorming</p>	<p>Brainstorming is one of the most well-known methods for generating solutions to problems. It involves a group of people generating ideas together.</p> <p>Despite being very well-known, brainstorming is widely misunderstood and often poorly applied. To ensure it is done correctly, it is important to follow five basic rules:</p> <ul style="list-style-type: none"> ▪ Criticise nothing ▪ Aim for a lot of ideas ▪ Be daring ▪ Build on ideas ▪ Stay focused
<p>Frames of reference</p>	<p>A frame of reference is a point of view or perspective. A person's frame of reference is shaped by their knowledge, assumptions, beliefs and values.</p> <p>Frames of reference can be shaped by our professional experiences and our personal experiences and background. For example: a medical frame of reference (doctors and nurses); a cultural frame of reference (the attitudes, beliefs and practices of a specific culture); or a consumer frame of reference (people who use products and services).</p> <p>When using frames of reference as a critical thinking technique, encourage team members to consider how frames of reference influence how they think about a problem and potential solutions.</p>
<p>Disney model</p>	<p>The Disney model is a commonly used method for creative thinking. It requires participants (either an individual or a group of people) to sequentially immerse themselves in each of the following roles:</p> <ul style="list-style-type: none"> ▪ The dreamer embodies freedom and imagination and is happy to live in a world of ideas ▪ The realist has their feet on the ground, is hard-headed and focused, and wants to know how an idea can become reality ▪ The critic is stern and unforgiving, refusing to ignore potential faults and weaknesses. <p>In practice, the Disney model involves the embodiment of these three characters, starting with the dreamer. At each phase, there is a key task and key questions to ask.</p>

There may be other techniques commonly used in your industry to facilitate critical and creative thinking. Ask your colleagues if they have their own techniques and approaches for facilitating critical and creative thinking within their teams.

It is always good to look at practices implemented by other organisations to improve critical and creative thinking. Use the internet to research what other organisations have done; additionally, you can ask your network of contacts in similar organisations about their practices. Use the information you have gathered to reflect on what you could introduce to your own organisation.

Example

Applying critical thinking

Ivan, the manager of a small IT team at an equipment hire company, has been considering how he can create opportunities for his team to apply and improve their critical and creative thinking skills.

At their regular weekly catch-up, Ivan suggests they run through a recent problem they had with a major client. After equipment was delivered on-site, the client rang and talked to the receptionist, complaining about the condition of the equipment and its ability to do the job.

Ivan suggests his team start by clearly describing the problem in one or two sentences. He asks everyone to individually write down what they think the problem is in a simple sentence, then they share what they have written and consider each other's view. They collaborate and test assumptions and finally agree on a clear definition of the problem.

Practice Task 7

Read the previous example, then answer the following questions.

Question 1

How does describing a problem clearly in a sentence help to develop critical thinking skills?

Question 2

In developing a clear definition of the problem, what things should the team consider?

Question 3

What other actions or things can Ivan ask his team to do in relation to the problem, to further use and develop their critical and creative thinking skills?

Question 4

The Disney model is a technique used to apply creative thinking in the workplace. Match the role on the left to the correct description on the right

- | | |
|---------------|--|
| » The dreamer | » Is stern and unforgiving, refusing to ignore potential faults and weaknesses |
| » The realist | » Embodies freedom and imagination and is happy to live in a world of ideas |
| » The critic | » Has their feet on the ground, is hard-headed and focused, and wants to know how an idea can become reality |

Question 5

Identify the five basic rules of brainstorming.

Read the following case study then answer the questions that follow.

Case study

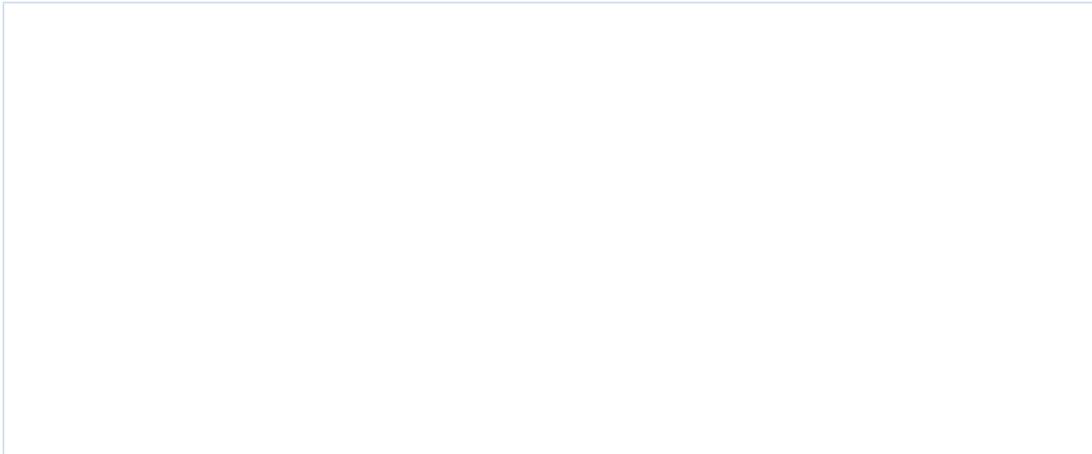
The finance department at a large import and export company has a problem. The marketing department does not seem to be providing accurate financial data for inclusion in the company's monthly financial report. Due to this, each month the company's financial report has errors. You have been asked to facilitate a meeting with the marketing team to identify a solution to the problem.

Question 6

Identify three ways you could encourage the team to think critically about how to solve this problem.

Question 7

State three things you can do to ensure the team does not become defensive, but rather sees this as an opportunity to learn.



2D Provide feedback to team members

Providing feedback to team members can assist in their personal development.

Once employees have had the opportunity to apply critical and creative thinking to problems in the workplace, it is important to provide them with feedback. This can be given in numerous ways, such as a brief informal discussion or a structured and comprehensive meeting.

Constructive feedback has a range of benefits for employees and organisations, including:

- supporting people's professional development
- establishing and reinforcing company expectations
- building a culture of open communication.

How to provide feedback

Use the feedback process as an opportunity to establish a connection with your team and get to know them better.

You can do this by eliciting their views and opinions, asking and encouraging questions, and demonstrating active listening.

There are five steps you can take to make the feedback process constructive and positive.

1	Choose an appropriate time and place	<ul style="list-style-type: none"> • Ensure that you both have the time and space to prepare for and focus on the discussion. • Do not give a team member negative feedback in public. • Choose a meeting place that is private and will not make the person feel singled out.
2	Give feedback in person	<ul style="list-style-type: none"> • Face-to-face conversations are typically the best way to establish a connection with a person. • Be aware of your (and their) body language. • Demonstrate active listening.
3	Be prepared	<ul style="list-style-type: none"> • Spend some time thinking about what you want to achieve from the discussion. • Plan how you are going to approach the discussion (see the STAR model below). • Consider the team member's personality and preferences (e.g. meet in a private place for someone who does not like attention).

4	Be clear, inclusive and collaborative	<ul style="list-style-type: none"> ▪ Outline why you are having the discussion and what you are hoping to get from it. ▪ Encourage a two-way discussion – elicit the team member’s views and opinions by listening and questioning. ▪ Using the principles of collaboration, decide together what actions you will take.
5	Follow up	<ul style="list-style-type: none"> ▪ Give the person time to reflect on the feedback you provided – let them know what they should do if they have further questions or comments. ▪ Follow through on any actions you committed to (e.g. providing further information). ▪ Give the person the opportunity to provide you with feedback as well.

If you need to give feedback that might be interpreted as negative (e.g. areas for improvement), use the technique of appreciative inquiry to ensure the feedback is constructive. Appreciative inquiry involves focusing on strengths and opportunities, rather than problems and weaknesses. For example, instead of asking ‘Why didn’t you question the assumptions behind that decision?’, ask ‘Take me through what happened when you were making that decision: what do you think went well, what did you have difficulty with and what did you learn?’

When you provide feedback to team members, ensure you follow organisational policies and procedures. For example, your company may have a standard template that is used to provide and record feedback to staff. If you are not sure about these policies and procedures, ask for advice from a colleague or your supervisor. You must ensure that the individual receiving your feedback does not feel intimidated or bullied.

Balanced and specific feedback

Feedback should be balanced and specific. Balanced feedback includes points about what is being done well and areas for improvement.

Messages should be clear and action oriented. It is important that the feedback you provide is based on evidence, not opinion.

When you are preparing for a feedback session, you can use the STAR model to help ensure your feedback is balanced and specific.

Situation	Describe the situation: what, where, who? <ul style="list-style-type: none"> When we had the team meeting on Thursday, I was very happy with the recommendations you proposed.
Task	What is expected regarding work, behaviour, skills and tasks? <ul style="list-style-type: none"> I had expected you would need a bit more time to come up with your own recommendations.
Action	How did what happen meet or fall short of those expectations? <ul style="list-style-type: none"> Your ideas were relevant to the issue and you expressed them clearly.
Result	What was the outcome or impact of the situation? <ul style="list-style-type: none"> It encouraged some of the other team members to put forward ideas and it ended up being a very useful discussion.

Example

Providing feedback

Ivan's team has met several times now to discuss how to avoid the problem of missing deadlines. The discussion is open and frank, and although some members talk more than others, everyone contributes to the conversation. There are lots of ideas put forward, ranging from employing more staff to replacing the entire IT system used by the company. Eventually, it is decided that deadlines are sometimes missed because some team members are not aware of what needs to be done next and by what time. A solution is put forward to update the tracking software and make it available for everyone to see. This way, everyone is aware of progress.

The following day Ivan approaches Sean, one of the quieter members of his team. He says, 'Sean, I liked the way you contributed to the discussion at yesterday's meeting. The comment you made about IT helped others think about different possibilities, and that eventually led us to the idea of tracking software'.

The following week at Ivan's team staff meeting, Ivan announces to everyone in the team that their idea has been supported by management, and the purchase of software will go ahead. He emphasises the importance of everyone contributing to meetings and thanks them for working together, respecting each other's ideas, and using their thinking skills to come up with a solution.

Practice Task 8

Read the example on p. 59 then answer the following questions.

Question 1

Consider a scenario where Sean had not spoken or contributed at all in the team meetings, and you decided to provide him with feedback.

- a) Where would you choose to provide the feedback to Sean? Why would you choose this place?

- b) What would you say to him about expectations at the meeting?

- c) What would you say to him about him not contributing at the meeting?

- d) What would you say to him about him changing the situation in the future?

Question 2

Which of the following are steps you can take to ensure the feedback you provide is useful and positive? Tick all that apply.

- Offer advice
- Choose an appropriate time and place
- Be prepared
- Ask for evidence of learning
- Follow up

Question 3

What is appreciative inquiry?

Question 4

What does each letter of the STAR acronym stand for?

Summary

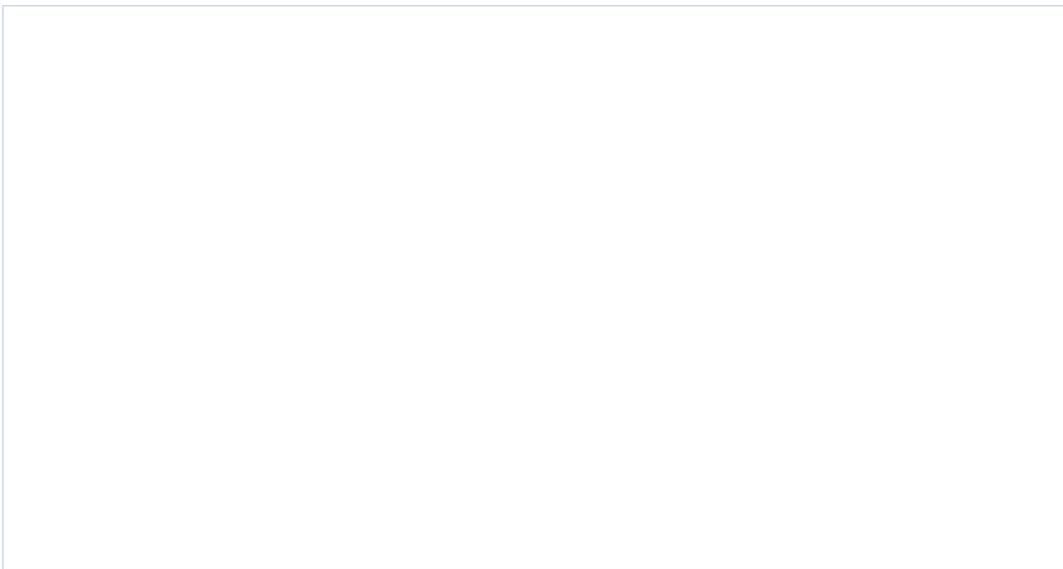
- There are many potential barriers to critical thinking in an organisation, including confirmation bias, attribution bias and generalising.
- Barriers to creative thinking in an organisation include inflexible rules and procedures, and micromanaging.
- When analysing organisational systems, it is important to consider organisational processes, resources and objectives.
- Some of the key characteristics of organisations that are safe environments for critical and creative thinking are that they allow people to ask questions and provide opportunities for people to explore problems.
- There are numerous established techniques that can be used to facilitate opportunities for critical and creative thinking, including brainstorming and the Disney model.
- Team leaders can facilitate opportunities for critical and creative thinking by embedding strategies in everyday work tasks, such as encouraging a team to consider how a workplace problem would be described by different stakeholders.
- To make feedback useful and productive, numerous factors should be considered, including choosing an appropriate time and place, and being clear, inclusive and collaborative.

Learning Checkpoint 2

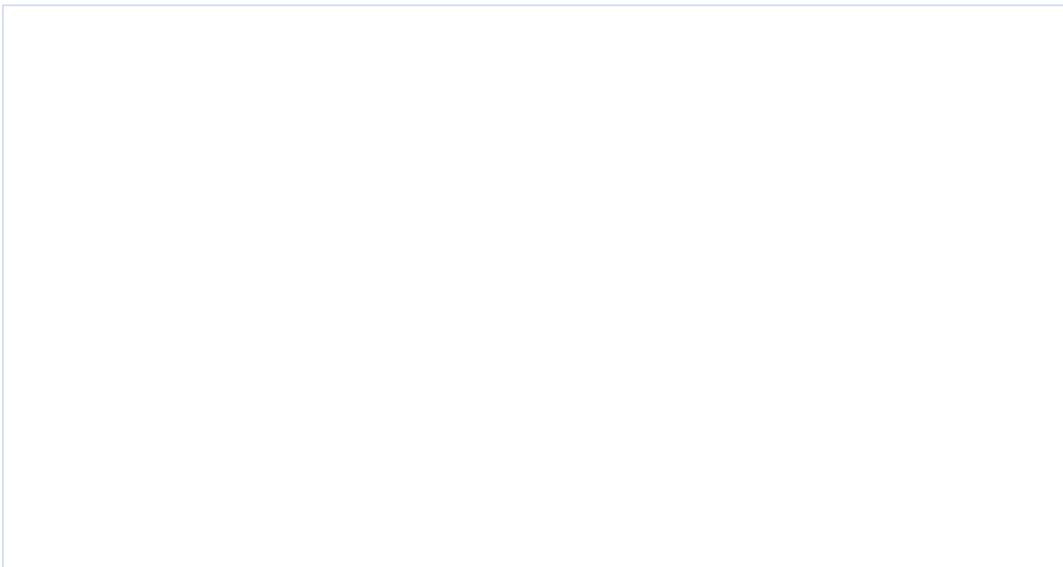
Establish an environment that encourages critical and creative thinking

Part A

1. Identify and briefly describe one established technique that can be used to facilitate the application of critical or creative thinking skills.



2. A team manager has noticed that her team is reluctant to ask questions and explore solutions. What are three practical things this manager can do create a safe environment for critical and creative thinking in her team?



3. Provide an example of three practical things you can do to ensure your feedback to team members is useful and positive

Part B

Read the following case study and then answer the questions.

Case study

Shona is a team leader at the head office of a large supermarket chain. She is currently undertaking an organisational system analysis to identify potential barriers to critical and creative thinking in the organisation. As part of her organisational system analysis, Shona is reading three reports by external organisations that discuss best practice training procedures in the retail sector. Shona wants to make sure she is actively and thoughtfully reading these documents, rather than passively accepting what they say.

1. Identify the four steps Shona could follow to critically read the documents. Make sure you place the steps in the correct order.

2. As part of her organisational system analysis, Shona is observing how decisions are made within head office. Having attended multiple meetings over the past two weeks, Shona has identified some common behaviours.

Which of the following behaviours pose a barrier to critical or creative thinking? Tick all that apply.

- Staff within the HR team rarely question what their manager tells them
- When coming up with solutions to problems, the HR manager encourages staff to 'think outside the box'
- The team regularly seeks out the viewpoints of staff members who are not within their team when they are making decisions about the allocation of resources
- In a discussion about staff retention, the HR manager states that the business retains good staff because of the friendly nature of the workplace and good staff who leave do so because they get offered more money elsewhere



Topic 3 | Monitor and improve critical thinking practices

- 3A Collect and analyse feedback
- 3B Identify support needs of individuals and teams
- 3C Recommend improvements to future learning arrangements

3A Collect and analyse feedback

Effective organisations continuously improve the critical and creative skills of their employees.

Organisations that wish to develop a culture where critical and creative thinking is accepted need to develop an environment where feedback is encouraged. Feedback clarifies expectations, allows people to express their opinions and builds confidence. It supports ongoing improvement and knowledge-sharing across the business.

Individuals and teams within your organisation will have their own unique insights into how critical and creative thinking can be encouraged and supported, as will those external to the organisation.

Gathering feedback from all these parties will help you identify additional supports that may be needed to build the capability of staff to think critically and creatively.

Gathering feedback

When gathering feedback on how well your organisation is practicing critical and creative thinking, apply critical thinking to analyse a range of different perspectives.

For managers to make informed training and development decisions, they should seek feedback from a range of stakeholders on how the organisation is performing in the areas of critical and creative thinking. Seeking feedback also ensures the views of teams and individuals are heard and improvement opportunities are identified.

How you gather feedback will depend on what is feasible and appropriate in your workplace. Some options include:

- individual face-to-face or phone conversations
- email correspondence
- structured interviews
- informal group discussions
- formal structured focus groups
- online surveys.

Gathering and analysing feedback has multiple purposes. You and your managers will want information on:

- the outcome of the learning opportunities provided to staff, both informal and formal

- whether the staff are applying the skills and knowledge they have acquired
- future training needs of teams and individuals
- what is working and should be continued; what is not working and needs to be changed or discontinued.

The feedback received can be used to inform future learning activities, as well as helping you to determine what best practices exist and where there are gaps.

Seeking feedback from managers

Managers observe how teams and individuals are applying critical and creative thinking during learning opportunities and in working environments. They are well positioned to review the effectiveness of a training program and to judge whether or not knowledge is being adequately transferred during formal or informal learning opportunities.

Managers are often mentors and coaches and it is important to gain their input as well as the viewpoints of their mentees.

Asking managers for feedback on learning programs ensures they are kept informed. Managers are also decision makers. They are often in a position to effect change.

Seeking feedback from team members

Team members who participate in informal and formal learning programs are best placed to provide useful feedback on those experiences. For example, they will know whether they benefited from participating in the program and if their learning needs were met.

Ask team members for feedback on:

- whether the course met their expectations
- what they gained from participating in the program
- the relevance of the course to their current job role and career ambitions
- what support they needed to participate in the program.

In addition to asking team members about these learning opportunities, you could also seek their feedback on other factors, such as whether the workplace culture encourages people to think critically, ask questions and challenge each other.

It is likely you will use face-to-face meetings with individuals or the team to gather feedback. Use these sessions to establish connections with your team. Use inclusive and collaborative techniques to help you build a genuine understanding of your team.

During these discussions, remember that developing critical and creative thinking skills requires time, patience and perseverance. They cannot be taught in a single session or short course.

Asking for feedback on your own performance

It is essential to ask for feedback on your own performance. This is particularly important when you are in a leadership role. It ensures that self-reflection, a key part of personal development, can occur.

For example, you could ask for feedback on:

- how you, as a team leader or colleague, have encouraged critical thinking
- what you could do to make it easier for your team to ask questions and think ‘outside the box’.

Here are some tips on how to ask for and respond to feedback:

Be specific about what you want feedback on; e.g. ‘I was wondering if I can get some feedback on the brainstorming session I facilitated last Friday’.

Prepare a set of questions to ask the person you want feedback from and, where feasible and appropriate, give them the opportunity to read the questions before you meet with them.

Ask open questions when seeking feedback. Open questions cannot be answered with a simple yes or no and often begin with the words ‘why’ or ‘how’. Answers to open questions will provide you with a more in-depth and nuanced understanding of your performance.

Be aware of how you are feeling when you listen to the feedback and manage your emotional responses appropriately.

Ask for specific examples if you need help understanding the feedback; e.g. ‘What would have been a better way of encouraging questions from the team?’, ‘What do you think I should do differently next time?’

Do not avoid the difficult questions, but be sensitive in the way you ask them and draw out the answers; e.g. ‘Were you provided with enough support during the program?’, ‘What else could have been done to support you?’

Thank the person for giving you feedback, even if you do not agree with it.

Seeking feedback from other stakeholders

Team members are not expected to only apply critical and creative thinking inside their own organisation. Customers, partners and suppliers who are part of your organisation’s supply chain can also be asked for feedback on the application of critical and creative thinking in your business. External stakeholder feedback should be sought on the team or across-organisation level, rather than on an individual’s performance. Their feedback can inform you whether their expectations are being met and may even provide some insight into the best practices of other companies.

Analysing feedback

Once you have gathered feedback from the different sources, it is time to analyse it.

This means questioning what these different parties are telling you about:

- the critical and creative thinking opportunities within your team and your organisation
- the additional supports that team members might need.

The first step is to compile the feedback. If you have numerical data from a survey, for example, this might mean creating some graphs and tables. If you have textual data, such as notes from an interview or focus group, this might mean combining all the answers to each question in a single document.

Once you have converted the feedback from data to information, it is time to analyse, synthesise and evaluate it. Apply your critical thinking skills as you review the information: is it clear, relevant, accurate, fair and logical? Look for key themes or obvious patterns in the feedback. You could also use one of the following basic techniques to assist you with the analysis.

Compare and contrast	<ul style="list-style-type: none"> ▪ Look for commonalities and differences in the feedback you have collected. ▪ Commonalities might be: <ul style="list-style-type: none"> – multiple people have reported that a specific learning opportunity was helpful – multiple people believe constructive debate is discouraged in the workplace – multiple people have asked for a specific type of additional support. ▪ Differences might be: <ul style="list-style-type: none"> – some people found a short course very useful and others report that it was a waste of time – some people believe the organisation encourages staff to ask questions and others believe it does not. ▪ Consider whether these commonalities and differences indicate patterns or trends.
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Challenge and reflect	<ul style="list-style-type: none"> ▪ Consider the following questions: <ul style="list-style-type: none"> – Did anything about the feedback surprise you? – Was anything missing from the feedback? For example, was there a lack of critical feedback on workplace culture? ▪ Reflect on the answers to these questions or discuss them with a trusted colleague: <ul style="list-style-type: none"> – What does the feedback tell you about critical and creative thinking opportunities in your organisation? – What does it tell you about additional supports your team might need?
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Critical thinking and analysis

Use the principles of critical thinking as you analyse the feedback. In other words, think about your thinking as you interpret the information and do not passively accept whatever people are telling you.

- What are assuming about the feedback? For example, are you assuming that some people's views are more trustworthy than others?
- Is the information you have gathered from each person relevant to the issue you are asking about? Are they talking about a workshop or seminar that was not intended to build critical thinking skills?
- Are you rushing to judgment about some of the feedback? For example, are you dismissing the views of one staff member because they are too critical or too positive?
- Is the information the person provided accurate?
- What are you missing in the feedback? For example, perhaps you are finding it difficult to acknowledge negative feedback on an activity you are especially devoted to?

It would also be useful to gather feedback from team members about what individual supports they think they need to build their critical and creative thinking skills.

Evaluating your own performance

Evaluating your own performance will help you identify your strengths, weaknesses and learning needs. However, the process can be challenging. It is often difficult to be objective about ourselves.

To be honest and realistic about our performance, we need to be self-aware. In other words, we need to have the ability to recognise and understand our emotions and motivations and their effect on others.

Here are some tips to help you evaluate your performance:

Set aside time	You need to set aside adequate time to reflect on your performance. You can use this time to reflect on the feedback you have received and gather relevant additional information.
Use self-reflection tools and techniques	Various tools and techniques are available to assist with self-reflection. For example, the Johari window is a tool that helps people to improve their self-awareness by clarifying what they know about themselves and how they appear to others.
Review your job description	The focus of your evaluation should be how you have performed in supporting the development of critical and creative thinking in your team. However, when you do this it may be useful to also review your job description. What are your responsibilities and duties in terms of supporting your team's learning and skills? How well have you met these expectations when it comes to their skills of critical and creative thinking?
Review organisational objectives	How have your efforts and achievements in relation to critical and creative thinking contributed to your company's objectives? Reflecting on this question will help you better understand the value of your work.
Identify next steps	Most of the work of self-evaluation involves looking back in time: what have you achieved, what could you have done better? However, self-evaluations also provide you with an opportunity to set some new goals and think about the future: how could you apply the skills you have learned? What steps will you take to address your weaknesses?

Example

Inviting feedback

Josephine is a customer service manager at BSM, a large telecommunications company. She has been working to develop her team's capacity to think critically for a few months. She has undertaken a series of interviews with her staff to determine the outcome of various learning opportunities.

As part of this process, Josephine asks her staff about how workplace culture at BSM supports or discourages critical thinking. None of the staff identify anything about the workplace that discourages critical thinking. This surprises Josephine as she herself can identify multiple aspects of the culture at BSM that undermines critical thinking.

Josephine discusses the findings with her colleague Vashti. Vashti asks Josephine whether she is assuming her team felt comfortable talking to her about negative aspects of BSM culture. Vashti suggests that, if Josephine's team was afraid, she might think poorly of them if they criticised BSM, that may be why they failed to identify any barriers to critical thinking.

Vashti and Josephine identify the need to develop an understanding within the team that questioning and challenging ideas is something to be encouraged in an organisation to ensure it can change and innovate.

Practice Task 9

Question 1

Identify four methods that could be used to gather feedback about the effectiveness of critical and creative thinking in your organisation.

Question 2

Identify one technique that can be used to analyse feedback.

Question 3

When we evaluate our own performance at work, we need to be self-aware. What is self-awareness? Tick all that apply.

- The ability to recognise and understand our past
- The ability to recognise and understand our emotions
- The ability to recognise and understand our motivations
- The ability to recognise and understand our effect on others
- The ability to recognise and understand our role

Question 4

Develop a list of Dos and Don'ts that must be observed when gathering and analysing feedback on critical and creative thinking learning activities.

Do	Do Not

3B Identify support needs of individuals and teams

When individuals are supported and encouraged to apply their thinking skills, a learning culture evolves.

As noted previously, critical and creative thinking skills are higher-order skills that take time to develop. Individuals and teams may need support not only to develop these skills, but to have the confidence to use them. Critical and creative thinking behaviours are reinforced when the workplace culture rewards and recognises individuals who question and challenge the status quo and look for innovative solutions.

Environments that support learning

Environments that promote effective learning share some common features.

It is important to understand the characteristics of environments that support learning. These characteristics apply to any environment where learning occurs, including workplaces and educational institutions such as schools, vocational education institutions and universities.

Characteristics of environments that support learning

People ask questions, and questions are valued more highly than answers.

The environment provides opportunities for diverse forms of learning by supporting a variety of learning techniques, including formal and informal methods.

From the outset of any learning activity, consideration is given to how the learning can be applied to the real world.

Learning is personalised and caters to an individual's abilities, learning style and level of interest.

Feedback is ongoing, authentic and transparent.

The outcomes of learning are measured in a range of ways that makes sense to learners.

Leaders and learners model positive learning habits and learn from each other.

Notice that the first characteristic is that people ask questions. This reflects the critical and creative thinking models. All these models included questioning as an essential component.

Spend some time reflecting on the characteristics of organisations you have worked in previously. Which of these characteristics did they possess? Which of these were missing? Would you classify any of them as learning organisations?

When reviewing any existing learning arrangements in an organisation, these characteristics provide useful benchmarks.

Identifying support requirements

In any team environment, the support needs of individuals should be identified and accommodated.

Any workplace or, in fact, any team, comprises individuals with different abilities, who come from different cultural backgrounds and who learn at different rates. These differences should be considered when designing learning opportunities. Some individuals will:

- learn best attending formal training programs
- develop skills and confidence by participating in a program where they have one-on-one interactions with a coach or mentor
- learn by doing and by having the opportunity to practise, test and apply their critical or creative thinking skills in a team environment, e.g. team meetings, brainstorming sessions.

When asking for feedback from individuals, make sure you question them on:

- how they like to learn
- if they have any specific learning or other needs
- what support they require to build their confidence in applying their critical and creative thinking
- what barriers, if any, exist that prevent them from reaping the full benefits of the learning opportunity.

Supports you may provide depend on the particular backgrounds and needs of individuals, but may include:

- scheduling training programs to accommodate flexible working hours or the needs of part-time staff
- considering cultural requirements of individuals, e.g. ensuring training programs are designed to meet the needs of staff from CALD (culturally and linguistically diverse backgrounds)

- recording sessions for individuals who are sight impaired or those who are unable to attend
- providing support during formal training sessions, e.g. laptops for all participants
- assigning a workplace coach to follow up with individuals after a training session
- arranging for individuals to join training remotely, e.g. via an online meeting forum.

Creating a supportive environment

Managers and team leaders can create a culture that supports teams to develop and apply their thinking skills.

Even today, many organisations remain quite hierarchical. Managers continue to be responsible for making decisions, developing policies and creating strategy. In such organisations, individuals are not supported to voice an opinion, their contributions are not always recognised and opportunities for innovation and continuous improvement are missed. A learning culture is not supported.

Managers and team leaders can build a team culture that supports and rewards critical and clear thinking by:

- having processes in place that ensure knowledge is shared among the team
- creating regular formal and informal opportunities for team and individual learning
- viewing mistakes as an opportunity to discuss lessons learned, rather than an opportunity to criticise and blame.

Providing informal learning opportunities for team members to practise and apply their thinking skills in a non-threatening team environment benefits both the individual and other team members. Team members learn from each other when they:

- are given the autonomy to make decisions and solve problems together
- chair team meetings
- give short presentations to the group
- represent the team at department meetings
- mentor and coach other team members
- are trained in and given the opportunity to use different problem-solving tools, such as fishbone diagrams; 5 Whys; root cause analysis; or the Plan, Do, Check, Act cycle
- feel encouraged to join organisational committees, e.g. continuous improvement or auditing teams
- are invited to give constructive feedback to one another.

Learning plans

Establishing learning plans for individuals formalises the commitment of both the organisation and the individual to invest in learning.

Learning plans should be developed in consultation with the individual and should be regularly reviewed and adjusted to address changes in the business's and individual's needs.

Learning plans should:

- be specific
- identify the support the individual will be given to complete the plan
- identify timelines for completion of the learning activities
- align with the organisation's strategic plan and the team's business goals
- address the career aspirations of the individual.

This learning plan should be monitored and reviewed as part of ongoing discussions with the individual on their performance. Any learning planning process should be completed according to the policies and procedures relating to organisational learning that have been established.

Example

Engaging a team

Lina is a team leader at Trusted Media, a business that specialises in online marketing. Her creative team comprises diverse individuals, some of whom are extroverts always keen to give and take constructive feedback. Others are more reticent. Although they clearly have ideas to share, they keep to themselves. Lina struggles to involve them in team decision-making as it is a case of the loudest voices being heard. Lina is keen to address this team dynamics issue, which she believes is stifling critical thinking.

Lina arranges for one-on-one meetings with team members. She asks them to prepare for the meeting by reflecting on their development needs and how they believe teamwork could be encouraged.

Lina is pleasantly surprised at the feedback she receives from the team and the innovative ideas they suggest. She works with her staff to develop individual learning plans and draws up a team training plan. The plans include a team member coaching the rest of the team on mind-mapping, formal training on effective presentations, team building exercises and report writing.

Practice Task 10

Question 1

Identify four characteristics of effective learning environments.

Question 2

Which of the following statements are correct? Tick all that apply.

- When planning learning opportunities for a team, an individual's personal circumstances may need to be accommodated.
- Mentoring is the least preferred method of developing critical thinking skills as only one person in the team benefits.
- When deciding on support needs of teams and individuals, you will need to consider the resources required.
- It is not a good idea for members of a team to provide support and coaching to one another.
- Collaboration between managers and individuals when preparing learning plans creates mutual responsibility for their execution.

Question 3

You have been asked to prepare a proposal for the implementation of a formal training program aimed at improving the critical thinking skills across the business. A section of the proposal must address the supports that may need to be provided to program participants.

Write four points that you will include in this section of your proposal.

3C Recommend improvements to future learning arrangements

Organisations change and it is important that learning arrangements remain relevant and align to the strategic goals.

Actively monitoring the effectiveness of workplace learning ensures that opportunities for improvement are recognised and recommendations can be implemented. Supporting workplace learning is especially important during periods of uncertainty in the business environment: the greater the uncertainty, the more important it is to be able to think critically and creatively.

Recommendations for learning arrangements

When recommending changes for an organisation's learning arrangements, the focus should be on evaluating what it does well and where it could do better.

When reviewing an organisation's learning arrangements, consider:

- where and how learning takes place
- where the organisation focuses its learning efforts.

Base any recommendations you make on:

- the strengths and weaknesses of existing arrangements
- the findings of your organisational analysis, including organisational objectives, processes and resources
- the feedback received from your team on critical and creative thinking opportunities
- your research on existing best practice in your industry.

Here are some examples of the areas your recommendations might focus on:

Where and how learning takes place	<ul style="list-style-type: none"> • more opportunities for informal learning • more investment in formal learning opportunities • more opportunities for team learning • support for learning activities led by staff, such as discussion groups • more opportunities for collaborative learning between teams • more investment in opportunities to develop and individual's skills
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Where the organisation focuses its learning efforts	<ul style="list-style-type: none"> ▪ more investment in learning among teams involved in production, rather than sales ▪ more opportunities to test new ideas, rather than focusing on improving existing processes ▪ more support for team leaders to promote critical and creative thinking
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Any recommendations you make must be aligned to the organisation's goals. The learning arrangements should equip staff with the necessary skills and knowledge to contribute to the achievement of these goals.

How you develop and present your recommendations will depend on your organisation's requirements, policies and procedures. Most likely, your recommendations would be in the form of a report or a presentation to management. When presenting your recommendations, it is a good idea to demonstrate that you have used critical thinking. This will not only give weight to your ideas but will illustrate the benefits of critical and creative thinking. Any report or presentation should:

- provide the reasons for your recommendations
- provide additional documents to support your recommendations (e.g. customer feedback data, employee wellbeing surveys)
- ensure your recommendations are evidence-based
- identify the risks associated with the recommendations
- outline how the recommendations align with the company's objectives and strategic plans
- identify the resources (financial and non-financial) needed to implement your recommendations.

The scope of your recommendations – that is, whether they focus on improving existing policies and processes, or on adopting a whole new approach to learning – will depend on your findings and what is feasible in your organisation. They must also be guided by relevant legislation and organisational policies.

Legislation and policy

Learning opportunities must comply with legislative requirements.

When developing your recommendations, it is important to ensure your recommendations align with relevant legislation and organisational policies.

Your organisation's policies and procedures provide guidance on how learning opportunities are to be developed and evaluated. They ensure an organisation complies with its legal obligations.

Here are some examples of potentially relevant legislation. If you are unsure of which legislation you might need to consider when developing your recommendations, seek advice from a colleague and always refer to your organisation's policies and procedures.

Legislative area	Examples of legislation	Relevant areas
Privacy	<ul style="list-style-type: none"> • <i>Privacy Act 1988</i> (Cth) 	<ul style="list-style-type: none"> • Collection, use, security and disposal of personal information (including an employee's information)
Work health and safety	<ul style="list-style-type: none"> • <i>Work Health and safety Act 2011</i> (Cth) • <i>Occupational Health and Safety Act 2004</i> (Vic.) • <i>Occupational Safety and Health Act 1984</i> (WA) 	<ul style="list-style-type: none"> • Work practices • Accidents or injuries
Employment	<ul style="list-style-type: none"> • <i>Fair Work Act 2009</i> (Cth) • <i>Age Discrimination Act 2004</i> (Cth) • <i>Racial Discrimination Act 1975</i> (Cth) • <i>Sex Discrimination Act 1984</i> (Cth) • <i>Disability Discrimination Act 1992</i> (Cth) 	<ul style="list-style-type: none"> • Discrimination • Equal employment opportunity • Access to training

Practice Task 11

Question 1

Which of the following statements are correct? Tick all that apply.

- When planning learning opportunities for a team, the strategic goals of the organisation should be considered.
- The most important thing to consider when reviewing an organisation's training program is that the needs of all participants were met.
- Any proposal recommending changes to the formal and informal training opportunities should identify the risks associated with implementing these changes.
- When evaluating the learning opportunities offered to staff, you will need to consider cost constraints.

Question 2

Which of the following legislation may be relevant to creating opportunities for learning within the workplace? Tick all that apply.

- Privacy
- Intellectual property
- Taxation
- Work health and safety
- Employment

Summary

- There are numerous options for gathering feedback from individuals and teams about learning opportunities, including surveys and informal group discussions.
- It is important to source feedback from a range of internal and external stakeholders.
- Multiple strategies can be used when collecting and responding to feedback on your own performance, including being specific about what you want feedback on.
- Two basic techniques for analysing feedback are comparing and contrasting, and challenging and reflection.
- When analysing feedback on your own performance, self-awareness is critical. Self-awareness is the ability to recognise and understand our emotions and motivations and their effect on others.
- Identifying the different kinds of support individuals need to optimise their involvement in learning arrangements is an essential component of planning for future learning.
- Establishing a supportive team culture that provides individuals with a range of opportunities to learn and apply their thinking skills is the role of managers and team leaders.
- When developing recommendations about learning strategies in the workplace, it is important to consider the characteristics of environments that support learning.
- When developing your recommendations, it is important to ensure they align with relevant legislation and organisational policies.

Learning Checkpoint 3

Monitor and improve critical thinking practices

Part A

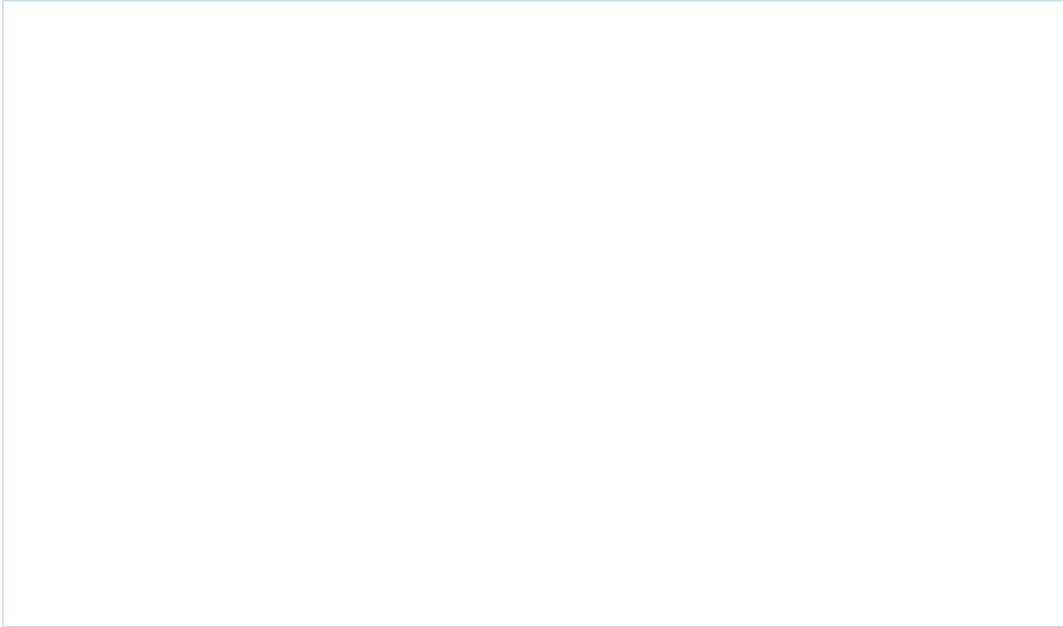
1. In an environment that supports learning, what does feedback need to be? Tick all that apply.

- Ongoing
- Authentic
- Immediate
- Transparent
- Strategic

2. You are working with the People and Learning Department to set up a mentoring program. You ask managers to nominate potential mentees and mentors to participate in the program. What do you need to consider during the planning process? Tick all that apply.

- Privacy legislation
- Your organisation's professional development policies
- Best practices relating to mentoring programs
- Support needs of both potential mentors and mentees
- Employment legislation
- Procuring a learning management system

3. When developing a proposal to improve your organisation's current learning arrangements, what are five pieces of information you need to include?



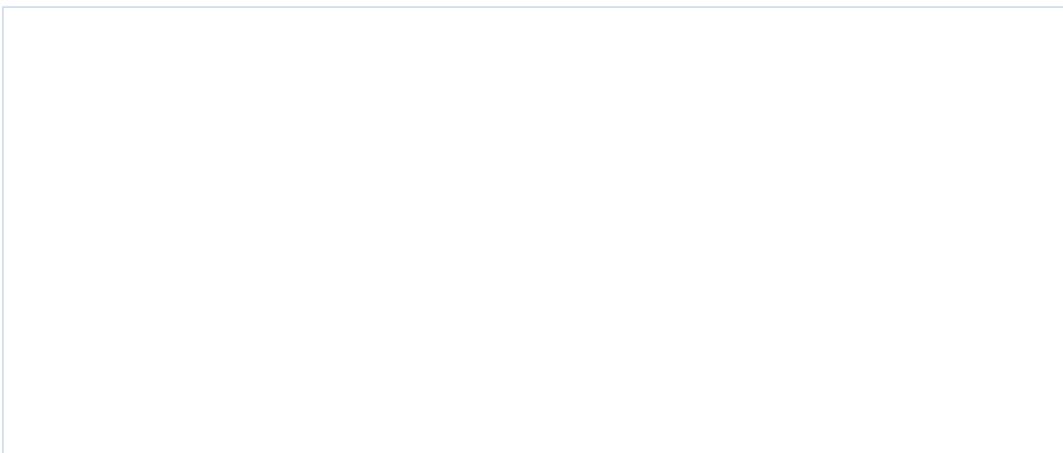
Part B

Read the following case study, then answer the questions.

Case study

You are the manager of a team of 20 accounting and administrative officers. A critical thinking workshop was completed three weeks ago, and all your team members participated. You are seeking feedback on its effectiveness. You are preparing a short online survey so that responses can be anonymous, and your team members can respond honestly.

1. List six questions that you will include in the survey.



2. How will you analyse the feedback provided?

3. The feedback revealed that while participants were pleased with the formal training sessions, the majority reported that now they are back at work they have not been able to apply what they learned.

Suggest three actions you might take to support your team to apply their learning.

4. You need to evaluate how you have performed over the previous two months at developing critical thinking skills among the team. It was one of the key performance indicators (KPIs) you agreed with your manager. You are meeting with your manager this week to discuss it.

What are three actions you will take when preparing for the meeting?