GROWTH
&
GOALS
Welcome!

I pay respect to the Algonquin people, who are the traditional guardians of this land.

I acknowledge their longstanding relationship with this territory, which remains unceded.

I pay respect to all Indigenous people in this region, from all nations across Canada, who call Ottawa home.

I acknowledge the traditional knowledge keepers, both young and old.

And I honour their courageous leaders: past, present, and future.

native-land.ca

uottawa.ca/indigenous/

Source: caut.ca/content/guide-acknowledging-first-peoples-traditional-territory

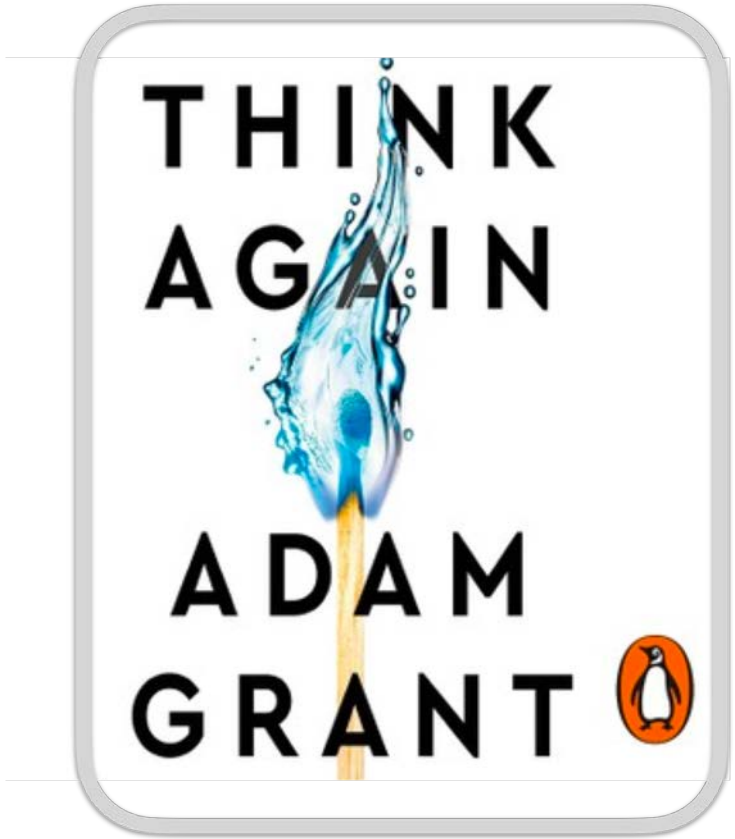
WORLD ECONOMIC FORUM

# Reskilling needs

50%

of all employees will need reskilling by 2025.

**Source:** Future of Jobs Report 2020, World Economic Forum.



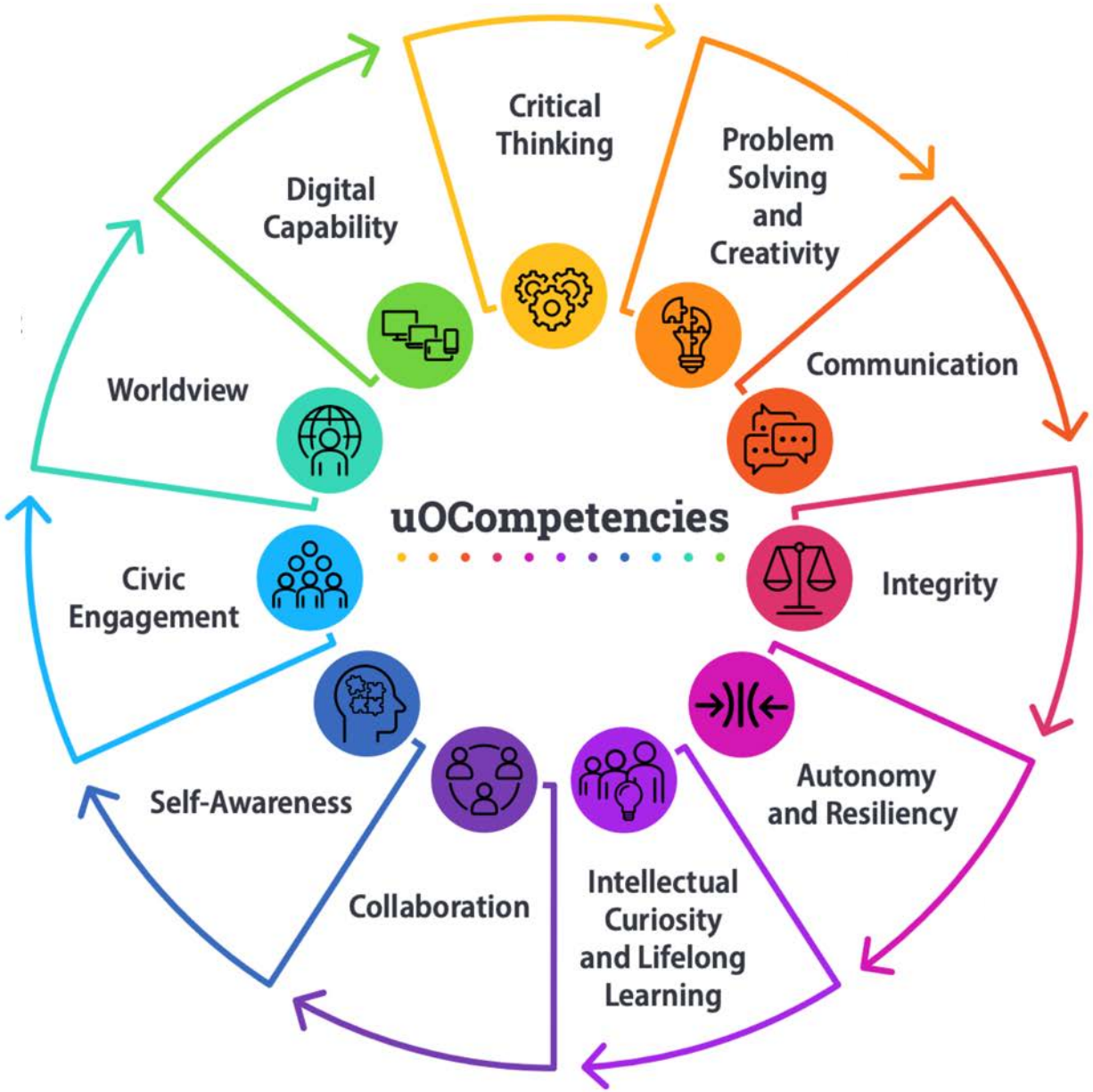

In his book, Adam Grant talks about the **power of knowing what you don't know**.

About having the confidence to approach situations ready to succeed,
while **staying humble** enough to ask questions, seek help… to **stay curious**.

And it takes a lot of **confidence to stay curious**.

# We set out to help students address key learning issues:

1. Identifying what to learn and how to learn effectively
2. Managing course and life goals and demands




uOttawa.ca/current-students/career-experiential-learning/career-development/competencies
Degree Level Expectations (DLE): Awareness of the limits of knowledge; Autonomy and professional capacity skills

# The Growth & Goals Module is designed to help students become more strategic, efficient, and effective learners

Did you know? Adjectives have to be in this order:
Opinion-size-age-shape-colour-origin-material-purpose

A
Canadian
white
delightful
great
snowfall

A
delightful
great
white
Canadian
snowfall

# GROWTH & GOALS

Connected
Scalable
Explicit

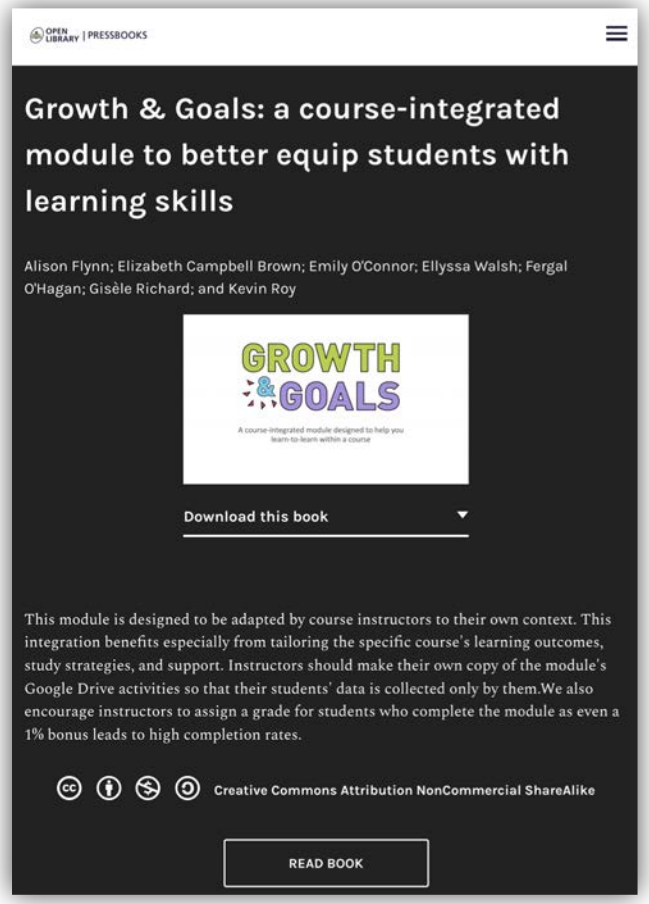
Integrated in courses, aligned with **learning outcomes**

FR EN

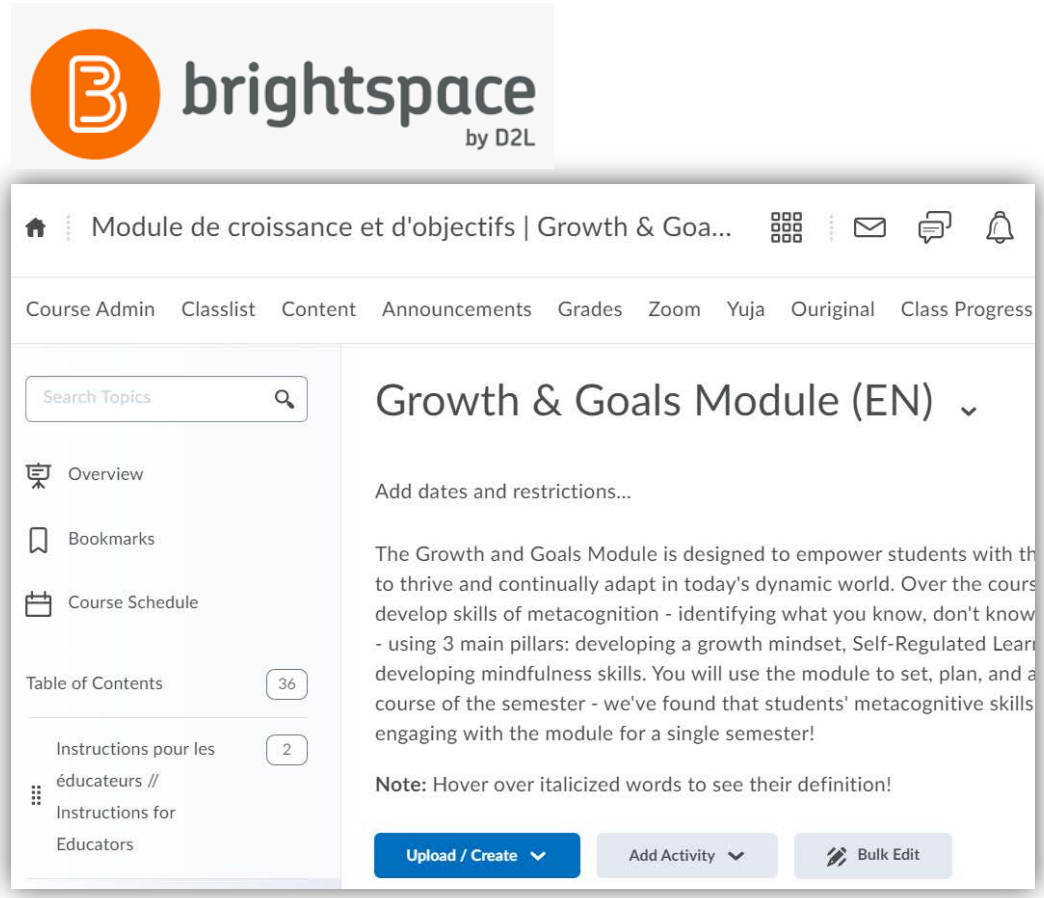
Meets or exceeds accessibility requirements

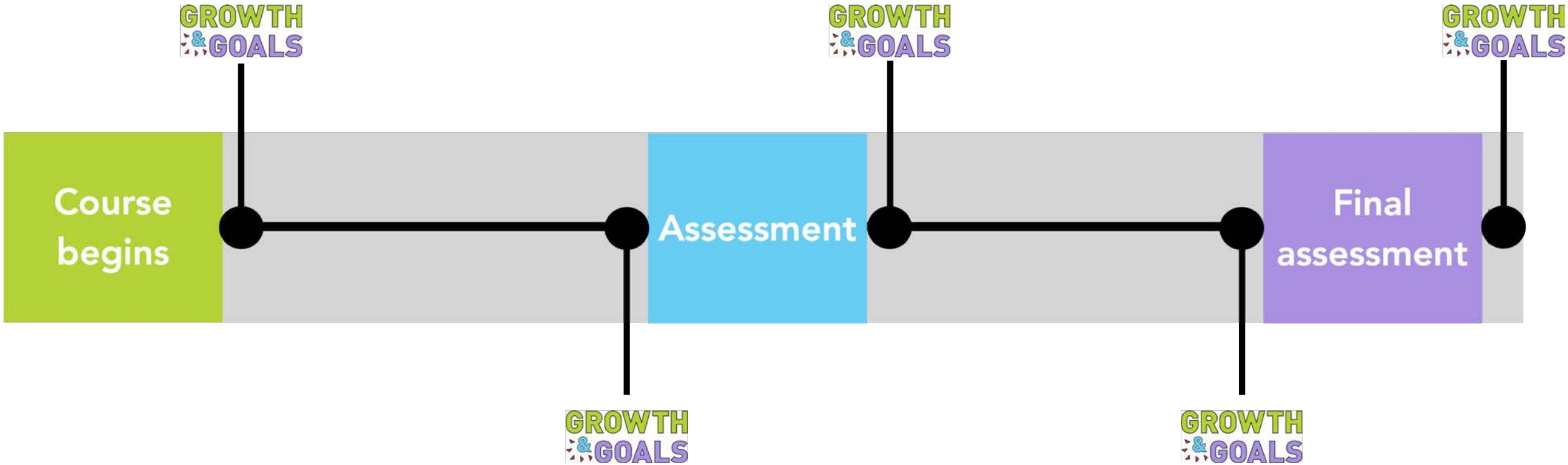
Open Education Resource
Easy to integrate quickly
Easy to adapt

## Course-integrated



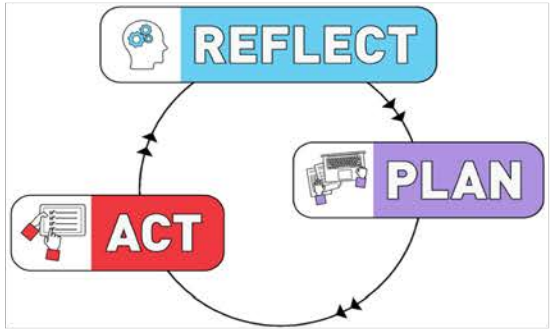

## Course-independent




GROWTH & GOALS
GROWTH & GOALS
GROWTH & GOALS
Course begins
Assessment
Final assessment
GROWTH & GOALS
GROWTH & GOALS

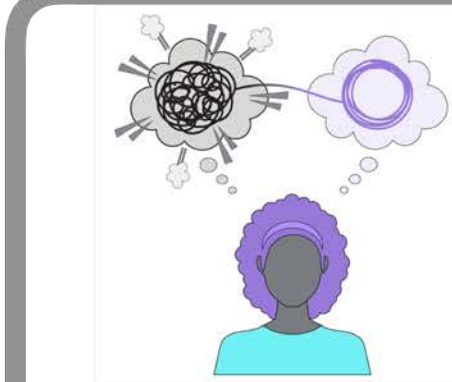
# Core concepts

Metacognition



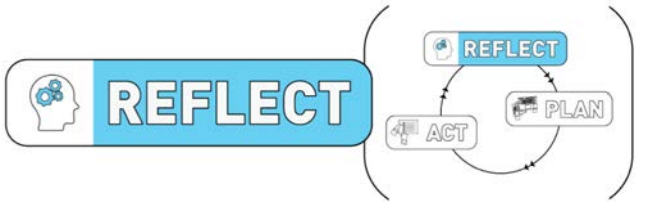

Self-regulated learning

Mindsets



Mindfulness

# Beliefs about learning (T/F?)




When it comes to learning, metacognition can be just as important as intelligence

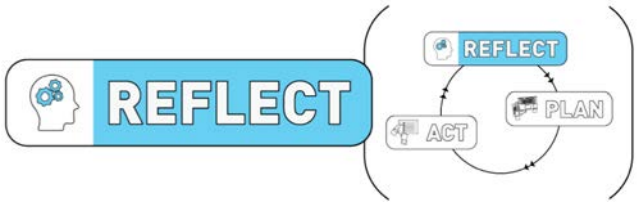
A student's failure to learn is due to their limitations in intelligence

Individuals who set specific goals are more likely to achieve those goals than individuals who do not set goals

The professor is responsible for teaching me and making sure I learn

Strong learners seek out help from others

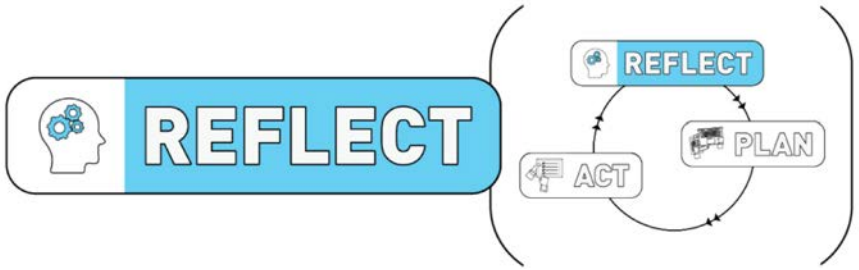
# Identifying tendencies



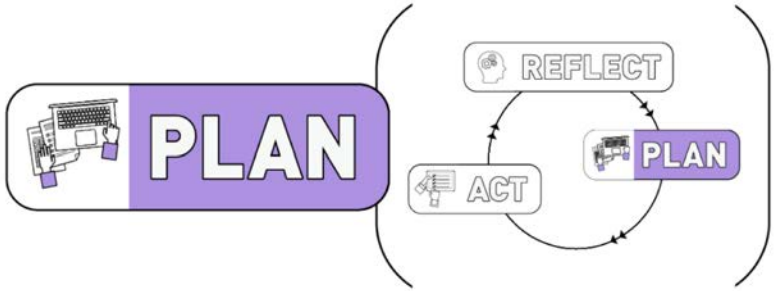

The following list describes how these students have prepared for the upcoming final exam and their feelings about it. Do you see any similarities between yourself and these students?

- [ ] Cram for a few hours before the exam
- [ ] Cannot gauge their academic preparation accurately
- [ ] Think they are not good at this subject
- [ ] Very defensive about their study methods (these methods worked in high school!)
- [ ] Do not ask for help
- [ ] Are afraid of looking stupid
- [ ] Do not find extra materials because they already have too much to learn
- [ ] Have little self-confidence for achieving success

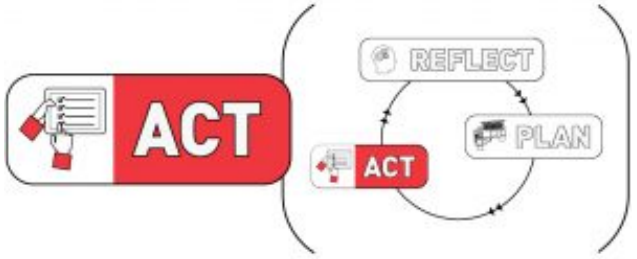
# Metacognition




- What do you know/not know about the course's prior knowledge learning outcomes?
- What do you know/not know about the course's learning outcomes?




- Decide what to do for your learning




- How are you progressing toward your goals and the intended learning outcomes?
- What are you doing to achieve your goals?

# Rate your abilities on the prior and course LOs

Rate your knowledge or skill for the following learning outcomes:

- Quickly calculate the formal charge on an atom (<5 seconds)
- Justify a reaction mechanism using causal reasoning and the data provided
- Demonstrate group facilitation skills

*ADAPT to your course/context*

# What is the basis for your ratings?

Intuition/Feeling

Read over the section/chapter/slides

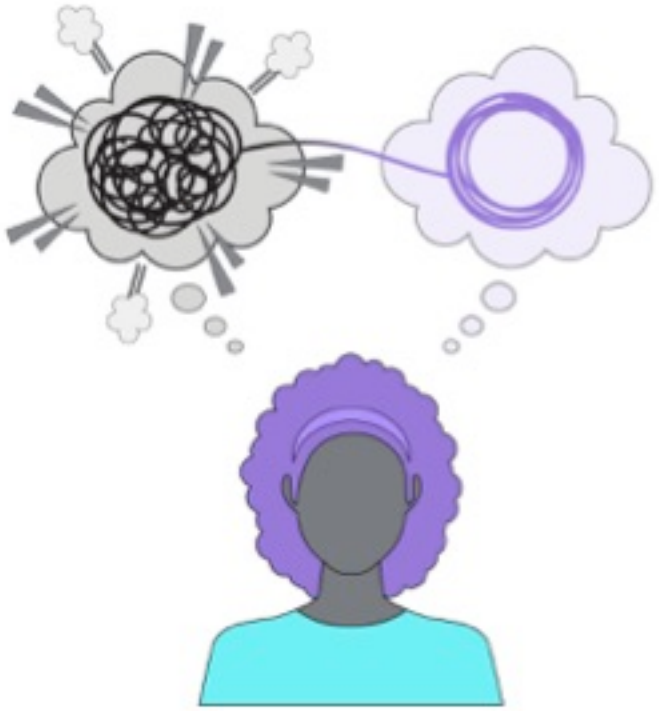
Summarized section/chapter/slides

Explained key ideas to someone else and checked their understanding

Tested myself with problems I've never seen before

Worked with classmates to test each other

# Mindfulness

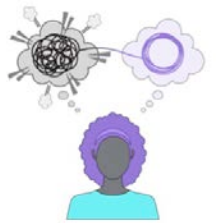


Mindfulness is a practice that allows you to develop present-time awareness of thoughts and feelings,

and accept those thoughts and feelings as natural products of your mind that

you can observe and let pass without becoming entangled, distracted, and off track.

# How present are you?



I could be experiencing some emotion and not be conscious of it until some time later.

I break or spill things because of carlessness, not paying attention, or thinking of something else.

I find it difficult to stay focused on what's happening in the present

I forget a person's name almost as soon as I've been told it for the first time.

# Mindsets

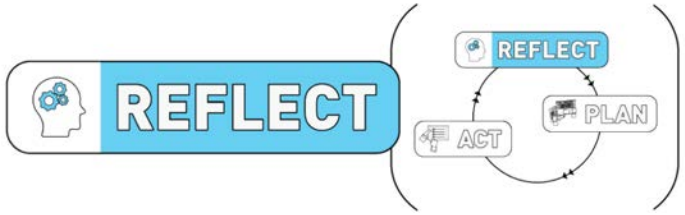
« In a fixed mindset students believe their basic abilities […] are just fixed traits…

In a growth mindset students understand that their talents and abilities can be developed… »

-C. Dweck, 2006

Dweck, C. S. Mindset: The New Psychology of Success; Gildan Media Corp, 2007.

# Mindsets




Decide to what extent you disagree or agree with each statement:

- My ability in this subject is something I cannot change
- When a problem gets really hard, I give up
- I’m not a [subject] person

# More about mindsets

Most people hold different mindsets in different areas of their life

A challenging situation will bring out a student's mindset

A growth mindset is predictive of better academic outcomes

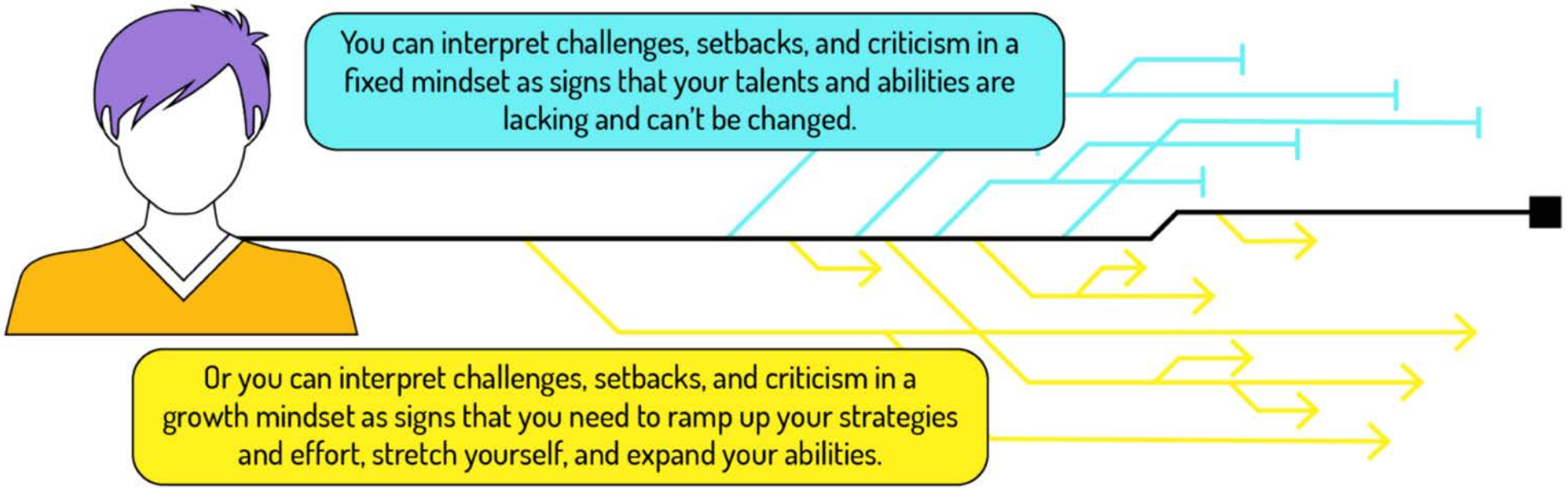
Mindset interventions have been effective, especially for at-risk groups

Instructor's mindset matters too!

*Dweck (2006). Mindset: The new psychology of success.*
*Dweck & Leggett (1988). Psychological Review, 95, 256.*
Corradi, Nicolaï, & Levrau, (2018). Higher Education, 1–14.
Aronson, Fried, & Good, (2002). J. Exp. Soc. Psych., 38, 113-125.
Canning, Muenks, Green,, & Murphy,. (2019). Science Advances, 5,1-7

# Changing your fixed mindset voice

**How you interpret challenges, setbacks, and criticism is your choice.**




**So as you face challenges, setbacks, and criticism, listen to the fixed mindset voice and...**

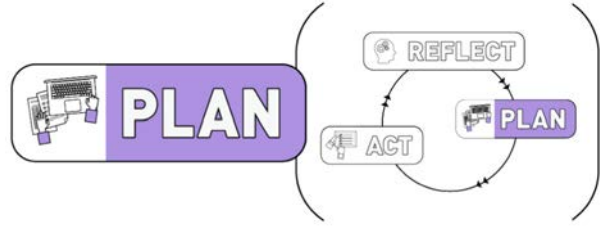
Talk back with a growth mindset voice!

# The importance of failure

- Success comes through effort and failure
- As you watch this video, consider the ways you can relate this famous failure to your own experiences with effort, failure, and success

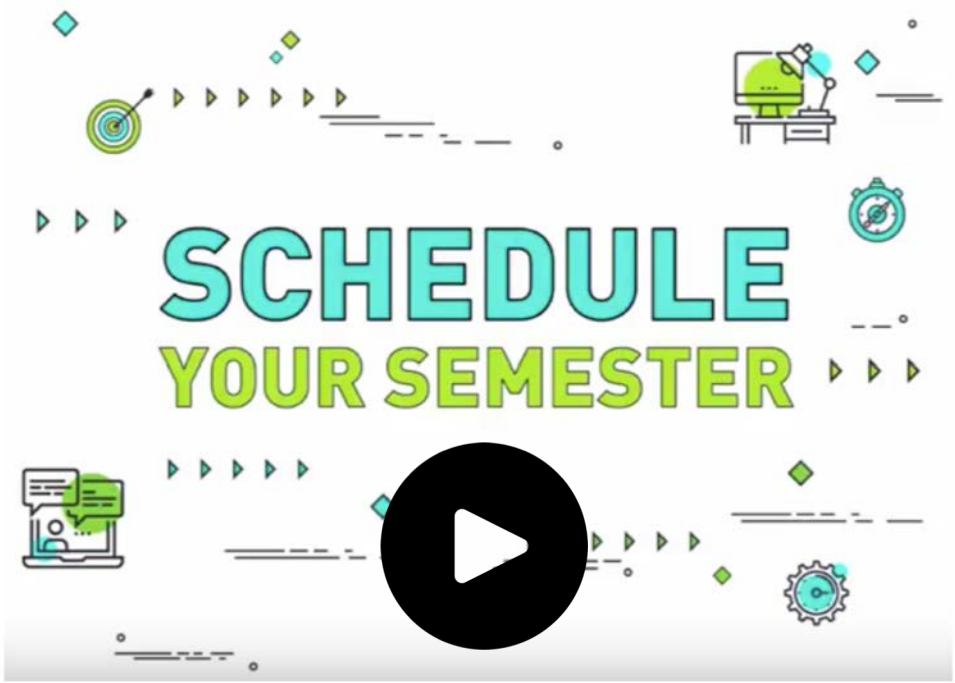
#DysonInvents #InsideDyson
The Dyson story: James Dyson speaks about our approach to engineering

# Plan Phase: SMART Goals

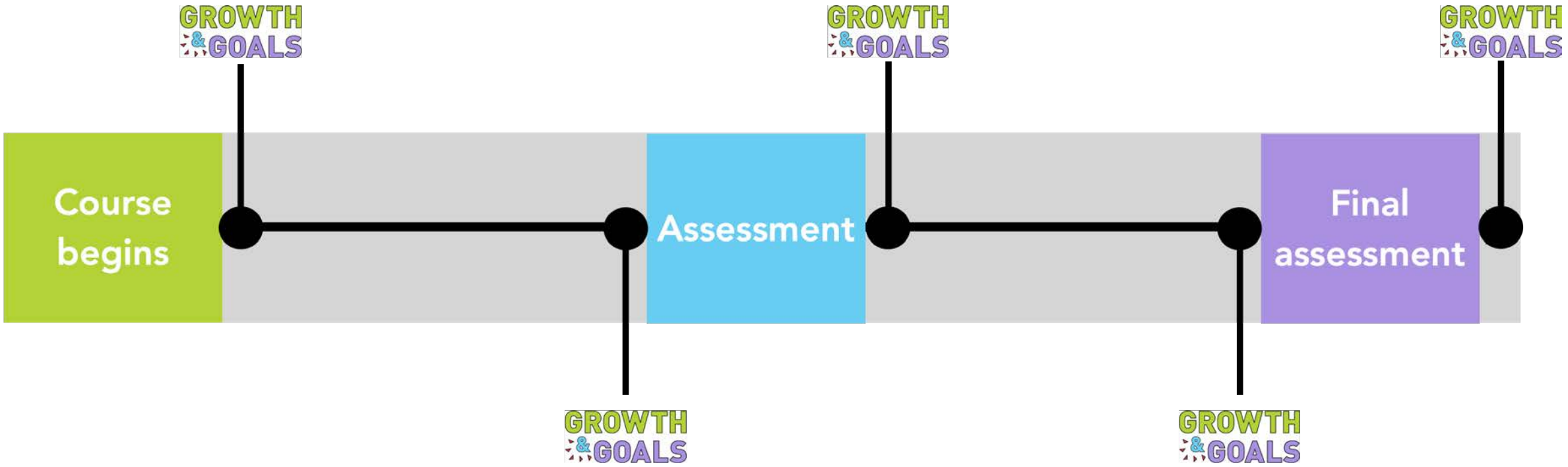



| Specific | Measurable | Accountable | Reachable | Time-specific |
|---|---|---|---|---|
| | | | | |
| Can your goal be more defined or explicit? | How will you know that you have progressed or reached your goal? | Who will keep you responsible to your goal? | What experience or knowledge makes your goal realistic? | When will you accomplish your goal? |

# Plan Phase: schedule and support



- Reflect: how did it go?
- Review your goals-any changes?
- What support will you seek?
- Next steps?




- Rate your abilities on the course LOs to date
- How did you decide (intuition, self-test, *etc.*)
- What learning strategies will you use?

GROWTH & GOALS

Icons by Freepik from Flaticon

**>6000**

Students have used the tool at >10 institutions

**80%**

First time training

**>75%**

Complete module with small incentive

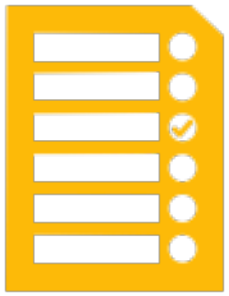
Metacognitive skills increase quickly

**95%**

Using concepts in another course

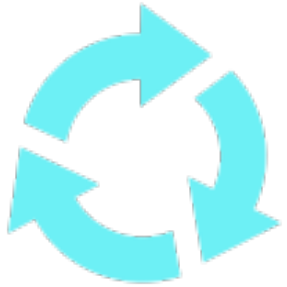
# How much work is involved for educators?

1 – 4 hours
Adapt existing template
No major course changes



Instructions and support provided

Results export to spreadsheet



Reuse in future years

***Currently***, we have a student working on the team who can adapt the module to your syllabus!

# Valuing the module in the course

Give a percentage of the final grade

Add questions about the module to your assessments in the course, without asking personal questions

Discuss the module and results in your course (anonymously) and give your recommendations

Invite a student to share their experiences

We can suggest some names!

# Development and evaluation teams: students are key members

CC BY NC SA

TLSS

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FLYNN RESEARCH GROUP

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Centre for Research on Educational and Community Services

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