

IMPERIAL



10-14
FEB
2025
South
Kensington
Campus

Learning Well Programme

DESIGNED FOR ALL IMPERIAL STUDENTS

- Craft your personal journey to success
- Connect study strategies with positive mental wellbeing
- Foster wellbeing through effective learning practices

Explore the Learning Well Project student resources

SCAN HERE

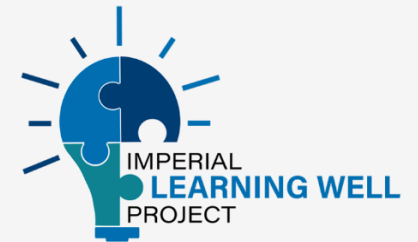
The poster features an illustration of a diverse group of students interacting. Above them are speech bubbles containing icons: musical notes, a stack of books, a person running, and a graduation cap.

Should learning be enjoyable? Using 'science of emotion' to reconsider emotions in learning

Facilitators:

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12/02/2025



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Pre-session Check-in Exercise

Imperial students -

To support you to get the most from the Learning Well Programme, please take a moment to complete this short exercise about your current understanding and expectations of this session:

- Your responses will be submitted anonymously.
- There are no right or wrong answers – feel free to share your thoughts.
- This activity should take no more than 2-3mins.

Learning Well Programme: Pre-session Check-in Exercise
(WEDNESDAY)



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Learning outcomes

By the end of this session, you'll be better able to:

- Recognise what can make learning enjoyable
- Identify the range of emotions involved in university learning
- Use science of emotion to better understand emotion associated with learning
- Share and develop strategies for working with your emotion in learning

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10-minute activity: In your experience, what makes learning enjoyable?

- Write your ideas on a post-it and briefly discuss with your group (5 minutes)
- Can you identify common patterns? (5 minutes 1-2 groups sharing)

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The transformative experience of learning triggers a variety of emotions



Image from: <https://englishpluspodcast.com/the-heart-of-learning-how-emotions-shape-your-education/>

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Example of emotion experienced in learning

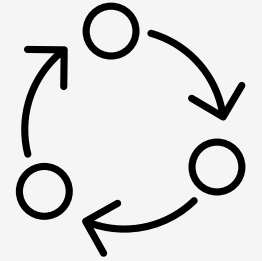
“Frustration can facilitate my academic benefit because if I am frustrated because I can't understand something... I'll usually work harder to try and understand it”
(Luca).

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What is emotion?

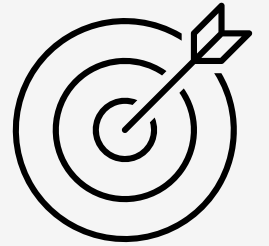
Emotions are constructed

Based on physiological sensations, social context, situation and experience.
Refined through continual prediction and feedback loops
(Lindquist & Barrett, 2008; Barrett, 2017).

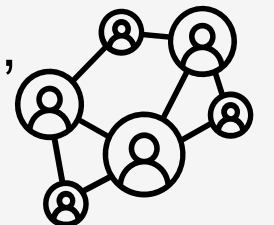


Emotions are goal-based

Control–Value Theory of Achievement Emotion (Pekrun & Perry, 2014)
Performance and mastery orientation goals, identity goals.



Emotions are social, a form of communication and influence (Parkinson, 2020),
source of information (Van Kleef and Cote, 2022).



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Stereotypes and risks associated with emotion

Cartesian dualism of cognition and emotion

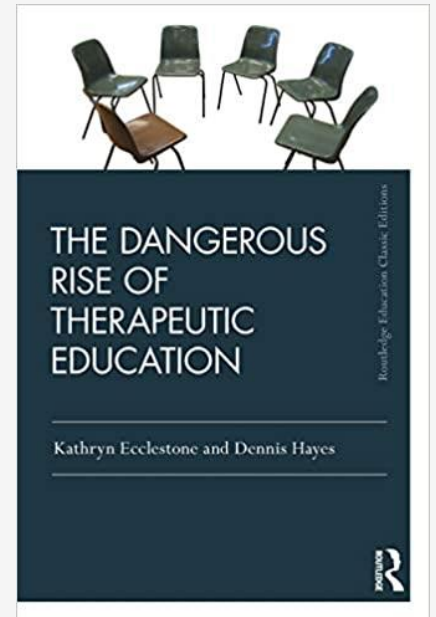
Scientific endeavour and Learning science as rationale, and objective.

“We’re not emotional, we’re engineers!”

“I don’t want to be influenced by emotions!” (Lonngren, Adawi & Berge, 2020)

Risk of positioning all students as vulnerable

“Everyday feelings have become pathologised so that simple nervousness and shyness become problems for which external help is available” (Ecclestone & Hayes, 2019: 97).



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Emotion positively influences learning by informing thinking, decision-making and memory

- Studies of individuals with brain damage affecting emotion-controlling areas showed that they were less capable of sensible choices when performing daily tasks rather than becoming more rational. They also lacked purpose, motivation, creativity and interest.
- Memories of past emotional experiences and feelings are integrated into cognitive circuits for deciding the best behaviour in a particular situation.

(Immordino-Yang and Damasio, 2015)

- Feelings that students experience when they are learning, give meaning to what they are learning.

(Brackett, 2019)



“I feel like if I didn't have emotions I wouldn't really care as much to further my knowledge...”
(Valerie)

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Emotional literacy and learning

‘The ability to appraise and regulate emotions in oneself and others and use emotions to guide thinking and solve problems.’

(Salovey and Mayer, 1990)

Becoming emotionally literate enables individuals to:

- Work effectively in multi-cultural, international teams and across disciplinary boundaries,
- Ability to approach challenges with curiosity, flexibility, critical thinking, creativity,
- Become independent learners with high self-efficacy and emotional resilience.

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RULER - A tool for becoming more emotionally literate

Developed by Prof Marc Brackett, University of Yale

Recognising the occurrence of an emotion

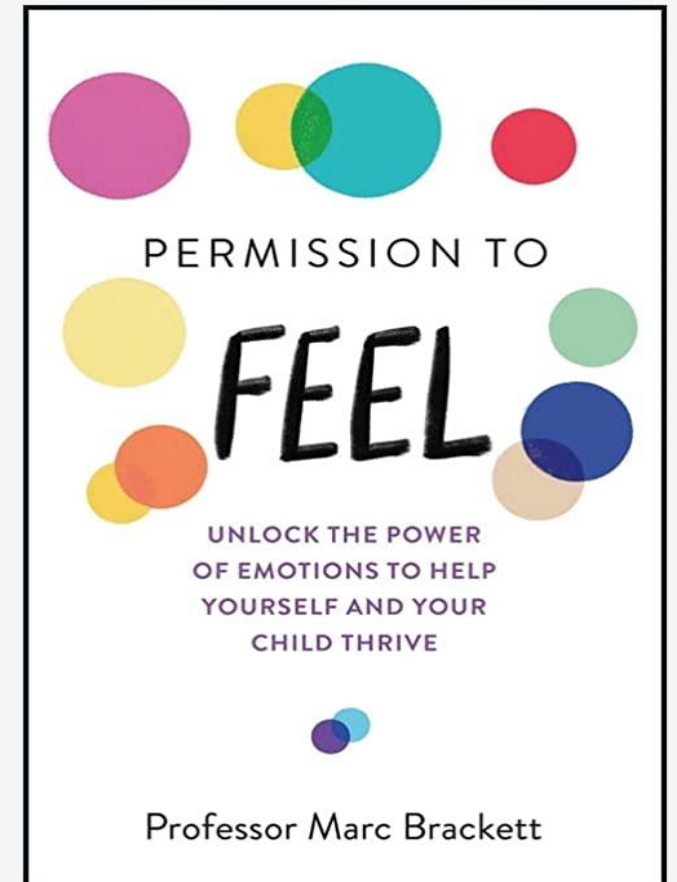
Understanding the causes and consequences of an emotion

Labelling – with accurate and nuanced vocabulary

Expressing – knowing how and when to display our emotions

Regulating – using strategies to monitor and modify emotional reactions to reach goals

(Brackett, 2019: 55)



Activity: Making (different) meaning of emotions experienced in learning

Place each emotion in the position on the 2 dimensional grid that you think best represents its emotional valance and activating potential for learning.

Activation of Learning		Emotional Valence	
		Positive (Pleasant)	Negative (Unpleasant)
	Activating		
	Deactivating		

- Hope

Shame

Anger

Pride

Anxiety

Relief

Hopelessness
- Surprise

Curiosity

Confusion
- Boredom

Frustration

Enjoyment

What factors influence your response?

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Activity: Regulating your emotions in learning?

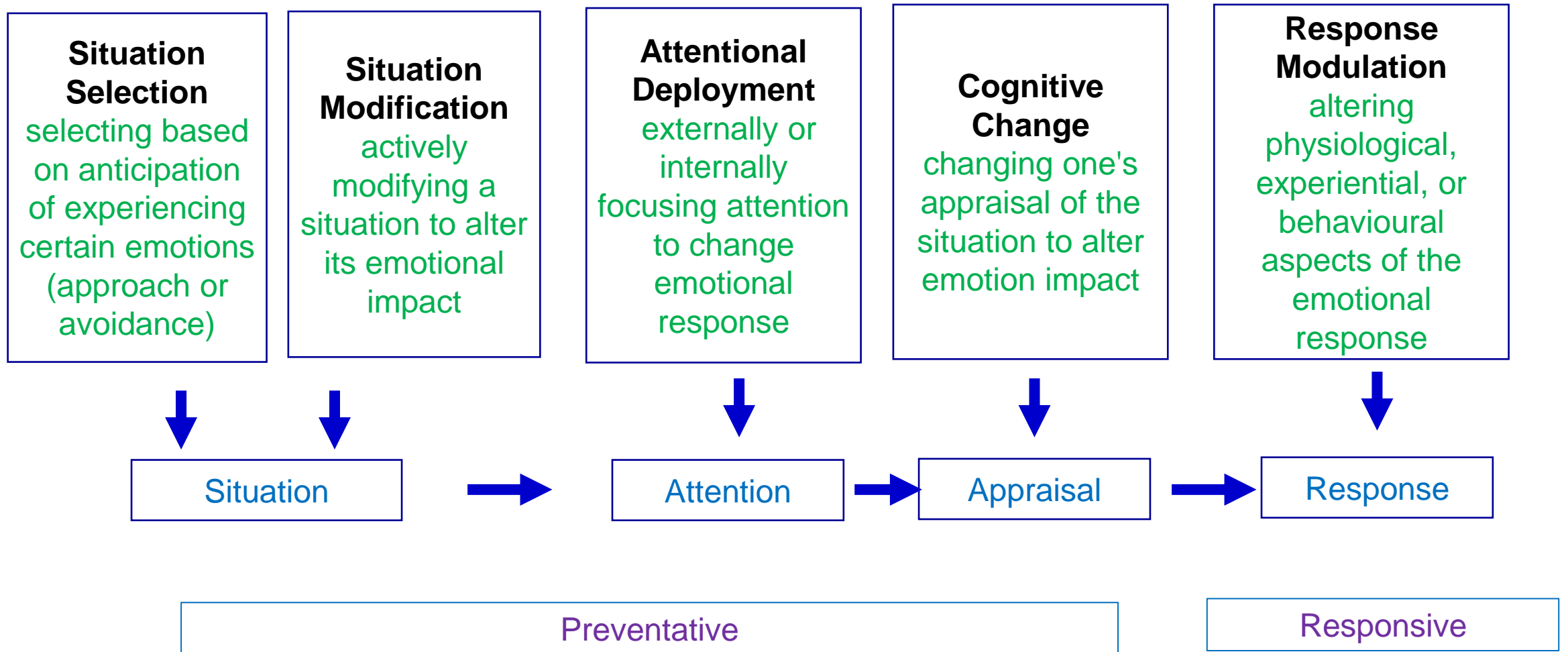
Think about the various learning situations that you find yourself in. This might include learning from lectures or in labs, working in groups, preparing for exams, carrying out coursework, making sense of feedback.

What do you do to influence, work with or regulate your emotions?

Is your goal always to upregulate pleasant / positive emotions?

Write your strategies for working with your emotions on post-its.

Strategies for regulating emotions



Process model of emotion regulation (Gross, 2015)

How do peers influence our emotions?

More engaging peers makes the atmosphere better for discussion

they help me feel happy by making jokes and just being there to converse with

Happy...They greatly enhance the experience. They encourage me to put in more effort to the discussion and the seminar in general.

I enjoy the seminars but I can tell everyone understands a lot more than me

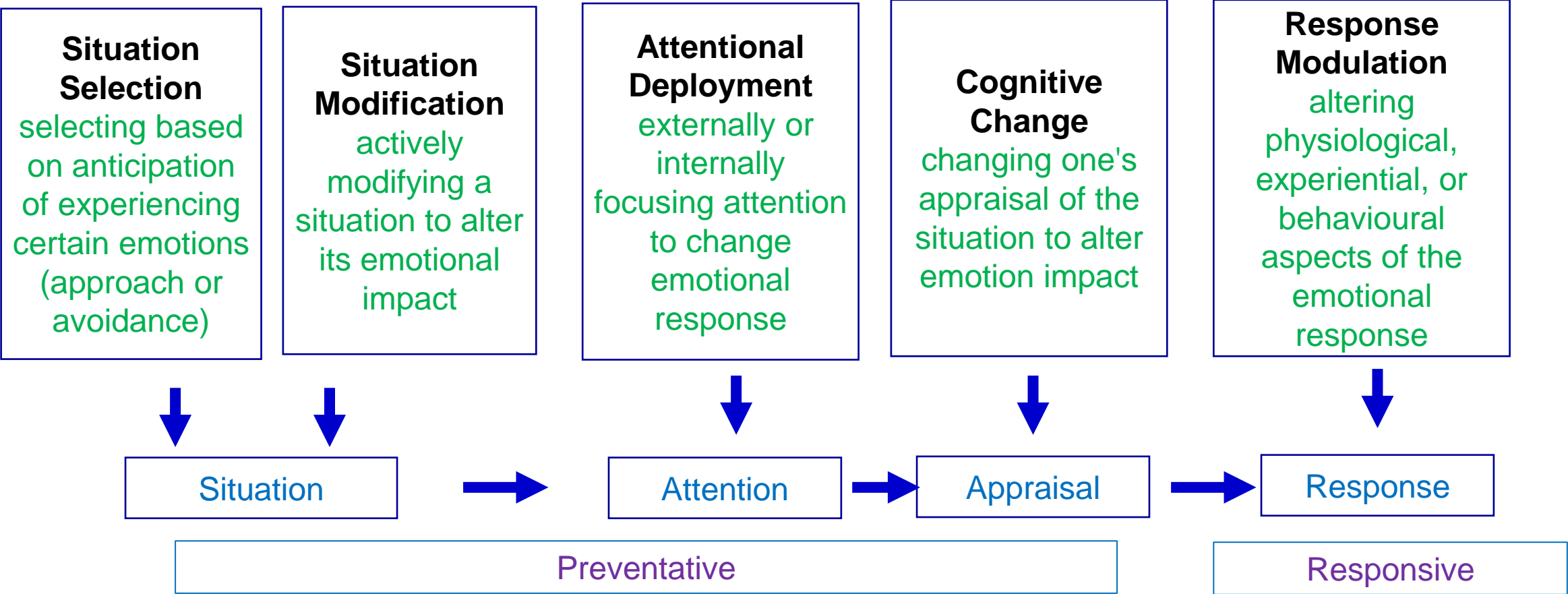
they showed great progress in every week and this helps me to get motivated

For more Imperial insights see [Ippolito and Kingsbury \(2024\)](#)

They were quite anxious about revision but I think it gives comfort to know you're not the only one.

Collaborating and feeling just as confused about certain parts as others is really comforting

Activity: How do your strategies relate to this emotion regulation model?



Process model of emotion regulation (Gross, 2015)

Use the flip chart and post-its to map your strategies against this model.
What do you notice?
What different strategies could you use? Make a note of 2 that you like.

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By the end of this session, you'll be better able to:

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Post-session Reflection

Imperial students -

To help you maximise this learning opportunity, this activity is designed to support you to reflect on what you've learnt and to consider what you can personally take away from this session.

- Your responses will be submitted anonymously.
- There are no right or wrong answers.
- This exercise should take no more than 3mins.
- We hope you find this activity helpful.

Learning Well Programme: Post-session Reflection Activity
(WEDNESDAY)



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References

- Artino Jr, A.R. and Pekrun, R., 2014. Using control-value theory to understand achievement emotions in medical education. *Academic Medicine*, 89(12), p.1696.
- Barrett, L. F. 2017. *How Emotions Are Made. The Secret Life of the Brain*. Pan Macmillan.
- Brackett, M., 2019. *Permission to feel: Unlocking the power of emotions to help our kids, ourselves, and our society thrive*. Celadon Books.
- Ecclestone, K. and Hayes, D., 2019. *The dangerous rise of therapeutic education*. Routledge.
- Gross, J.J., 2015. Emotion regulation: Current status and future prospects. *Psychological inquiry*, 26(1), pp.1-26.
- Immordino-Yang, M.H. and Damasio, A., 2015. We feel, therefore we learn: The relevance of affective and social neuroscience to education. In *Emotions, learning, and the brain: Exploring the educational implications of affective neuroscience (the Norton series on the social neuroscience of education)*. WW Norton & Company. 1(1) pp.27-43.
- Ippolito, K., Boyd, N., Bale, R. and Kingsbury, M., 2020. Emotions as pedagogical tools: The role for educational developers in university learning and beyond. *ETH Learning and Teaching Journal*, 2(2), pp.322-326.
- Ippolito, K., Kingsbury, M. 2024. Reciprocal cognitive and emotional interaction in STEMM university learning and teaching. *Sci Rep* **14**, 21660 (2024). <https://doi.org/10.1038/s41598-024-72656-w>
- Lindquist, K. A., & Barrett, L. F. 2008. Constructing emotion: the experience of fear as a conceptual act. *Psychological Science*, 19(9), 898-903. <https://doi.org/10.1111/j.1467-9280.2008.02174.x>
- Lönngren, J., Adawi, T., Berge, M., Huff, J., Murzi, H., Direito, I., Tormey, R. and Sultan, U., 2020, October. Emotions in engineering education: Towards a research agenda. In *2020 IEEE frontiers in education conference (FIE)* (pp. 1-5). IEEE.
- Parkinson, B., 2020. Intragroup emotion convergence: Beyond contagion and social appraisal. *Personality and Social Psychology Review*, 24(2), pp.121-140.
- Pekrun, R. and Perry, R.P., 2014. Control-value theory of achievement emotions. *International handbook of emotions in education*, 1, pp.130-151.
- Pekrun, R., Vogl, E., Muis, K. R., & Sinatra, G. M. (2017). Measuring emotions during epistemic activities: the Epistemically-Related Emotion Scales. *Cognition & Emotion*, 31(6), 1268-1276. <https://doi.org/10.1080/02699931.2016.1204989>
- Salovey, P. and Mayer, J.D., 1990. Emotional intelligence. *Imagination, cognition and personality*, 9(3), pp.185-211.
- Van Kleef, G.A. and Côté, S., 2022. The social effects of emotions. *Annual review of psychology*, 73(1), pp.629-658.