

Critical thinking

My virtual academy defined this as “... a skill that is vital in life. Critical thinking is when someone thinks independently, clearly and rationally by connecting ideas, forming their own opinions, analysing, and then drawing a conclusion”

<https://www.myvirtualacademy.com/blog/advice/teaching-teen-critical-thinking-skills/>

They suggest that some ways to encourage critical thinking is to

Ask questions that cannot be answered with a simple yes or no – these are known as closed questions, but if the questions are reframed or asked differently with one of [5 Ws](#) (who, when where, and why) it encourages people to expand on the answer they give.

Is the sky blue now? Will lead to a yes or no answer but ask why is the sky blue now in London but dark in New Zealand might lead the person to describe time zones and the orbit of the earth and the position of the sun in relation to the orbit. It might equally get a shrug and “I don’t know” but it can lead to “so how can we find out why one part is dark, and one part is light?”

Zety.com suggests the following steps to be a critical thinker

1. Identify the problem or question
 - Be precise and try to narrow the issue as this may make it easier to find solutions or answers
2. Gather data, opinions and arguments
 - Find different sources that present different ideas and points of view
3. Analyse and evaluate the data
 - Are sources reliable
4. Identify assumptions
 - Are they unbiased sources?
5. Establish significant
 - What is important information? Are the opinions and arguments relevant to the problem you are trying to solve – be open minded to other’s points of view.
6. Make a decision / reach a conclusion
 - Weight strengths and limitations of the information
7. Present or communicate
 - How do you share your findings / conclusions – will it produce more debate if people do not agree with your view or are, they supportive of your view or are they neutral.

Some critical thinking questions might be

- What do I already know?
- How do I know that?
- What am I trying to prove?
- What are my motivations, am I looking for evidence to support or disprove a point of view?
- What don't I know and where can I find that information?
- Who else can I speak to about this?

Ways to improve critical thinking could be:

Bright Horizons suggests the follow skills

Provide opportunities to play / explore an issue

Testing how things work can help develop critical thinking

Asking questions such as What happens if we do it this way? If we do the same thing five times is the result the same?

If it is not the same what might have caused it to change, what did we do differently?

Pause and wait

Allow your child to think and attempt a task, don't rush in with an explanation allow them to reflect or refine what they are thinking about

Do not intervene immediately or complete a task for a child (unless they are in a dangerous situation)

Give them time to try, but recognise if they are getting frustrated, ask questions perhaps give some prompts but let them try

Help children develop hypotheses

Ask questions such as - If we do this what do you think will happen? Let's predict that will happen next.

Encourage thinking in a new and different ways

Help them hone their problems solving skills – what else could we try? Let's think about possible solutions.

Do you model critical thinking? Can you verbalise your thinking, so they see how you do it?

Cambridge University press has some video on how to develop teens critical thinking skills such as Venn diagrams, ranking and scales and teach the teacher.

5Ws the five W's are a good way of asking questions or even recording information.

They are:

- Who
- What
- When
- Where
- Why

Some add a sixth question

- How

Students can use this method as a framework to describe to someone what a book is about, about an experiment, about a period of history, about an event in nature etc.

Parents can use this a way of exploring issues in greater detail, checking understanding and assumptions about facts.

So, for example if we took Animal Farm a student could describe

Questions	Student	Parent
	May tell you	May ask additional questions
Who (m	are the main characters in the book	is your favourite / least favourite character?
What	do they do?	happened is this a one-off event?
When	is it set?	is it a particular-time period, or year?
Where	is it set?	did this happen or could it have happened in another location?
Why	do the main characters do something?	are they motivated to do what they do or why aren't they?
How	do they organise themselves to do they achieve their aims and goals?	could they do things differently? do other characters them?

These questions can be used to look at things differently, to consider another person's view or to elicit a view as to if this was a good or bad thing, did it improve things or make it worse for some people? It could also be used to post hypothesia questions about what could have happened if an event did not take place, or if the outcome was different.

Title:

Date:

Who

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What

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When

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Where

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-
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Why

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How

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There is also a template available at

<https://www.scholastic.com/content/dam/teachers/blogs/krischia-cabral/migrated-files/5-ws-and-how.pdf>

<https://www.cambridge.org/elt/blog/2020/06/24/critical-thinking-video-tips-to-develop-teens/>

<https://zety.com/blog/critical-thinking-skills>

<https://www.brighthorizons.com/family-resources/developing-critical-thinking-skills-in-children>

<http://academic.shu.edu/english/1201/Reading/critical-reading-strategies.htm>

https://en.m.wikipedia.org/wiki/Five_Ws January 2021

<https://www.scholastic.com/content/dam/teachers/blogs/krischia-cabral/migrated-files/5-ws-and-how.pdf>