

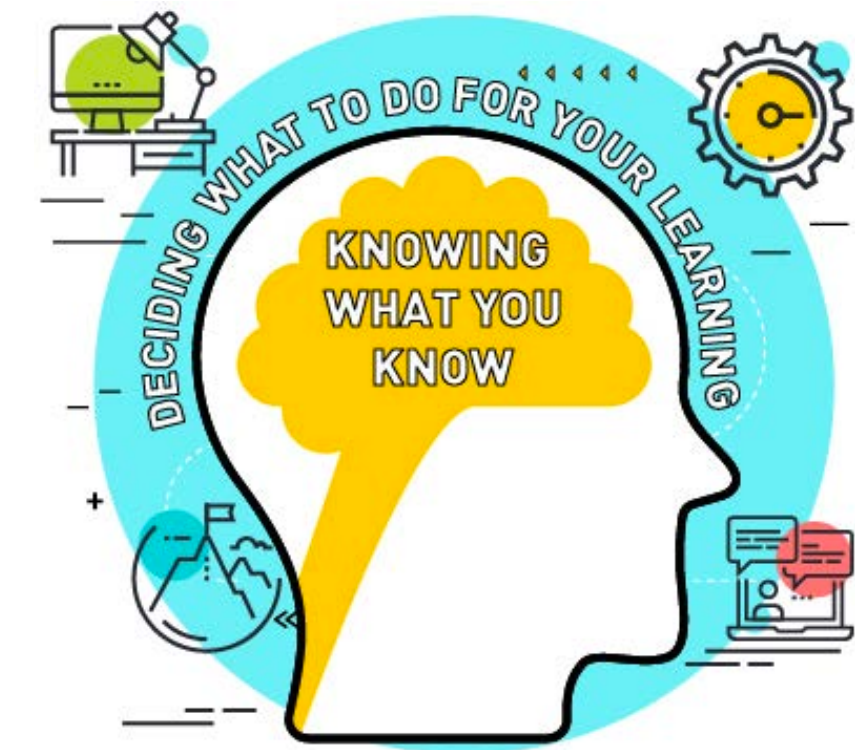
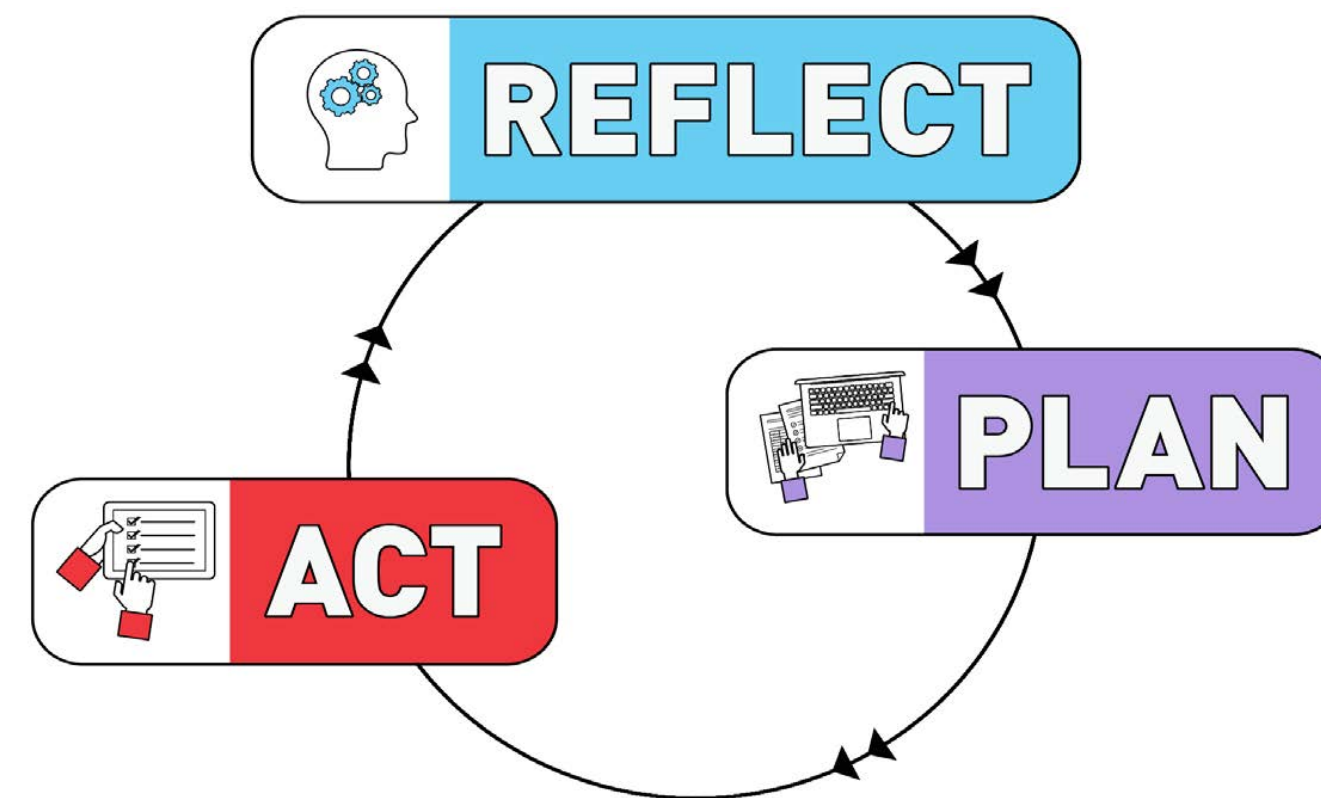
GROWTH & GOALS

Welcome!

Please sign into MentiMeter

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Growth & Goals



Emily O'Connor, Kevin Roy, and Alison Flynn
Teaching and Learning Support Service Presentation
May 15, 2019

Our goals for today

1. Persuade you to use the Growth & Goals Module in your classroom
2. Ask for your participation in the evaluation of the Growth & Goals Module
3. Hear your advice on the Growth & Goals Module

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Please give us feedback

P(+) = Positives: what is good about the project?

P = Potentials: If this project were successful in your context, what future benefits might result?

C = Concerns: share as constructive questions, such as *How to... ? How might... ? How might we... ?*

O = Overcome concerns: share ideas of how to overcome the concerns

Please give us feedback

P(+) = Positives: what is good about the project?

P = Potentials: If this project were successful in your context, what future benefits might result?

C = Concerns: share as constructive questions, such as *How to... ? How might... ? How might we... ?*

O = Overcome concerns: share ideas of how to overcome the concerns

One idea per sticky note, please

+

What is good?

P

What future
benefits might
result?

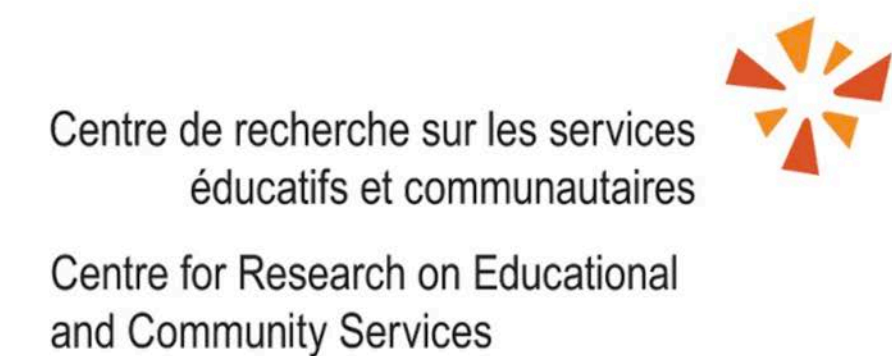
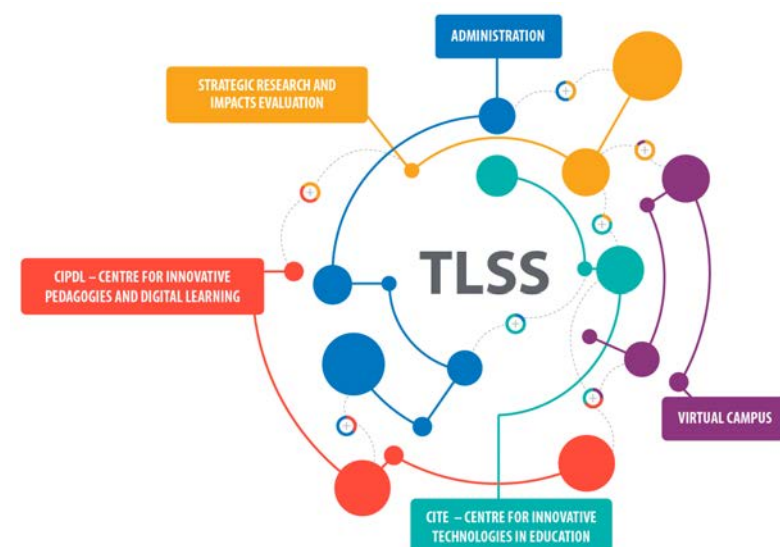
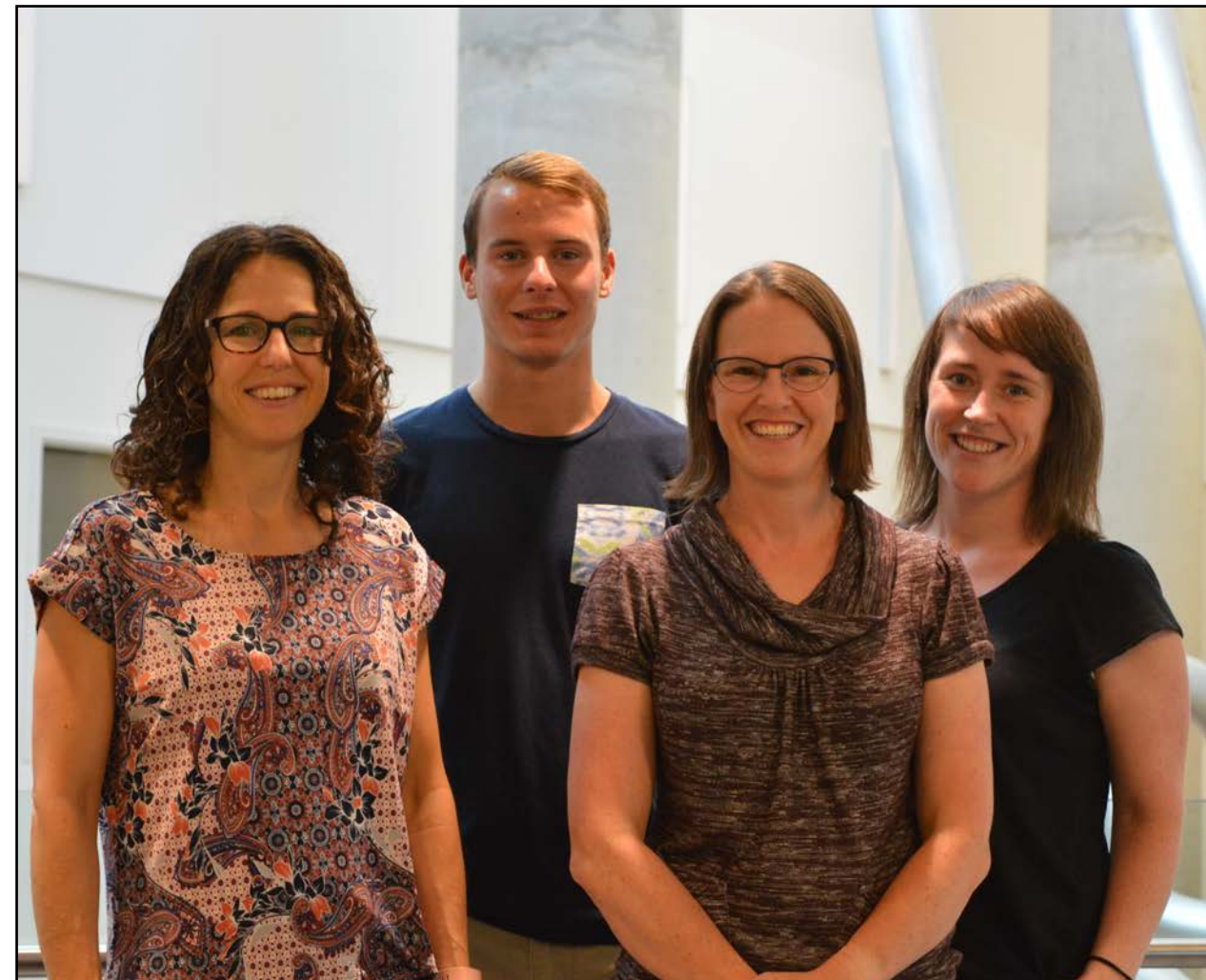
C

*How to... ?
How might... ?
How might we... ?*

O

How to
(potentially)
overcome the
concerns

Students are key team members



Today's session

Introduction

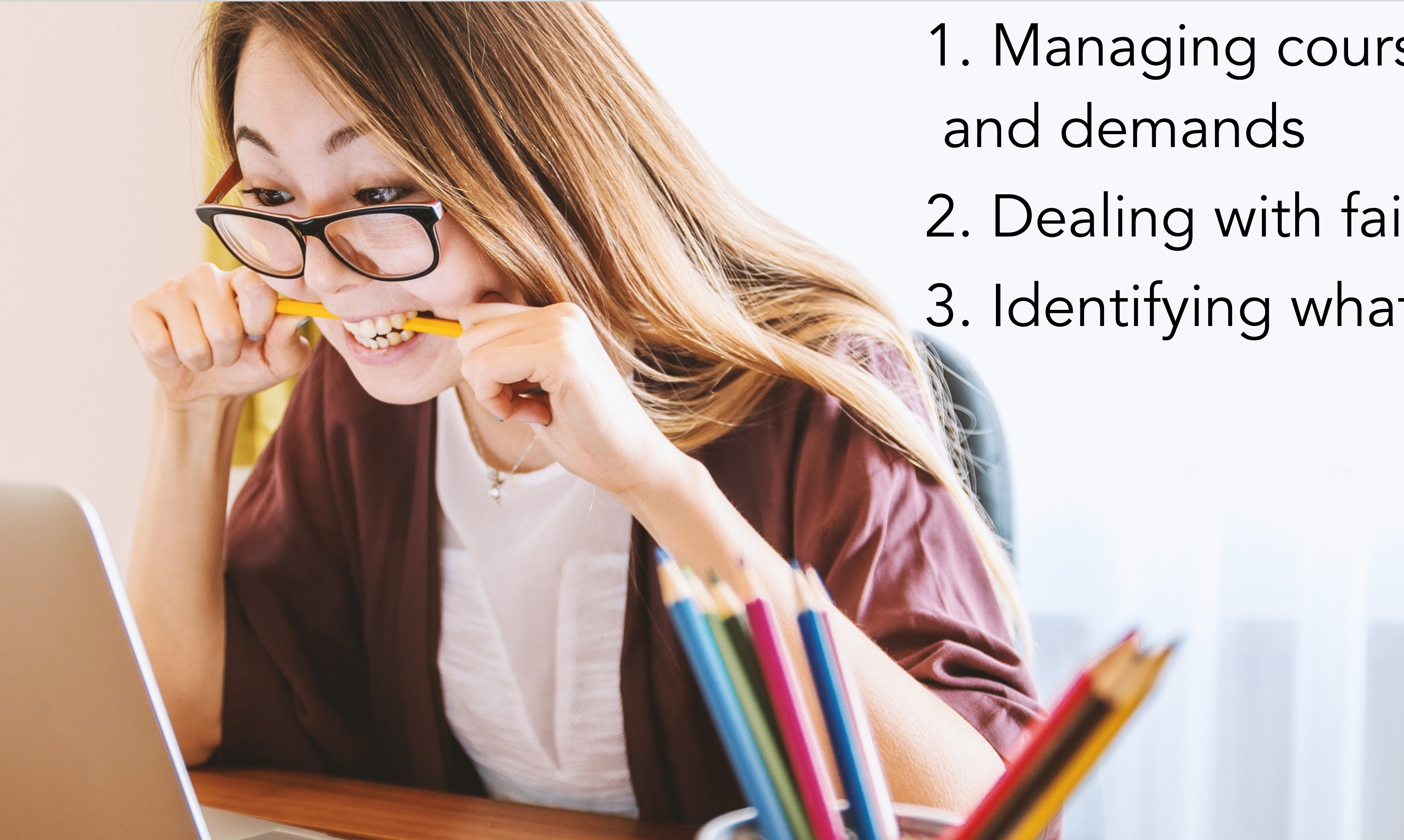
Module

Evaluation

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We set out to help students address 3 problems

1. Managing course and life goals and demands
2. Dealing with failure
3. Identifying what to learn and how



Undergraduate Degree Level Expectations (UDLE)



ONTARIO UNIVERSITIES
COUNCIL on QUALITY ASSURANCE



COUNCIL OF ONTARIO
UNIVERSITIES

Undergraduate Degree Level Expectations (UDLE)



ONTARIO UNIVERSITIES
COUNCIL on QUALITY ASSURANCE



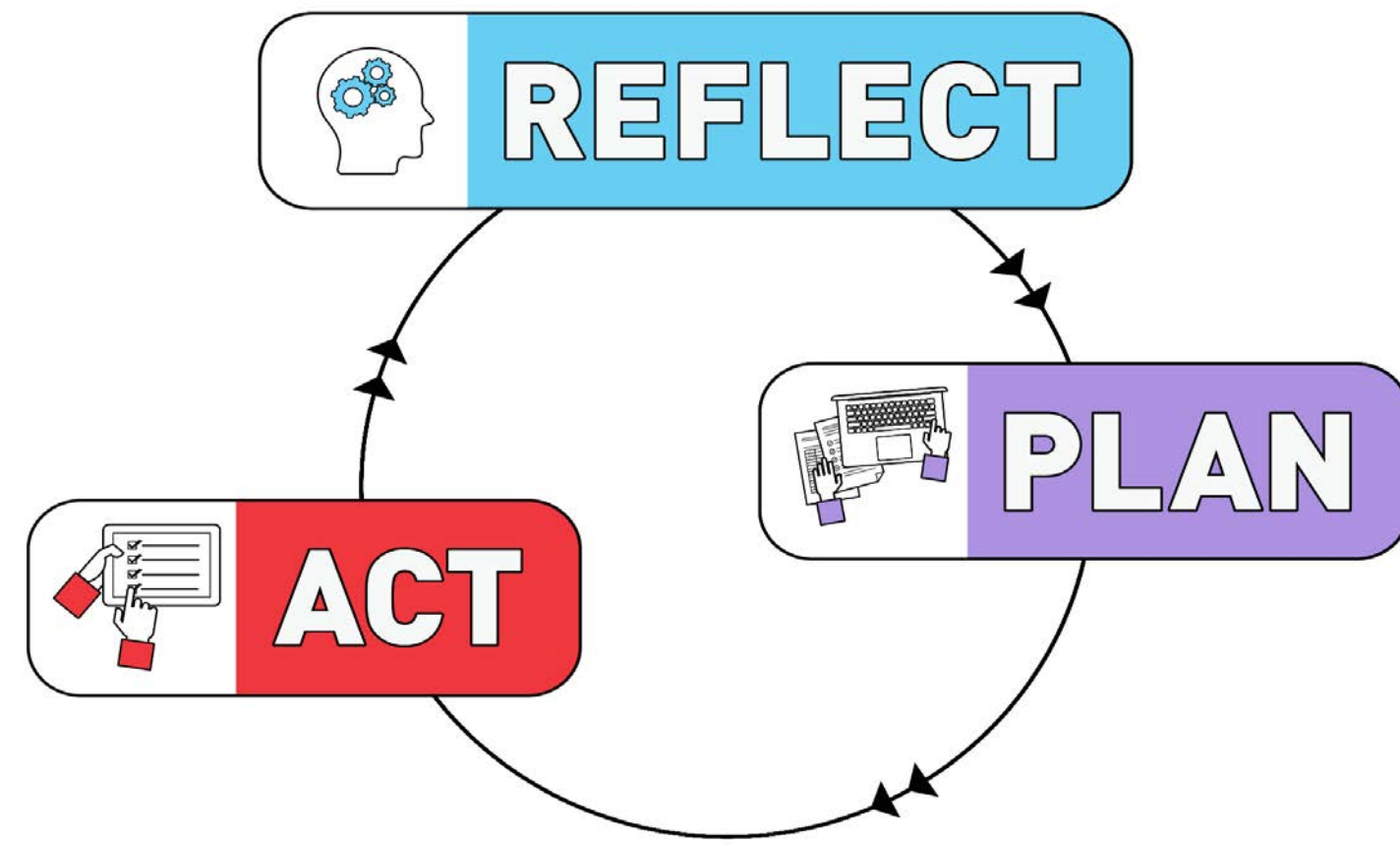
UDLE no. 5

Awareness of limits of knowledge

UDLE no. 6

Autonomy and professional capacity

Approaches



Self-Regulated
Learning



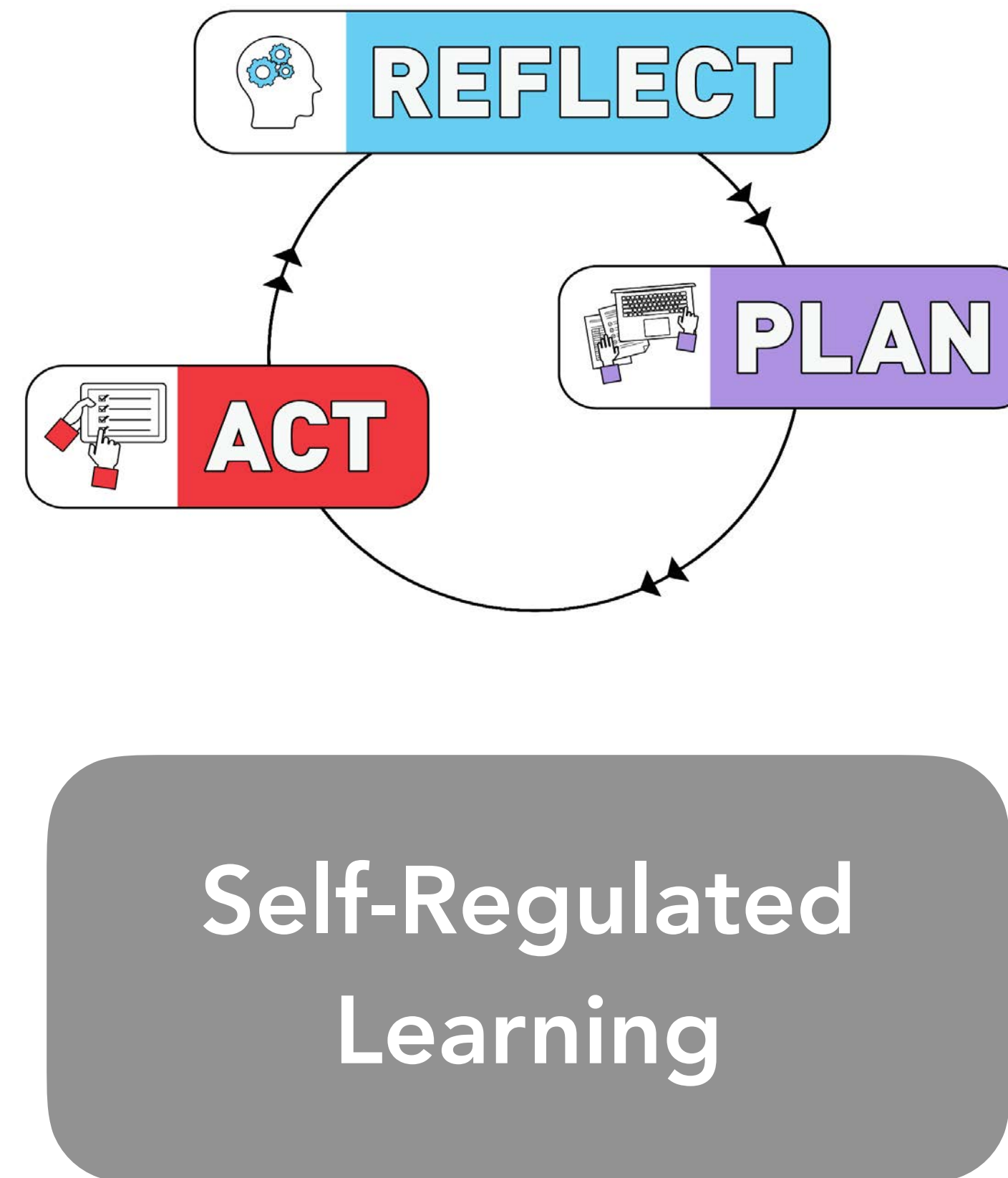
Metacognition



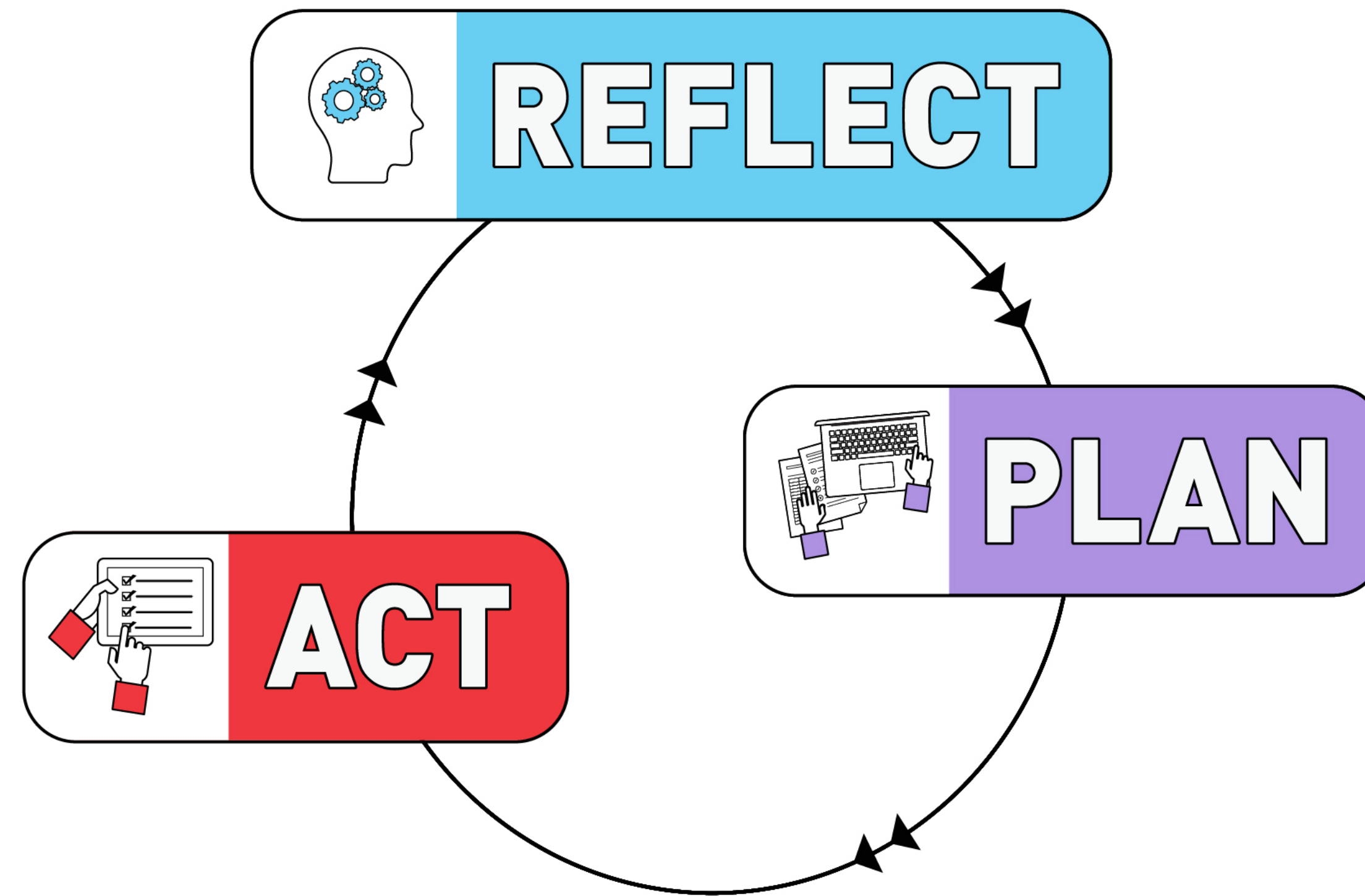
Growth Mindset

Approaches

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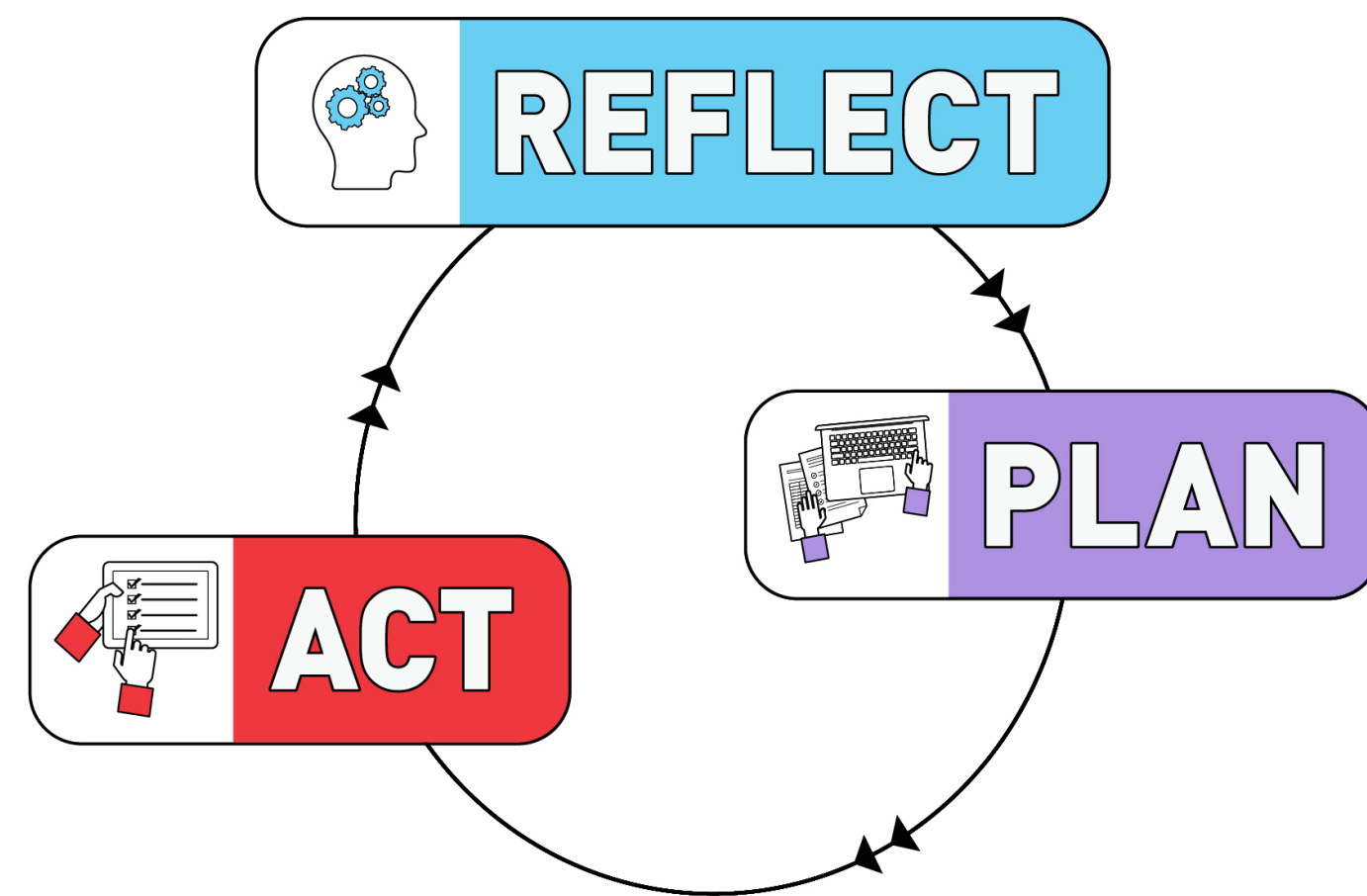


Self-Regulated Learning (SRL)



Zimmerman, B. J. (2008). *American Educational Research Journal*, 45(1), 166–183.

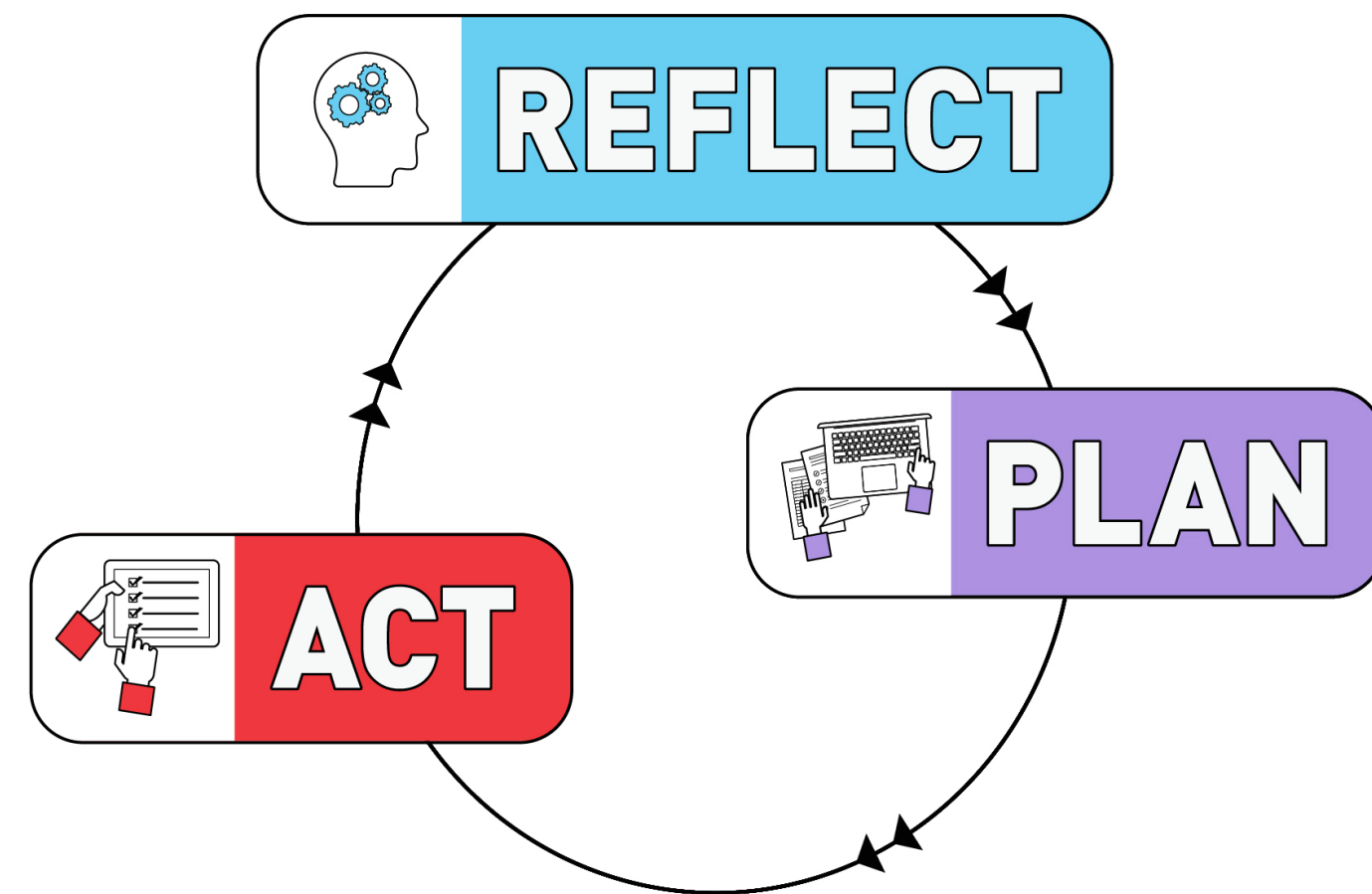
Self-Regulated Learning (SRL)



SRL is a process by which students take control of their actions, motivations, and feelings in order to seize opportunities and overcome challenges in order to accomplish goals.

Zimmerman, B. J. (2008). *American Educational Research Journal*, 45(1), 166–183.

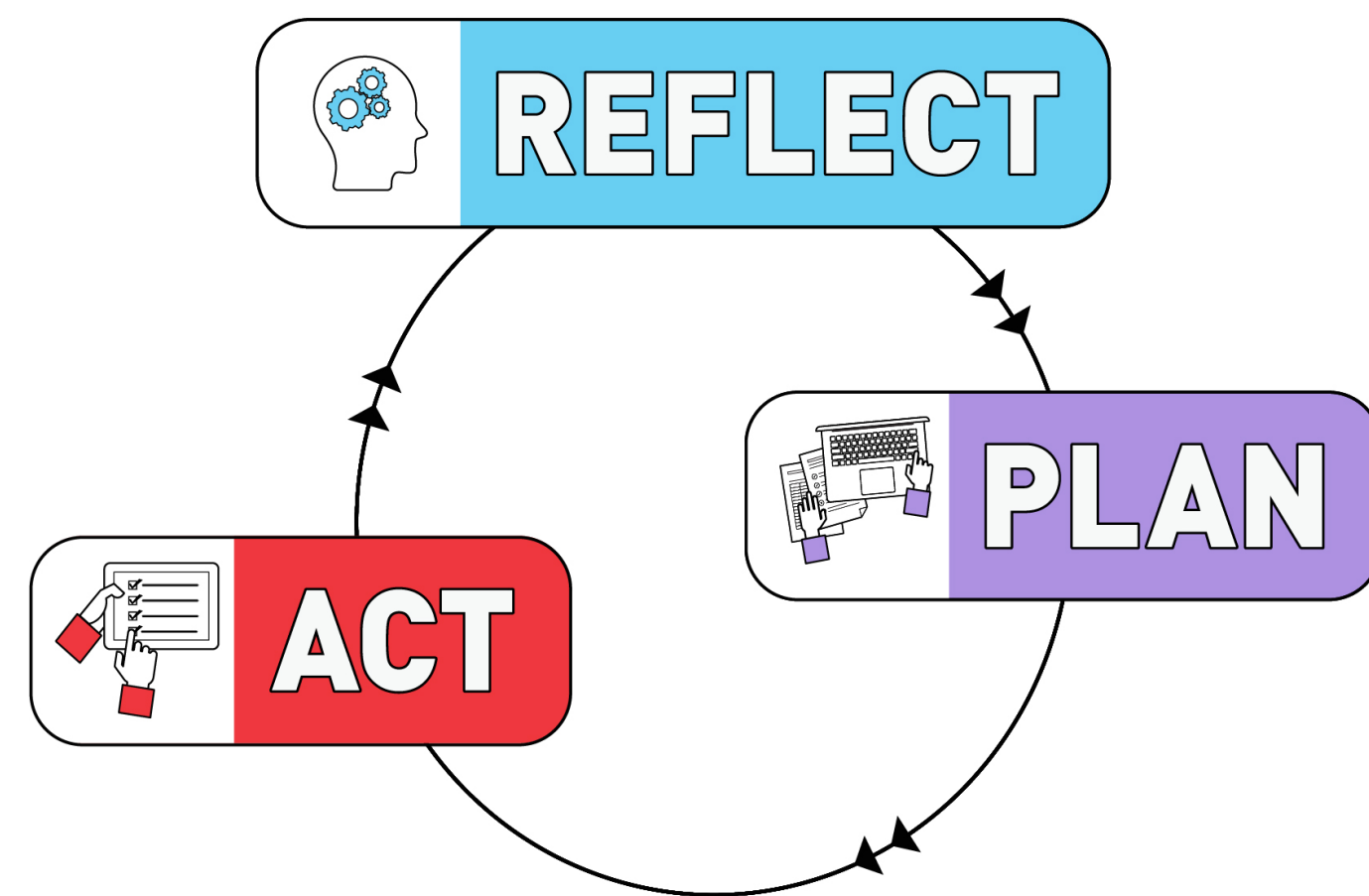
SRL can be learned



“Academic self-regulation is not a mental ability ... or an academic skill ... rather, it is the self-directive process through which learners transform their mental abilities into academic skills.”

-B.J. Zimmerman, 1998

SRL: Students set SMART goals



Specific

Measurable

Accountable

Reachable

Time specific

Dotson, R.,(2016). *Journal of School Administration and Research Development*, 1(1).

SRL: Helping students set goals

Can you identify the **SMART** goal?

Specific

Goal 1: Get a high grade in biology so I can get a job that pays a good salary when I graduate.

Measurable

Goal 2: Get into medical school. It is something I've wanted since I was a child. I've always known that helping people live healthy lives is my passion.

Accountable

Goal 3: Improve my well-being through meditation and exercise.

Reachable

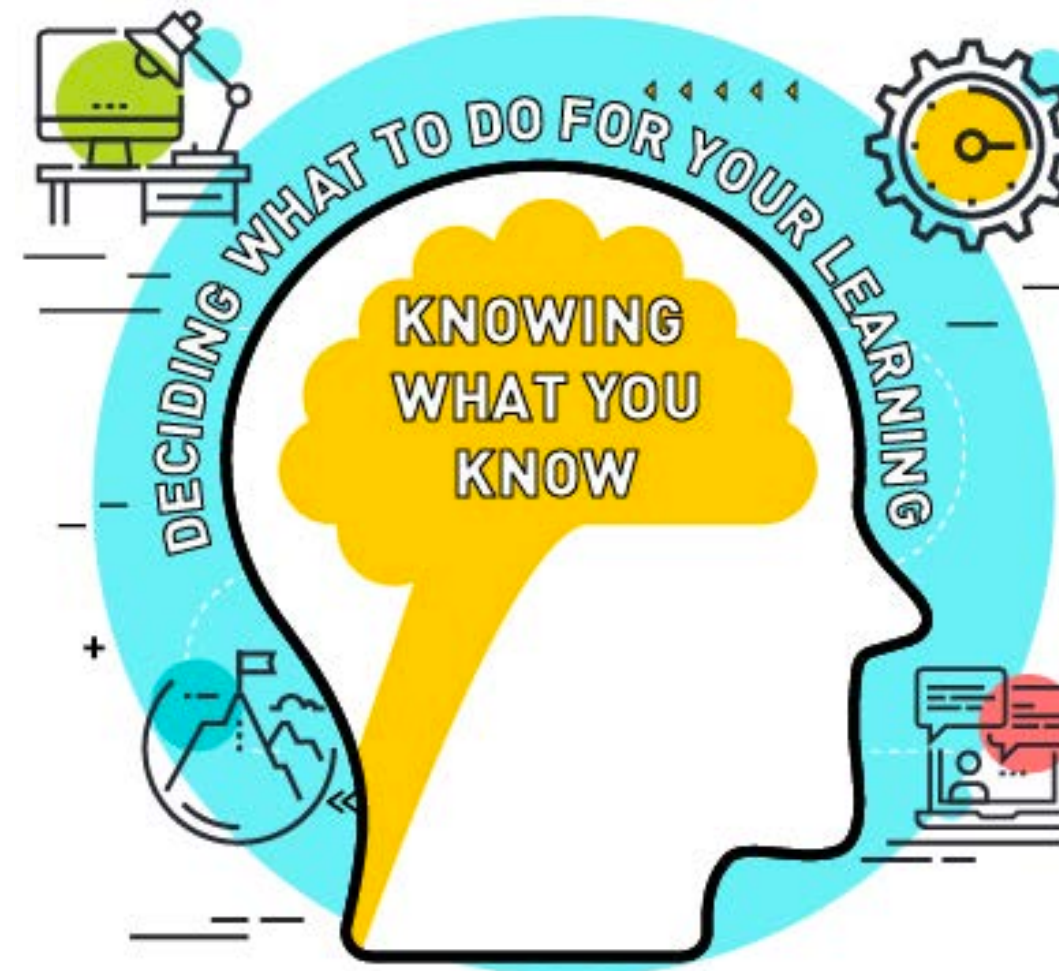
Goal 4: Complete proper flip turns at each end of the pool during my next race. I already do two flip turns during each practice, so I can reach this goal, which I shared with my coach.

Time specific

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Approaches

[menti.com](https://www.menti.com) 38 34 14



Metacognition

Metacognition: Knowledge and Control



Pintrich, P. R., Wolters, C. A., & Baxter, G. P. (2000). *Issues in the Measurement of Metacognition* (pp. 43–97).

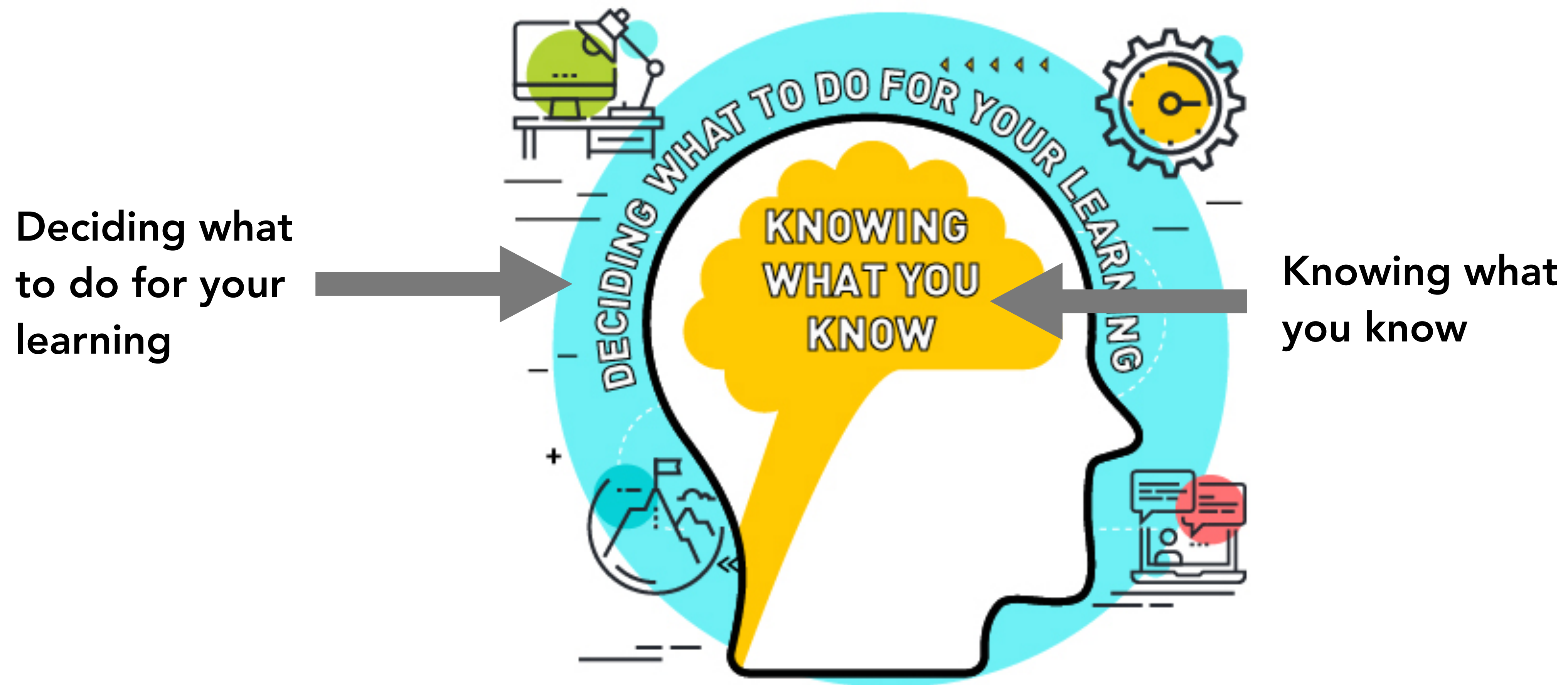
Metacognition: Knowledge and Control



Knowing what
you know

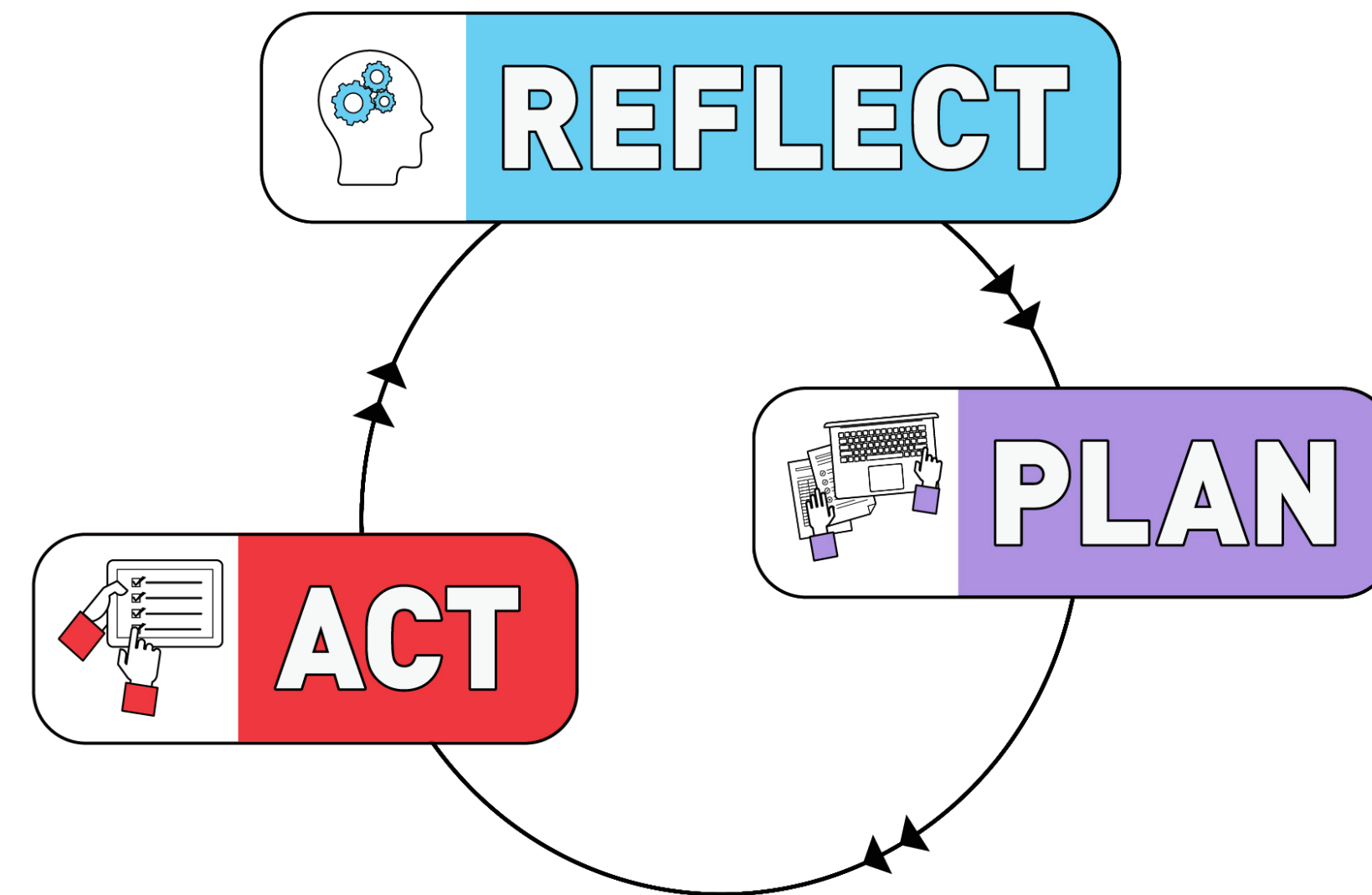
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Metacognition: Knowledge and Control

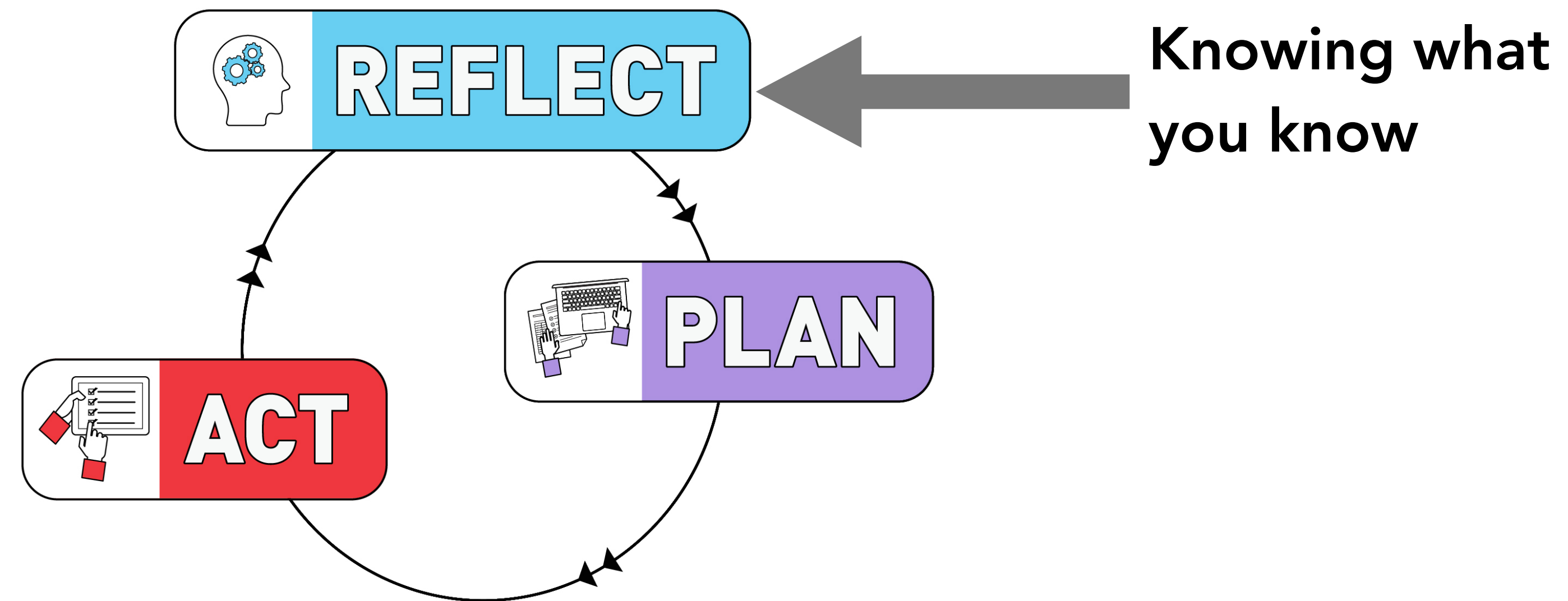


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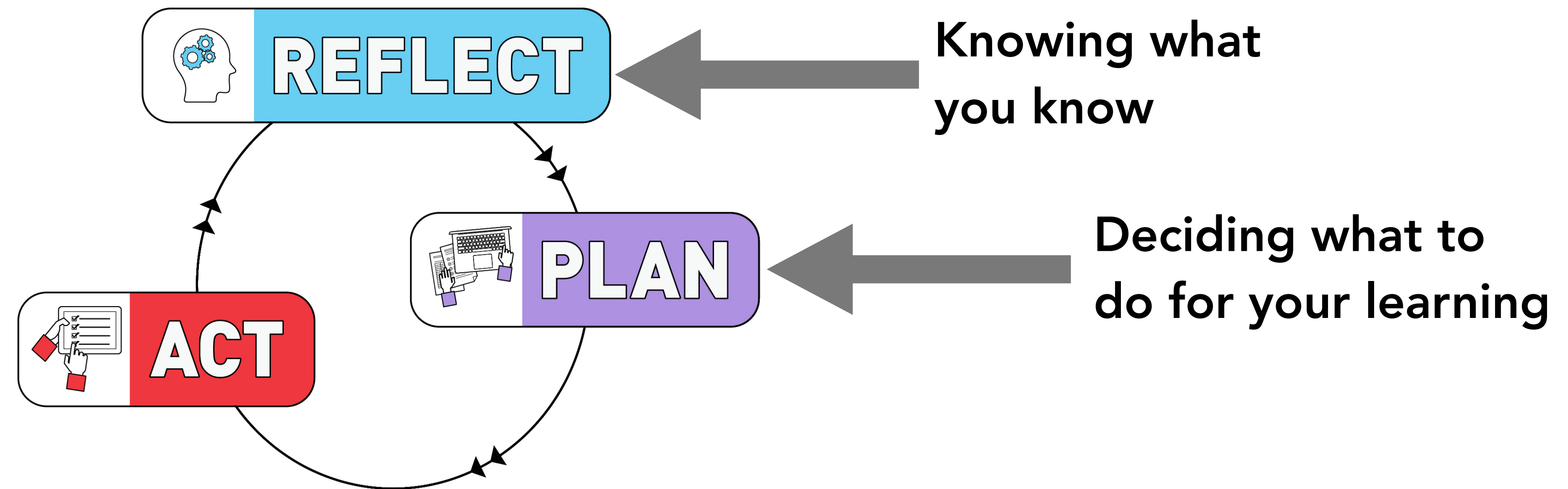
SRL Relies on Metacognition



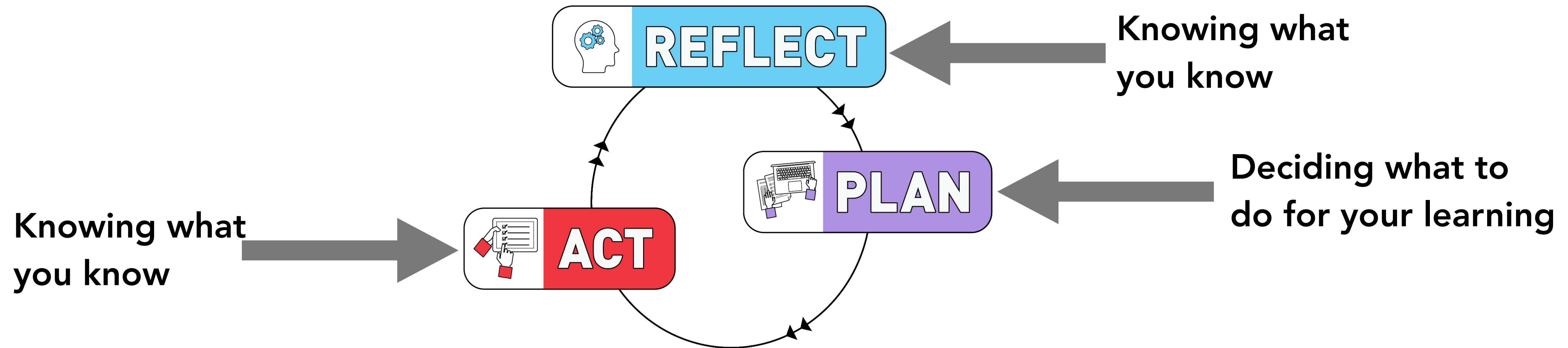
SRL Relies on Metacognition



SRL Relies on Metacognition



SRL Relies on Metacognition



Study Strategies



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Mindset statements



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Approaches

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Growth Mindset

Mindset can influence achievement



Dweck, C. S. (2006). *Mindset: The new psychology of success*. New York: Random House.

Mindset can influence achievement



"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. (2006). *Mindset: The new psychology of success*. New York: Random House.

Mindset: A closer look



- Most people hold different mindsets in different areas of their life

Dweck, C. S. (2006). *Mindset: The new psychology of success*. New York: Random House.
Dweck, C. S., & Leggett, E. L. (1988). *Psychological Review*, 95(1), 256-273.
Corradi, D., Nicolai, J., & Levrau, F. (2018). *Higher Education*, 1–14.
Aronson, J., Fried, C. B., & Good, C. (2002). *Journal of Experimental Social Psychology*, 38, 113-125.
Canning, E. A., Muenks, K., Green, D. J., & Murphy, M. C. (2019). *Science Advances*, 5(2) 1-7.

Mindset: A closer look



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- A challenging situation will bring out a student's mindset

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Mindset: A closer look



- Most people hold different mindsets in different areas of their life
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- A growth mindset is predictive of better academic outcomes
- Growth mindset interventions work and are especially useful for at-risk populations

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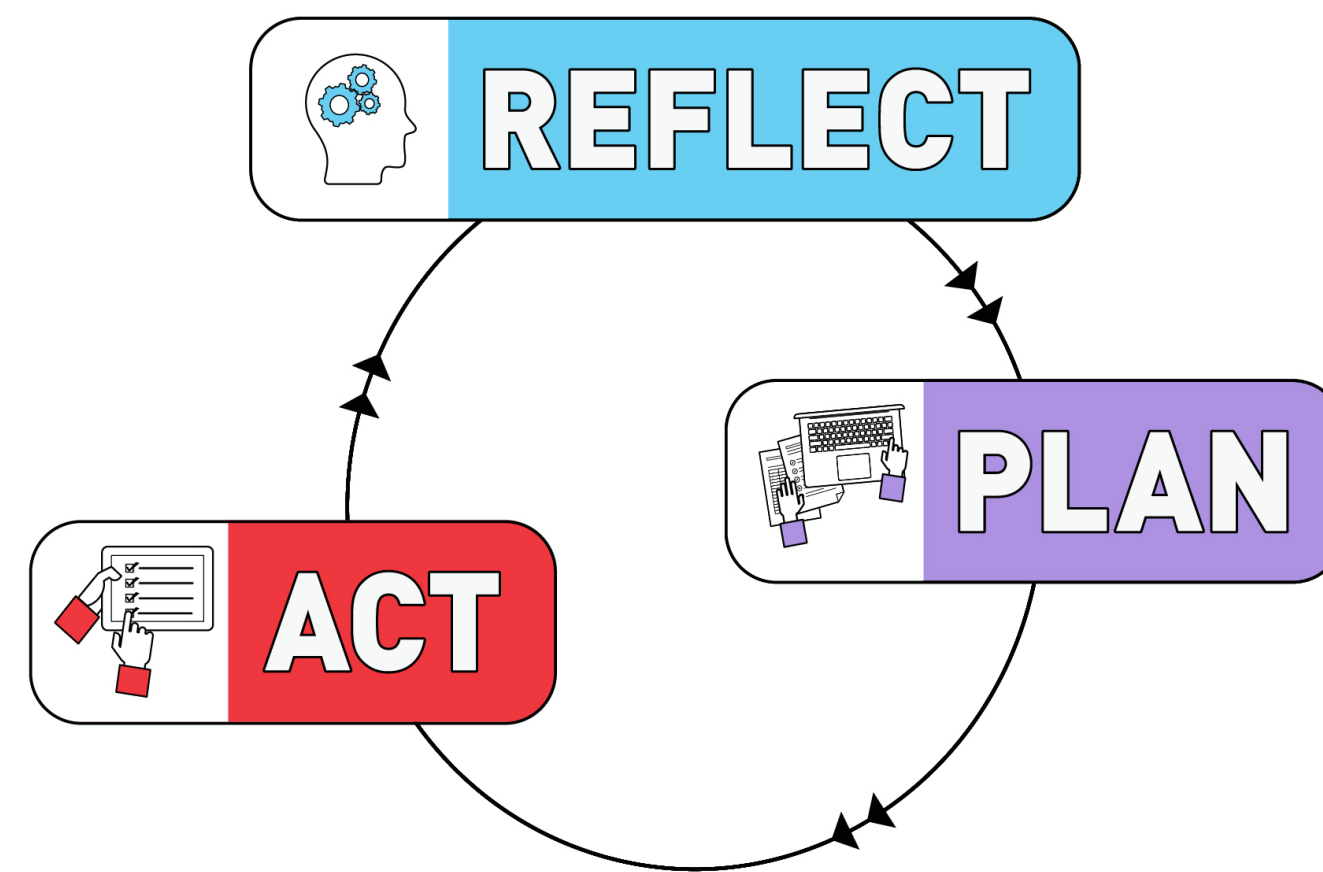
Mindset: A closer look



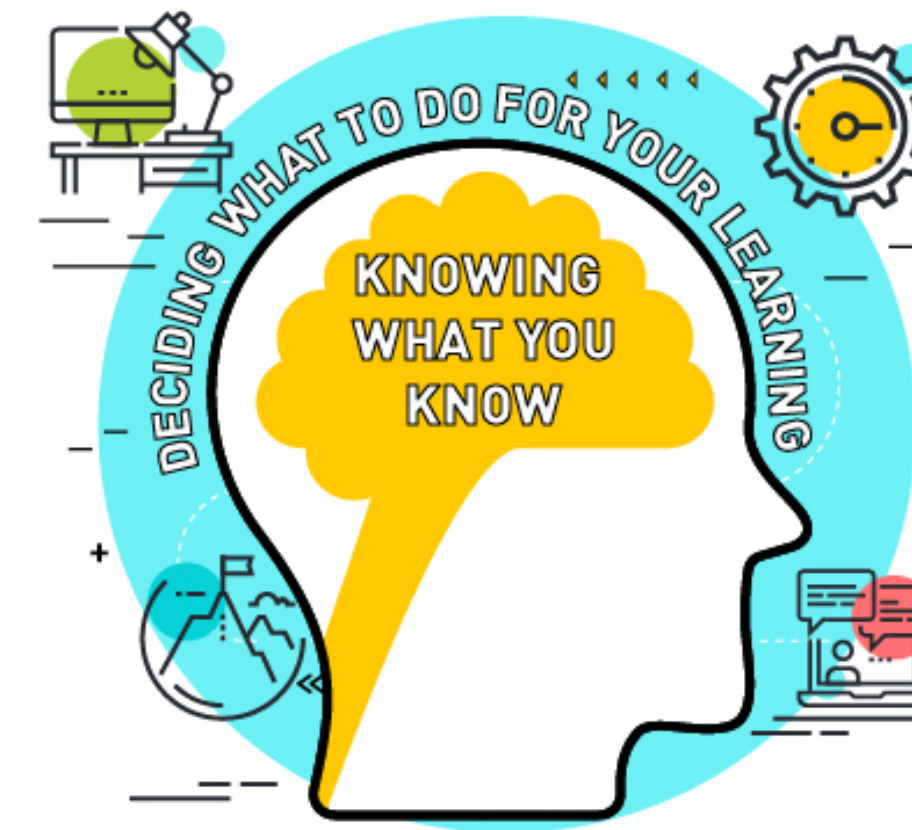
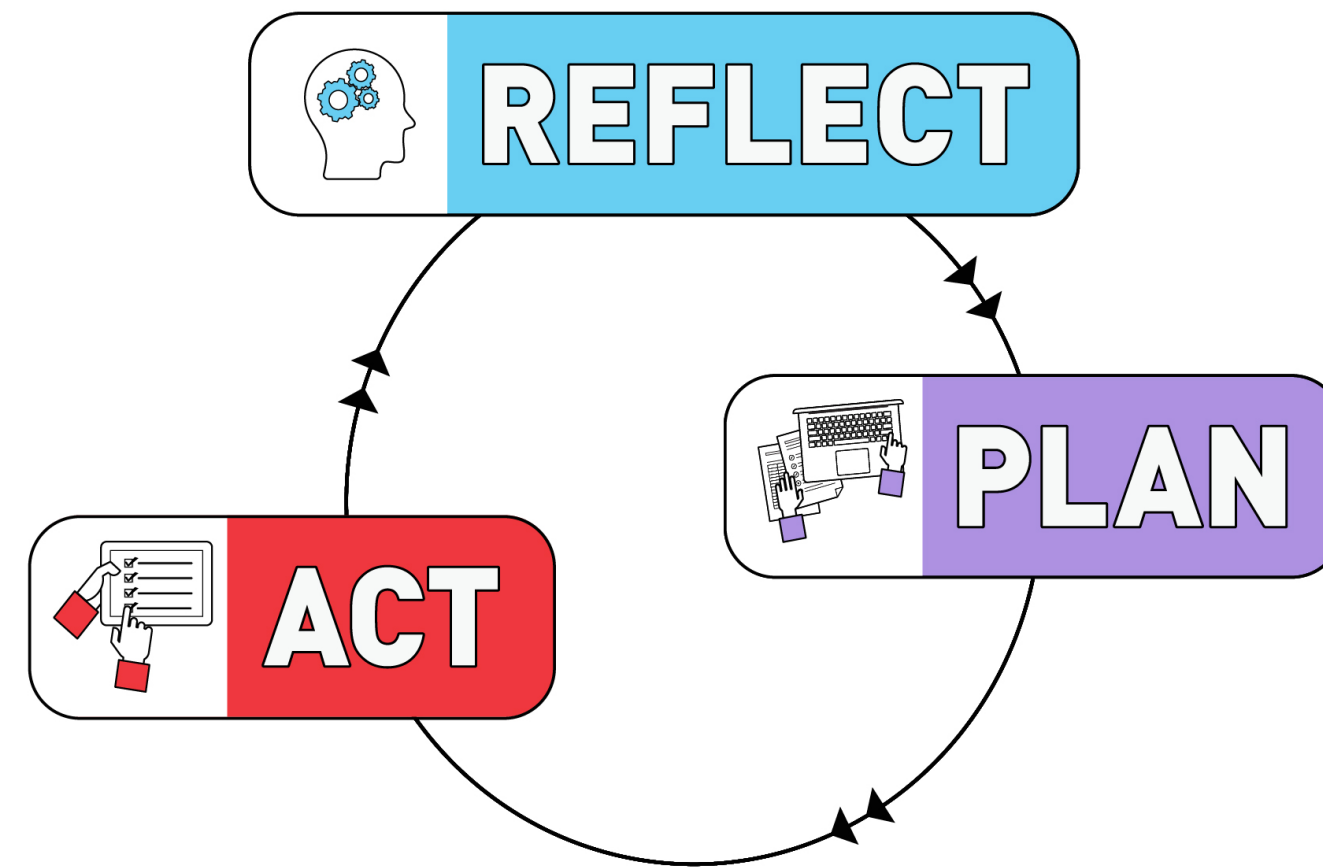
- Most people hold different mindsets in different areas of their life
- A challenging situation will bring out a student's mindset
- A growth mindset is predictive of better academic outcomes
- Growth mindset interventions work and are especially useful for at-risk populations
- Instructor's mindset matters too!

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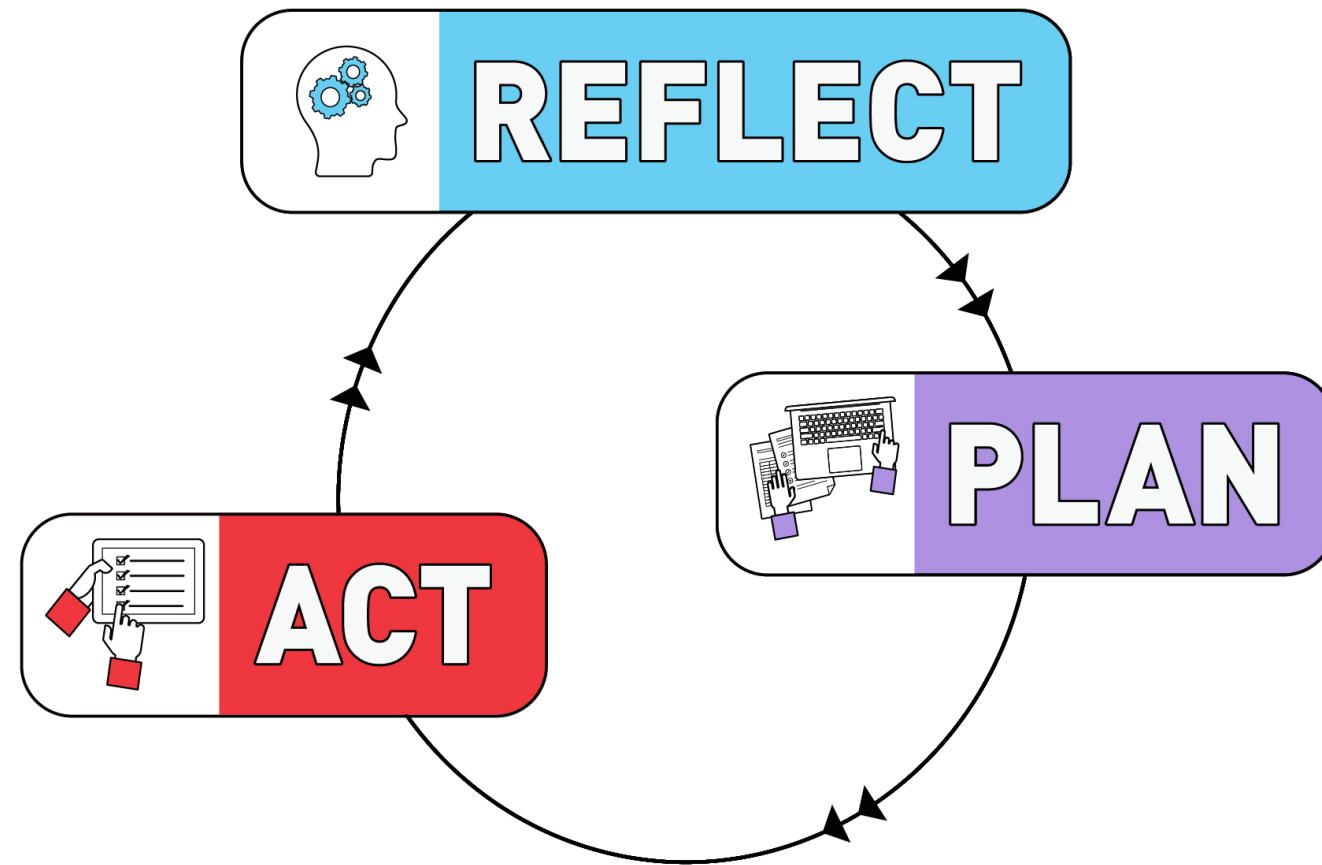
A framework for learning



A framework for learning (and why we should try!)



Concepts that can be taught



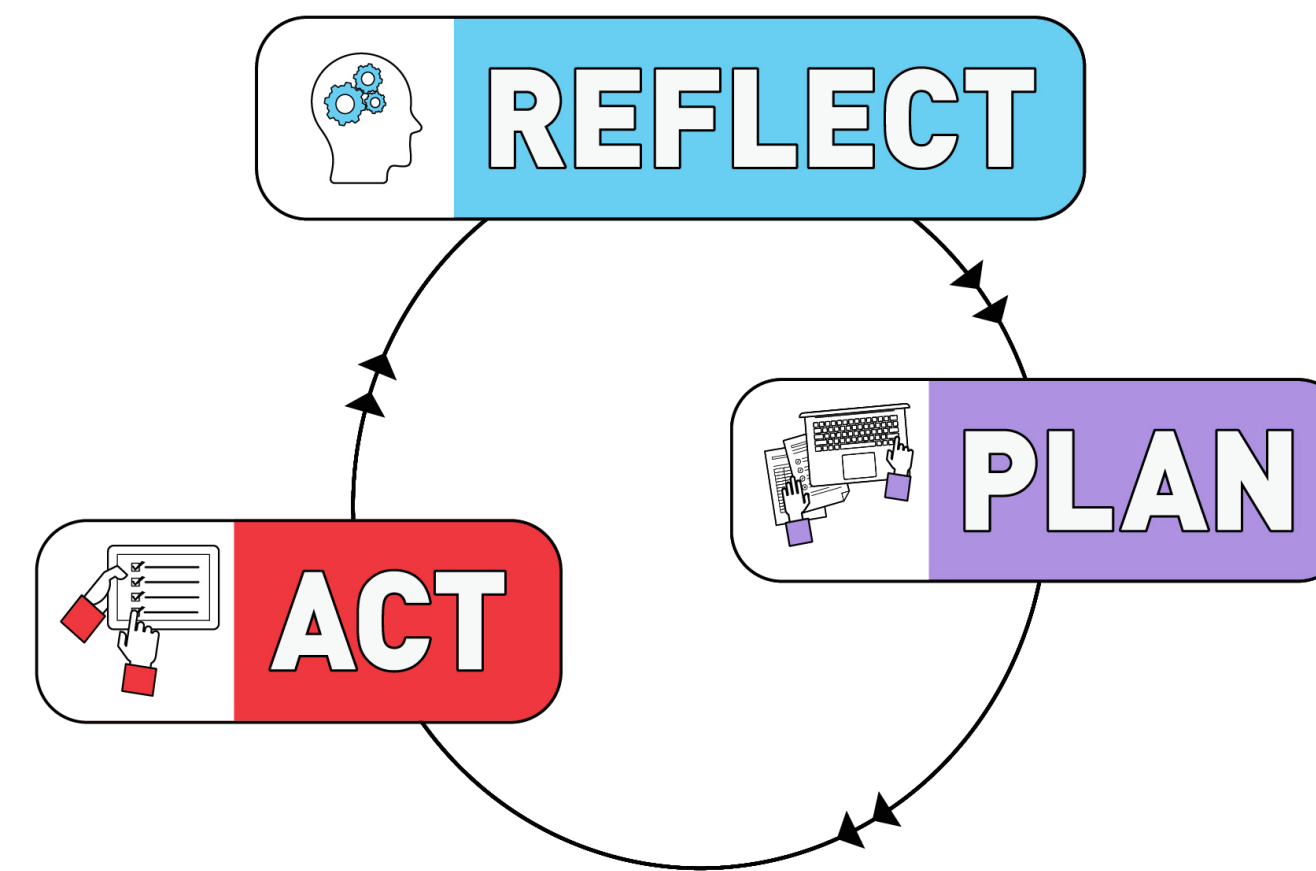
Zimmerman, B. J. (2002). *Theory into Practice*, 41(2), 64–70.
Schraw, G. (1998). *Instructional Science*, 26, 113–125.
Aronson, J., Fried, C. B., & Good, C. (2002). *Journal of Experimental Social Psychology*, 38, 113-125.

Our vehicle

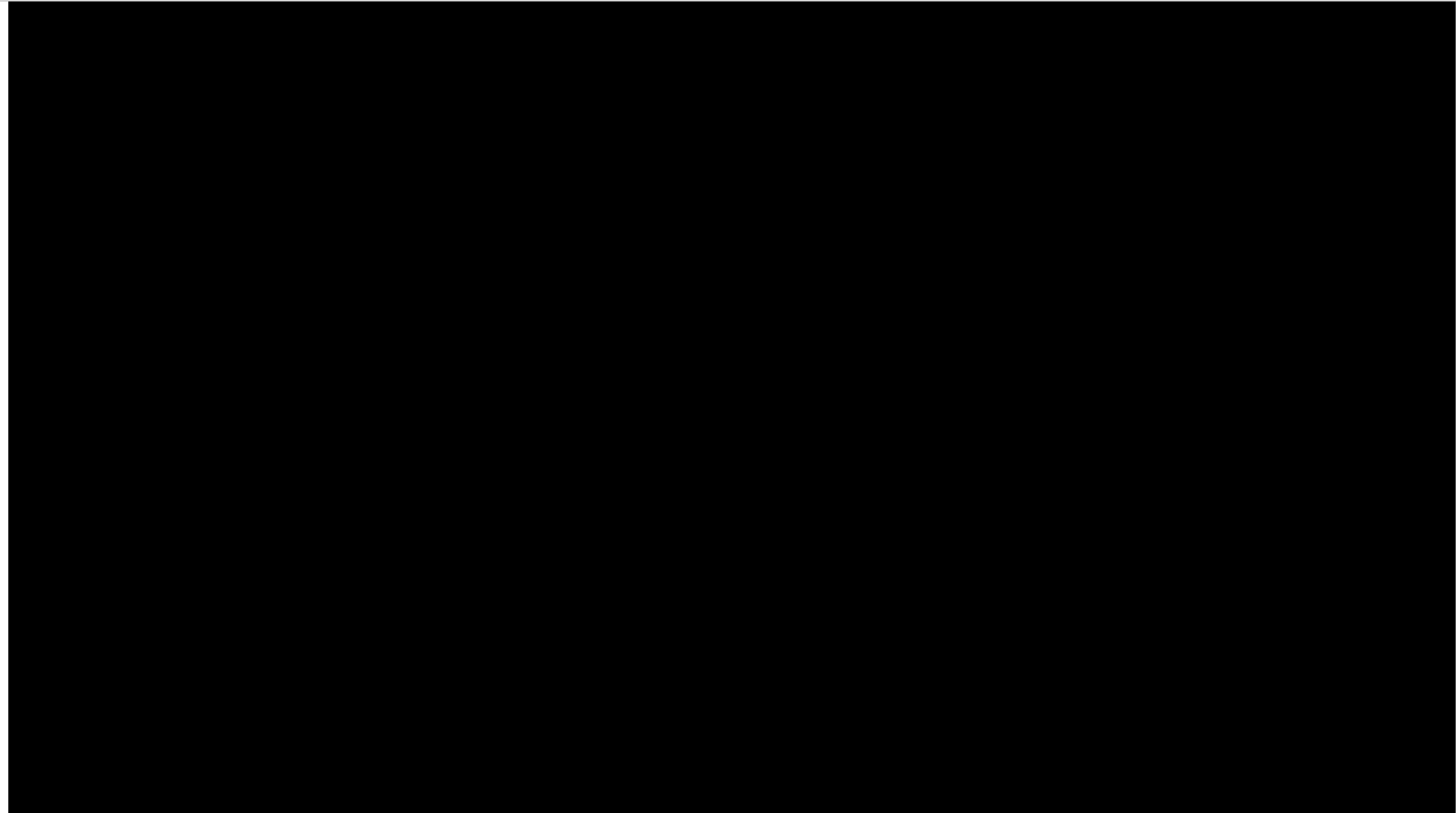


The Module

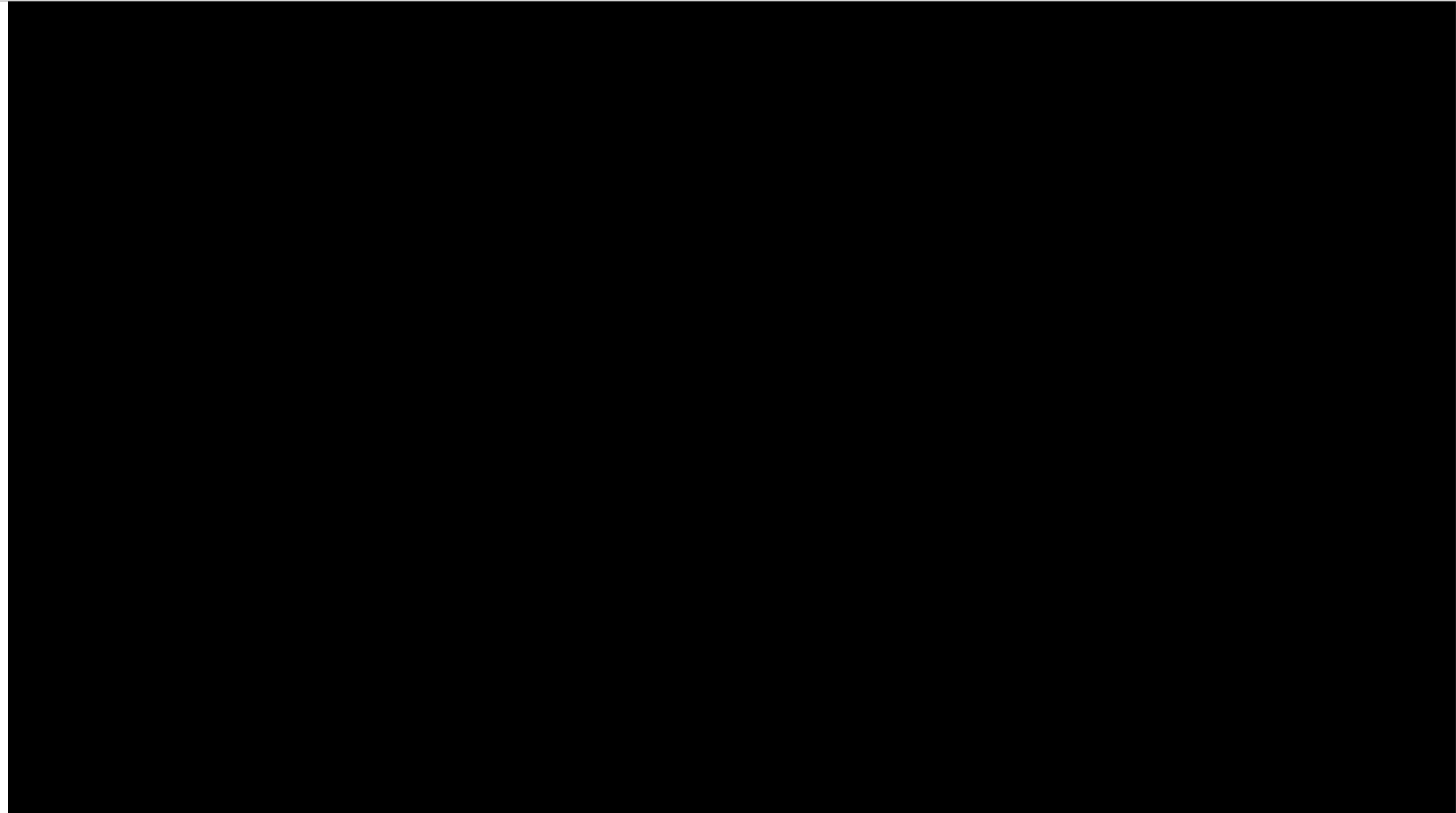
GROWTH & GOALS



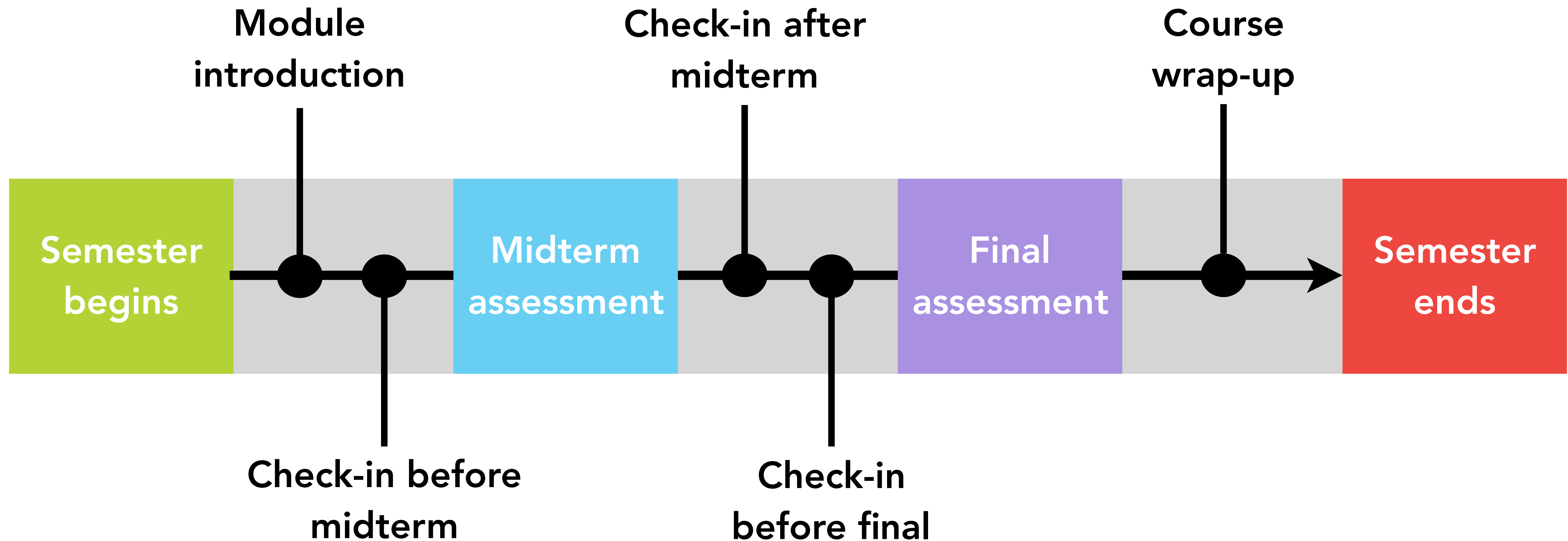
Growth & Goals Tour



Growth & Goals Tour



Distribution Timeline



Why bring Growth & Goals into your class?



Why bring Growth & Goals into your class?

Integrated into the course

Why bring Growth & Goals into your class?

Integrated into the course

Provides an effective study tool

Why bring Growth & Goals into your class?

Integrated into the course

Provides an effective study tool

Encourages goal setting within the course

Professor Benefits



How much work is this going to be for you?



How much work is this going to be for you?

Pre-semester: 2–3 hours *one time only*

In class: 10 minutes, 4 times per semester *optional*

Post-semester: 1.5 hours



How much work is this going to be for you?

Pre-semester: 2–3 hours *one time only*

In class: 10 minutes, 4 times per semester *optional*

Post-semester: 1.5 hours

Total:

~4–5 hours in year one

~2 hours in subsequent years



Student Champions





Support

Customization tutorial videos

Support

Customization tutorial videos

Instructional document

Support

Customization tutorial videos

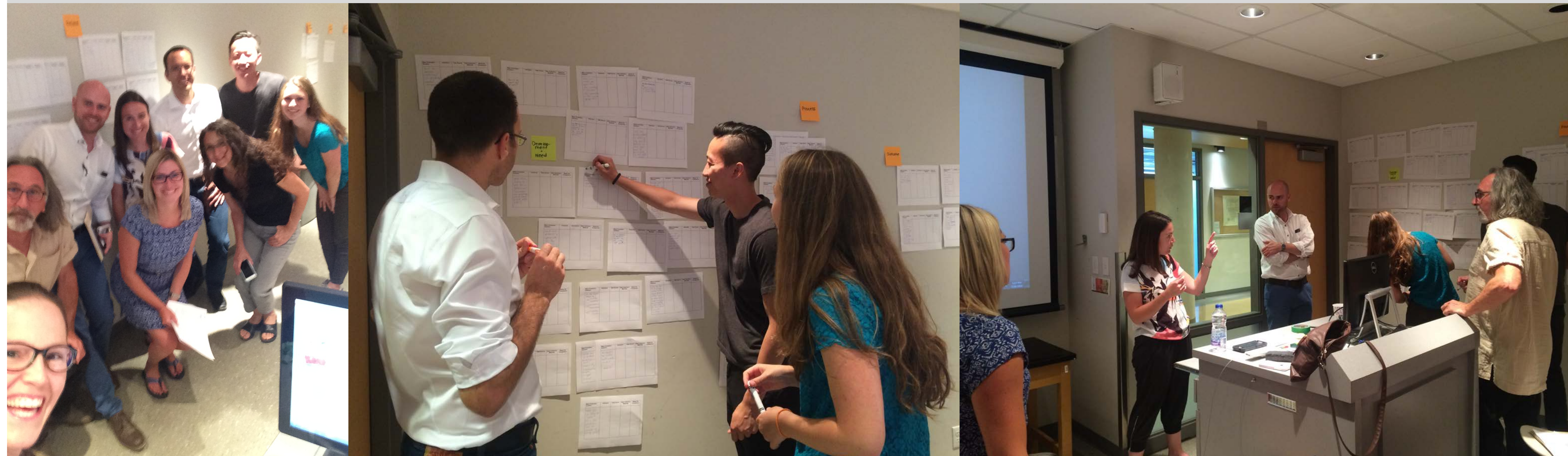
Instructional document

GrowthGoalsModule@gmail.com

Practical Participatory Evaluation

"...stakeholder participation will enhance evaluation relevance, ownership and utilization."

Cousins and Whitmore, 1998



Research Questions (RQs)

Resources

Students

Instructors

Program
Development

Research Questions (RQs)

Resources

Students

Instructors

Program
Development

Research Questions (RQs)

Resources

Students

Instructors

Program
Development

**RQ1 - What resources
does the module
require?**

Research Questions (RQs)

Resources

Students

Instructors

Program
Development

RQ2 - How many
students complete the
module?

RQ3 - How do students
perceive the module?

RQ4 - To what
extent do students
achieve the module's
learning outcomes?

RQ5 - Does the module improve
students' abilities to succeed in
the learning environment?

RQ6 - Which students
are benefitting from
the module?

Participation Rates

1656 students

>75% completion rate*

*When given a course mark incentive



Logical Responses



Logical Responses

Mean = 55 words per response

"I am taking this course since it is a career requirement. I used to really like chemistry but have had a hard time understanding it in university. Hopefully taking the time to do practice problems will help me improve my understanding in this course. I am expecting to pass but getting a mark over 75% is my goal."

Positive perceptions from students

82% of students
believe it will
improve their learning



79% of students
would recommend
Growth & Goals to a friend

Focus Group Themes

Worthwhile

Transferable

I used it more in other courses than this one, mostly the study techniques, like making a schedule.



It was hard to write down things I wasn't good at. I'm glad I did, though, because later in the module I made a plan to improve those things.



Resilience

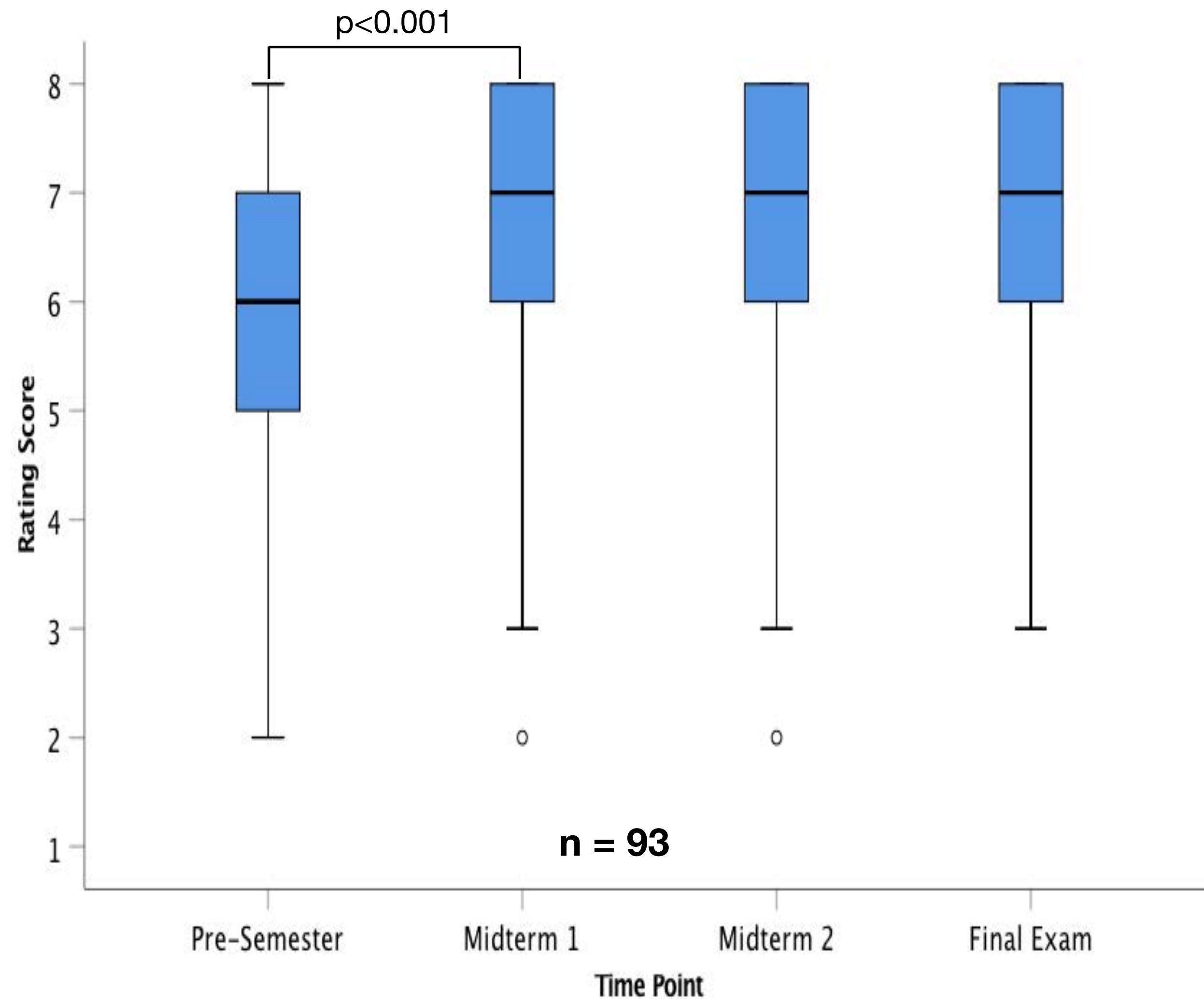
I like that a growth mindset makes you realize that it's okay to make a mistake and fix it later on.



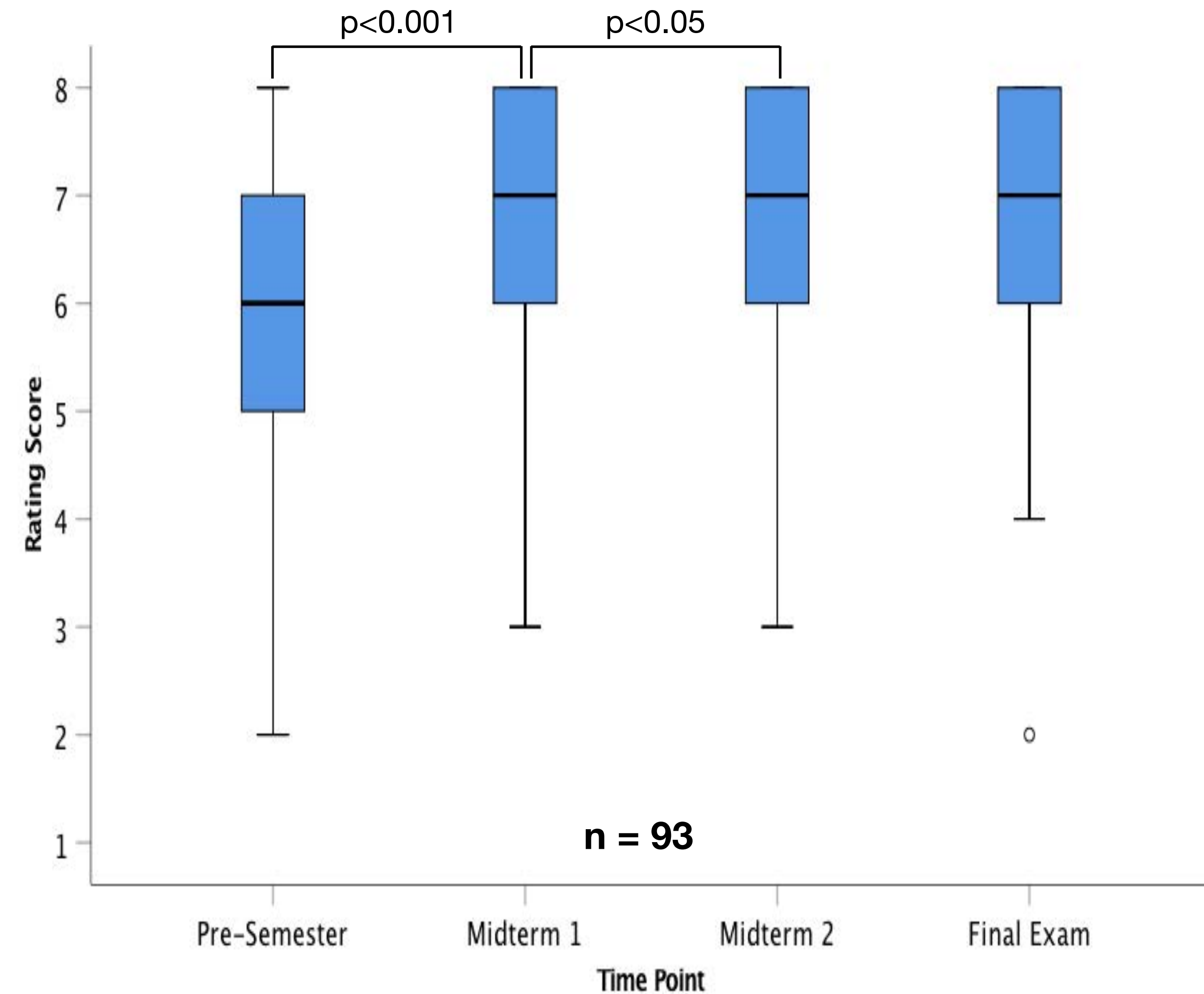
RQ4

Students report increase in course LO abilities

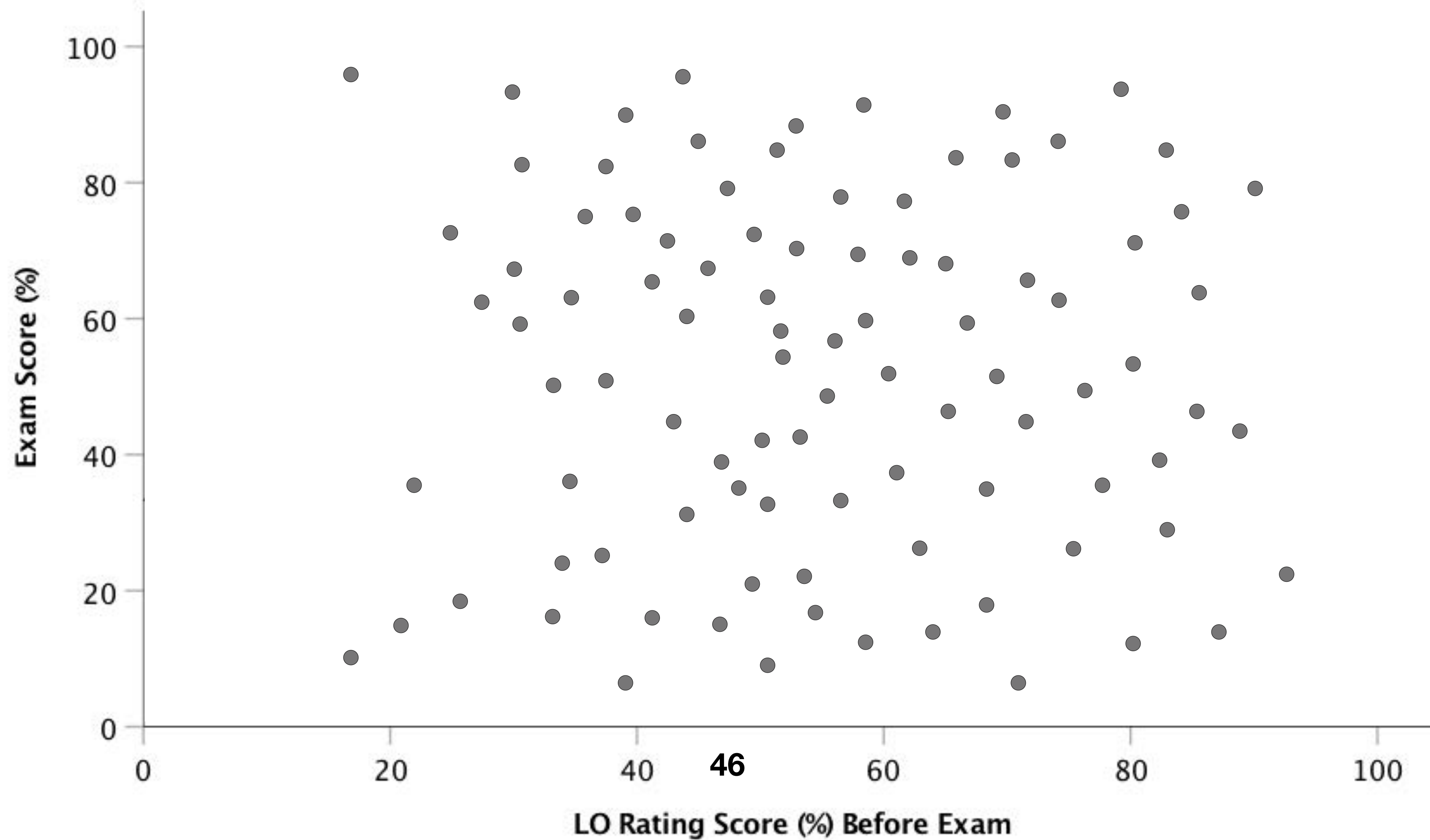
Course Learning Outcome #1



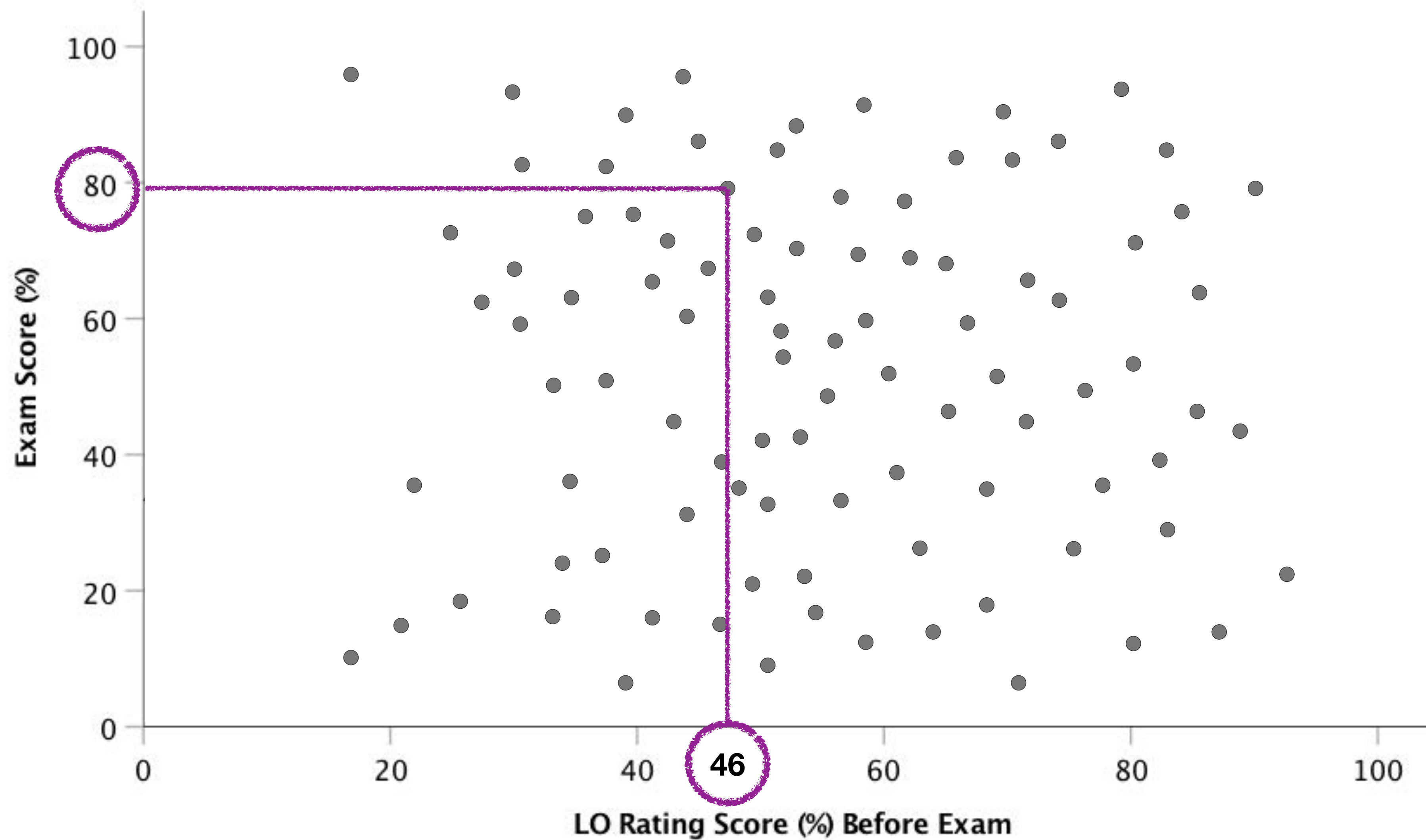
Course Learning Outcome #2



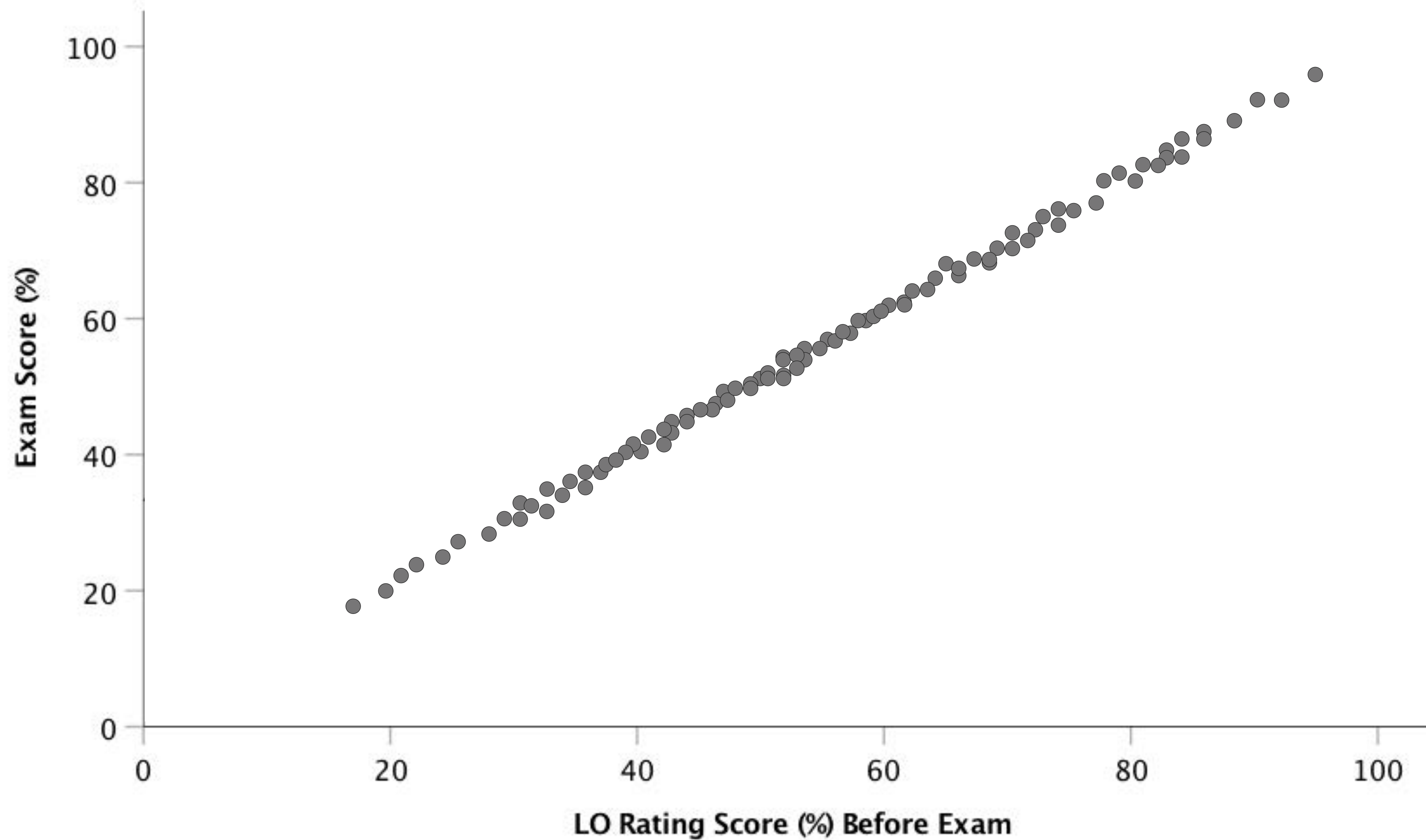
Inaccurate predictions ($r \approx 0$)



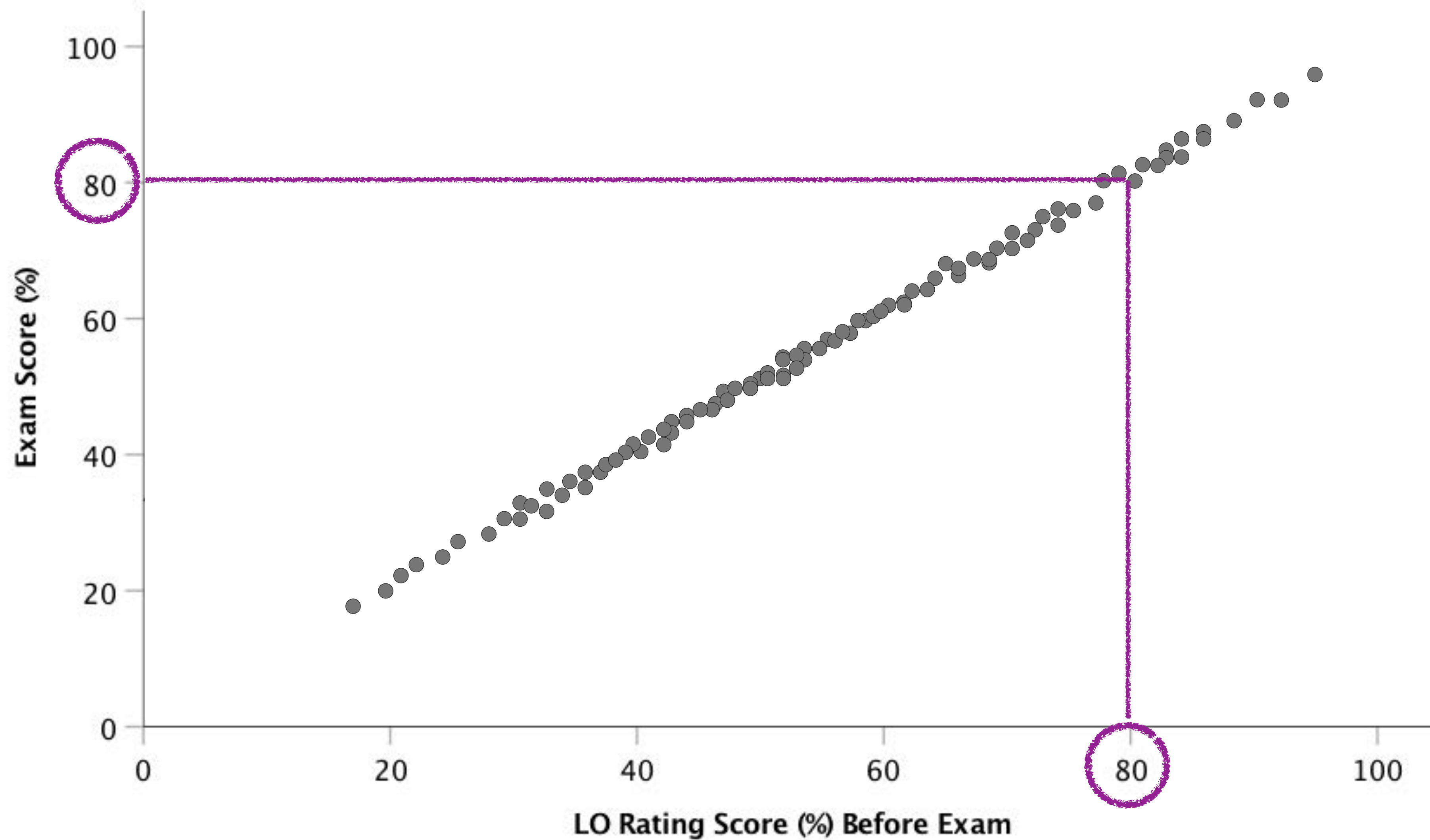
Inaccurate predictions ($r \approx 0$)



Knowing what you know ($r \approx 1$)

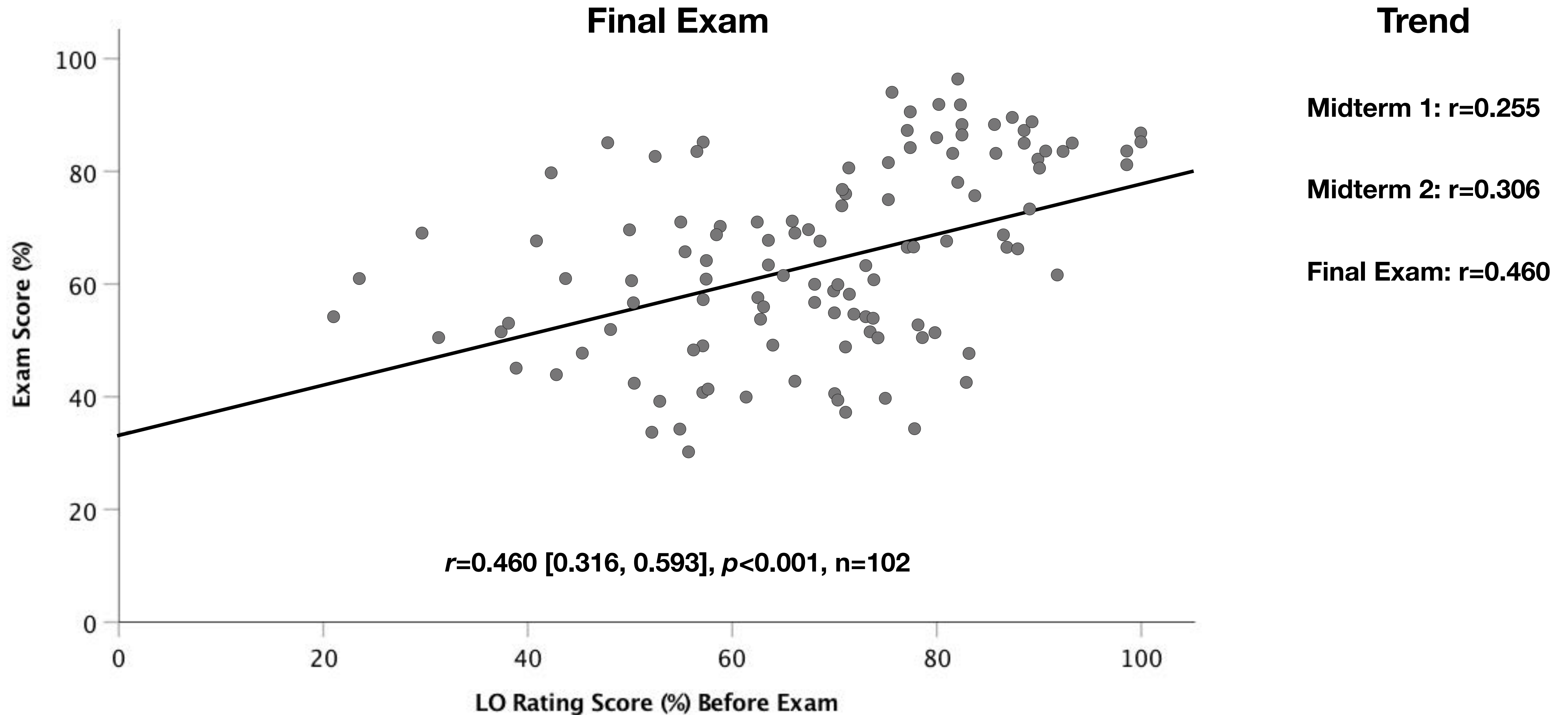


Knowing what you know ($r \approx 1$)

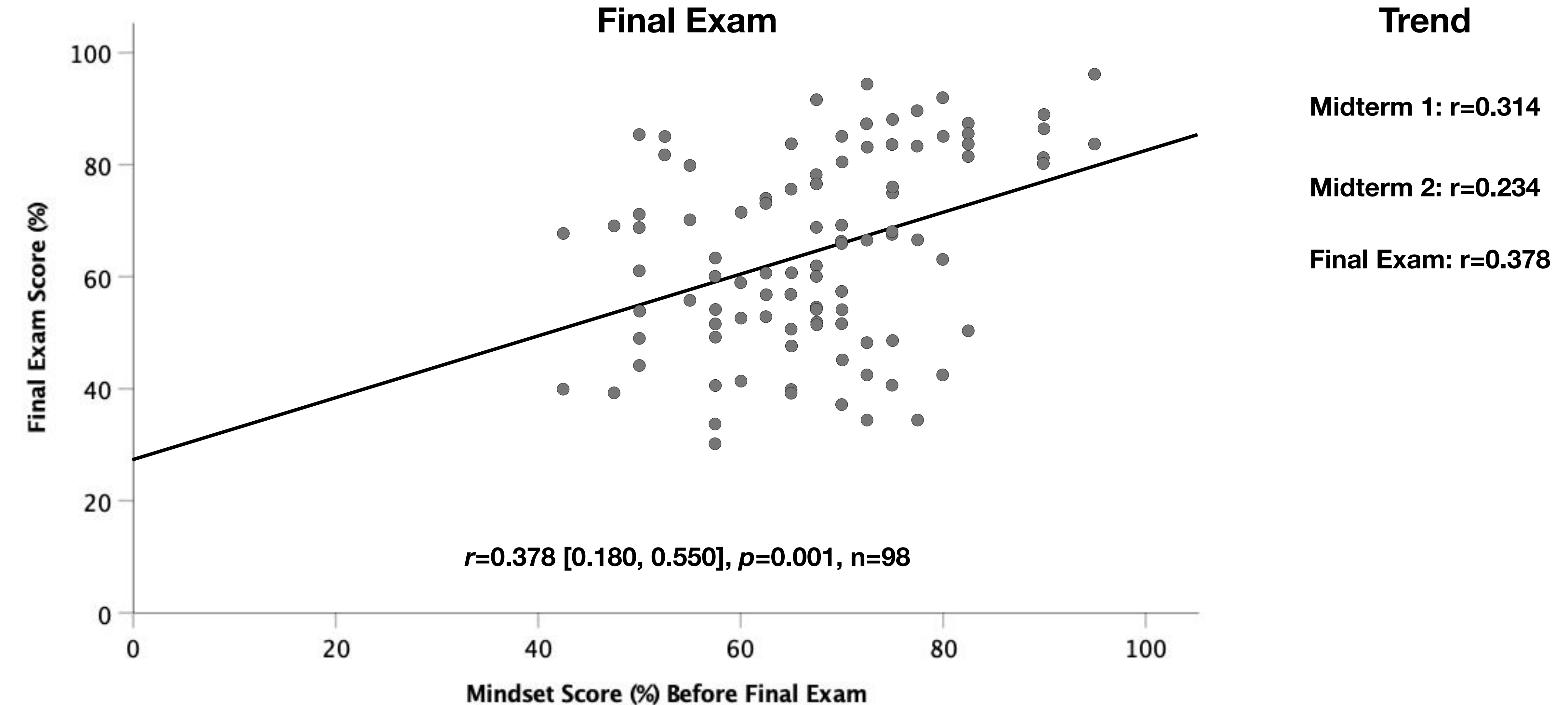


RQ4

Students become increasingly accurate predicting abilities



Mindset before test correlates with success



Increase in Growth Mindset

Students' self-reported **Growth Mindset scores** **increased** from before the course ($M = 69\%$, $SD = 9$) to the final exam ($M = 71\%$, $SD = 10$)
 $t(60) = 2.528$, $p = 0.01$.

Research Questions (RQs)

Resources

Students

Instructors

Program
Development

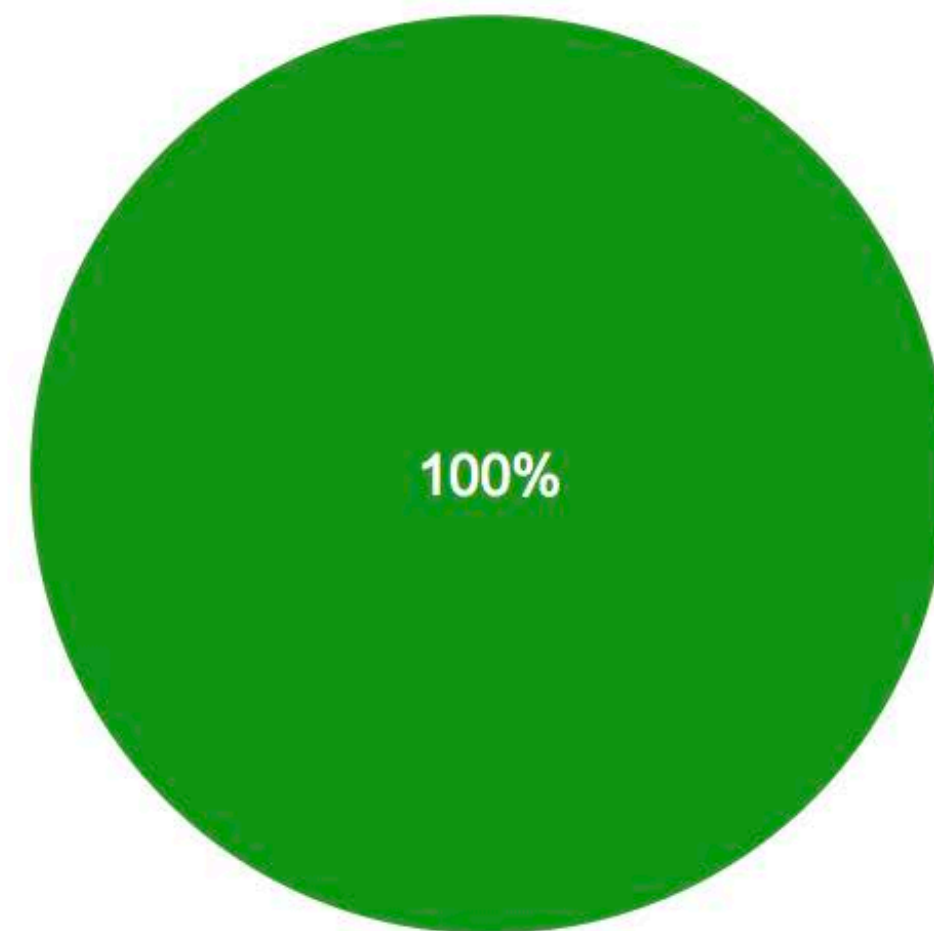
**RQ7 - How do
instructors perceive
the module?**

**RQ8 - What are the
effects of the module
on instructors'
teaching?**

Instructors' impressions before and after

To what extent do you believe the module is applicable to your discipline?

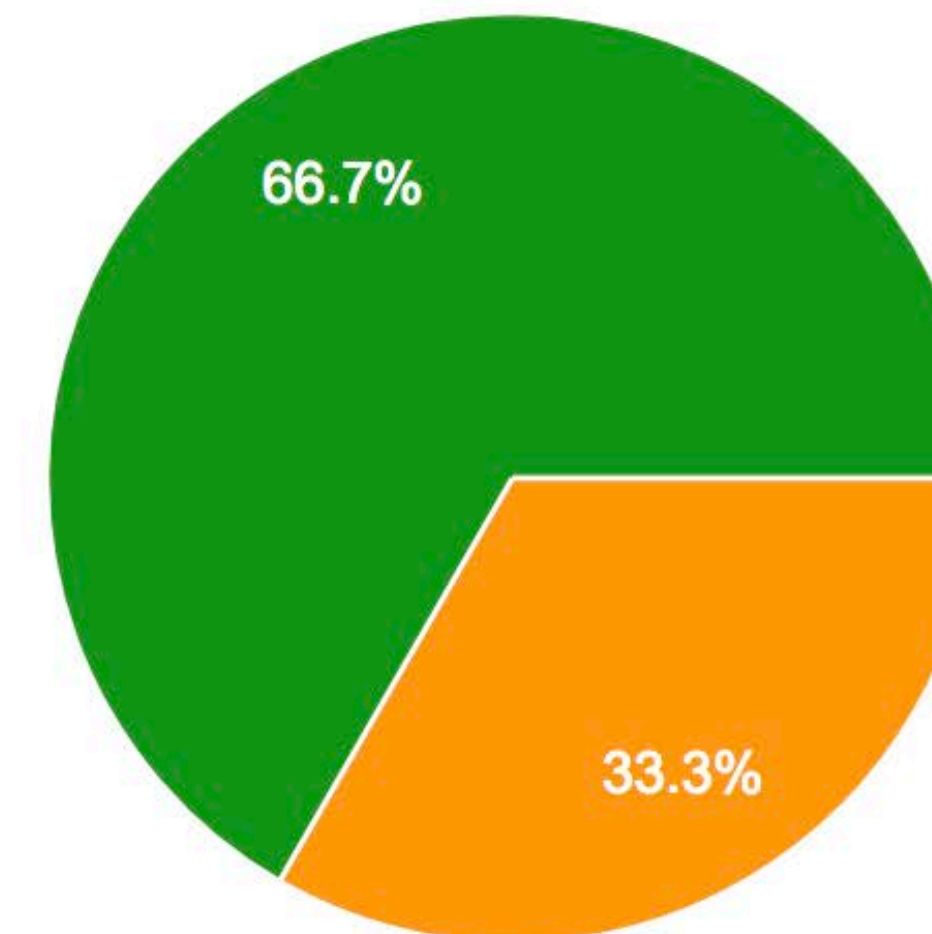
3 responses



Before the semester

- Not at all
- To a small extent
- To a moderate extent
- To a great extent
- Unsure

3 responses



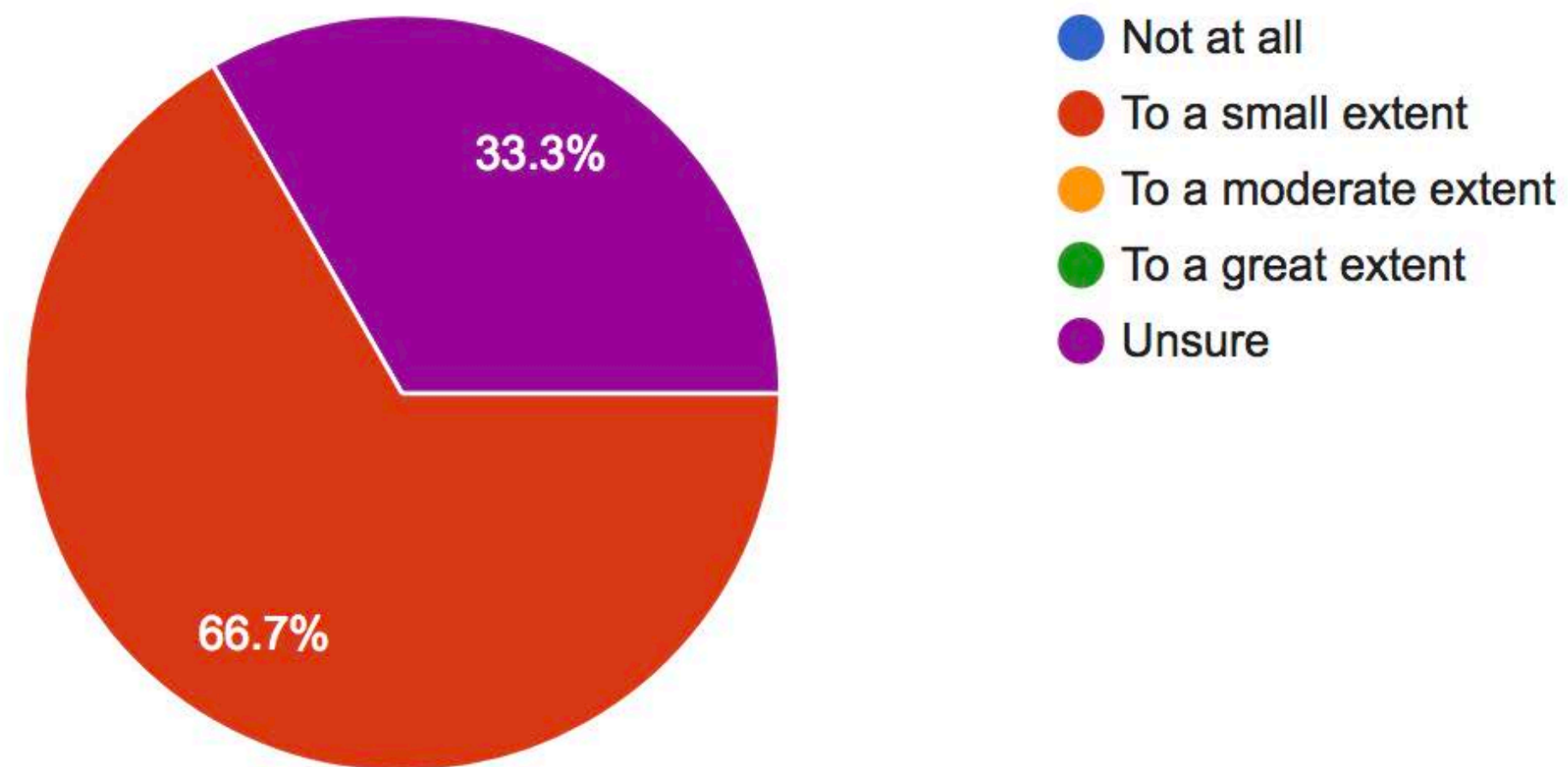
After the semester

- Not at all
- To a small extent
- To a moderate extent
- To a great extent
- Unsure

Impact on teaching

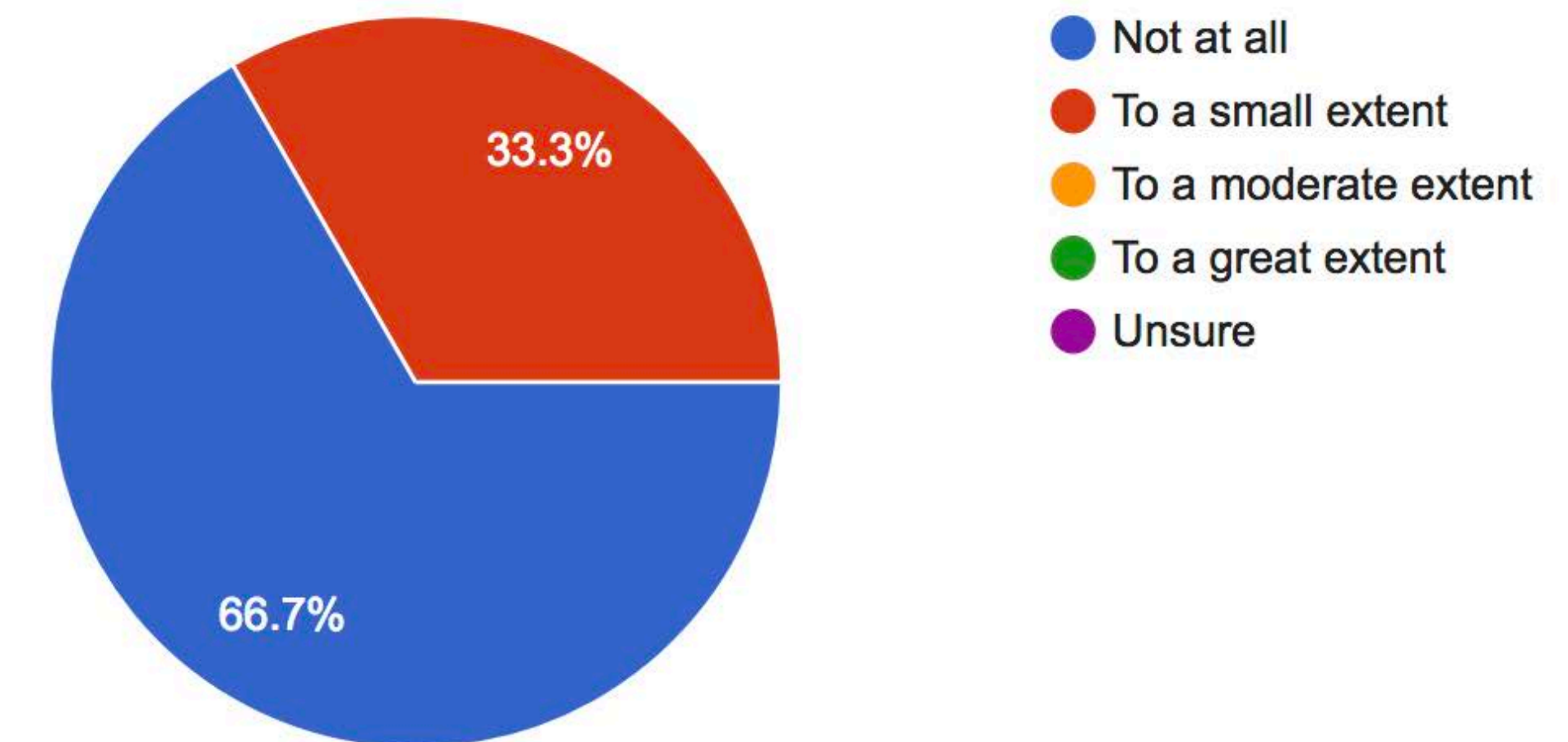
To what extent do you believe you had to change the module to adapt it to your course?

3 responses



To what extent do you believe integrating the module into your course impacted/changed your course content?

3 responses



Research Questions (RQs)

Resources

Students

Instructors

Program
Development

**RQ9 - What elements of
the module are
transferable across
academic disciplines?**

Research Questions (RQs)

Resources

Students

Instructors

Program
Development

**RQ9 - What elements of
the module are
transferable across
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Students are still using module skills

- **Follow up survey of 41 students who completed the module**

Students are still using module skills

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 - **97.5% still using or planning to use one or more skills learned in the module**

Students are still using module skills

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 - **27.5% still using, 40% planning to use SRL cycle**

Students are still using module skills

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 - **40% still using, 30% planning to cultivate a growth mindset with regards to their current course**

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 - **52.5% still using, 25% planning to use metacognition**

Students are still using module skills

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 - 97.5% still using or planning to use one or more skills learned in the module
 - 27.5% still using, 40% planning to use SRL cycle
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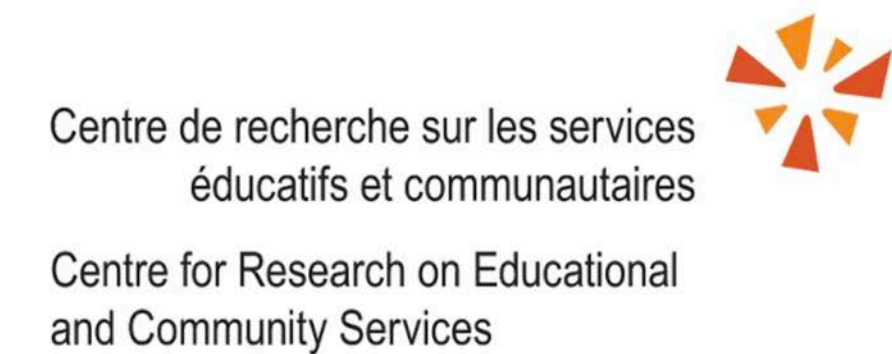
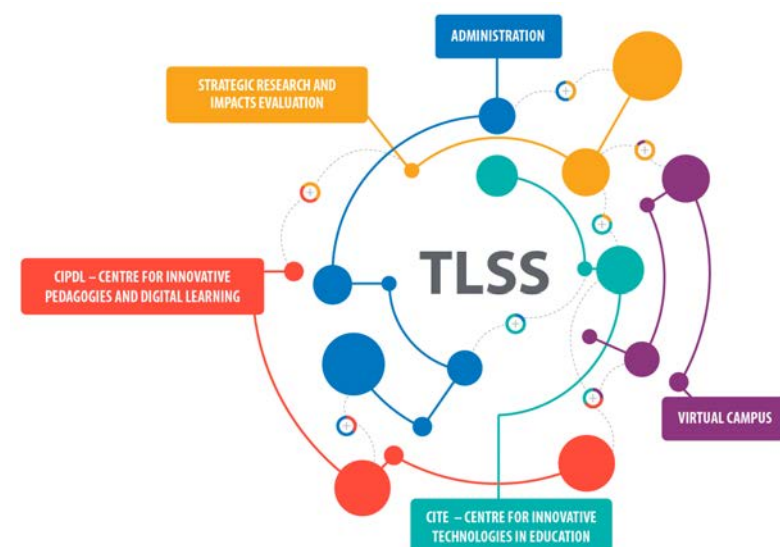
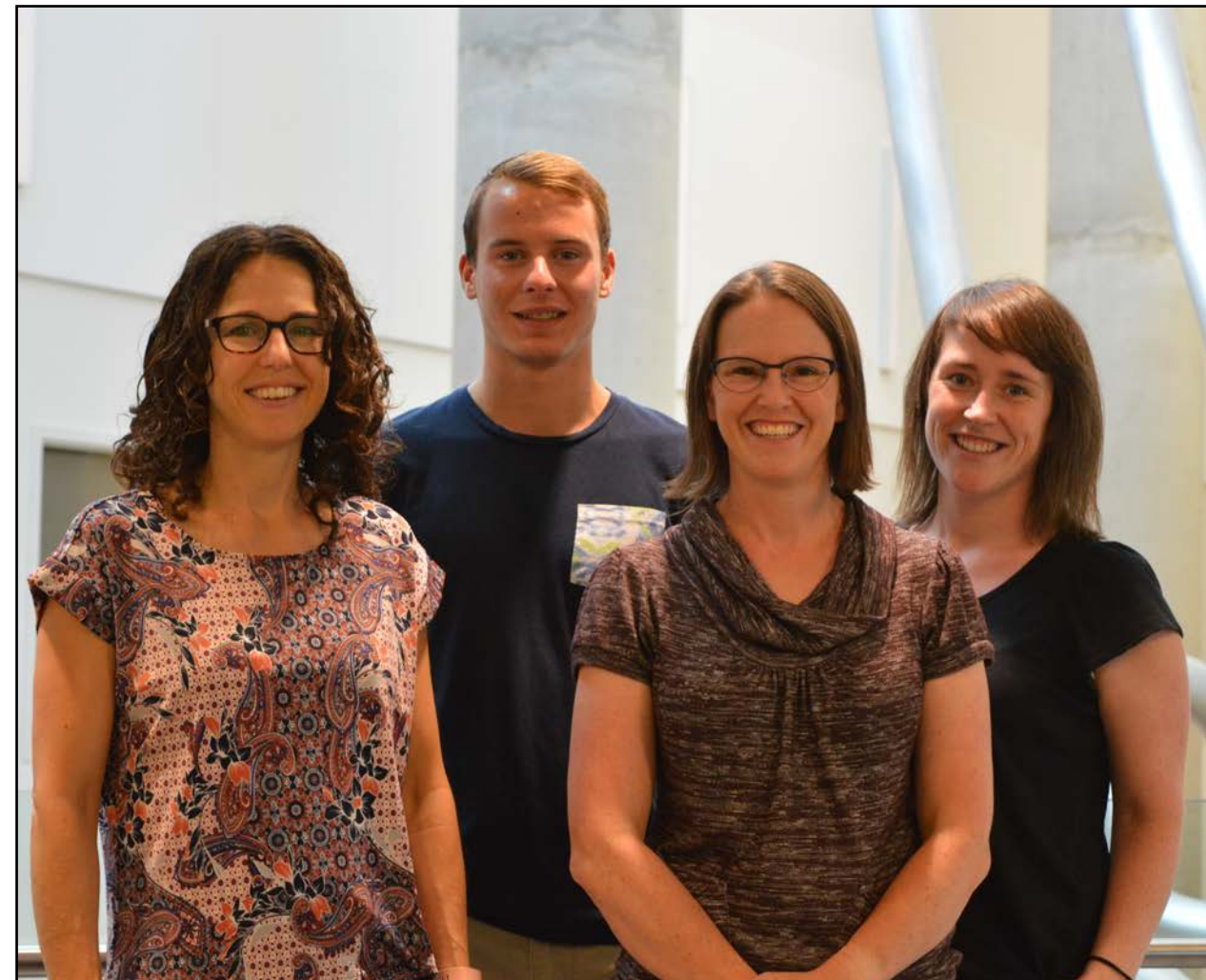
...

RQ5

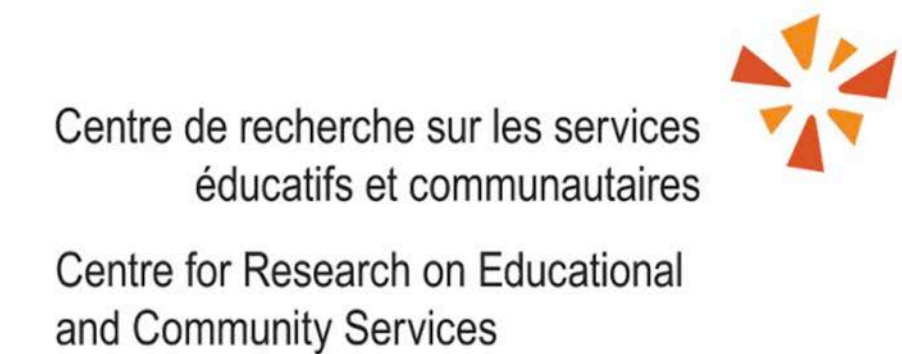
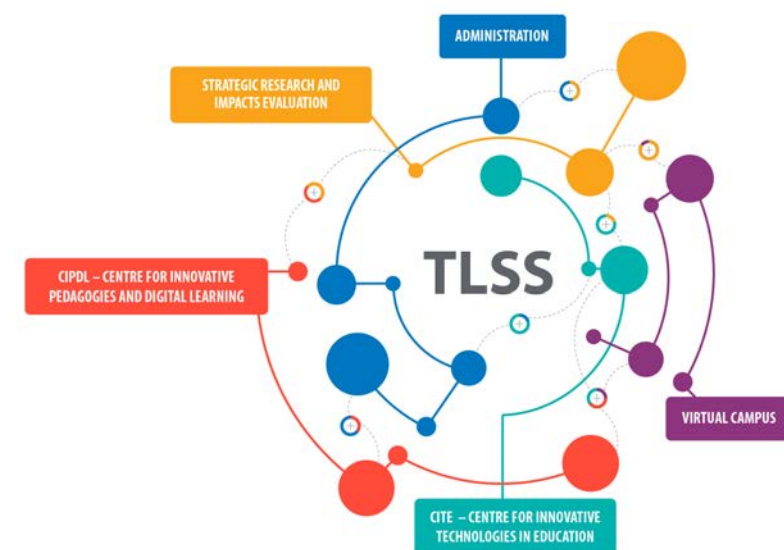
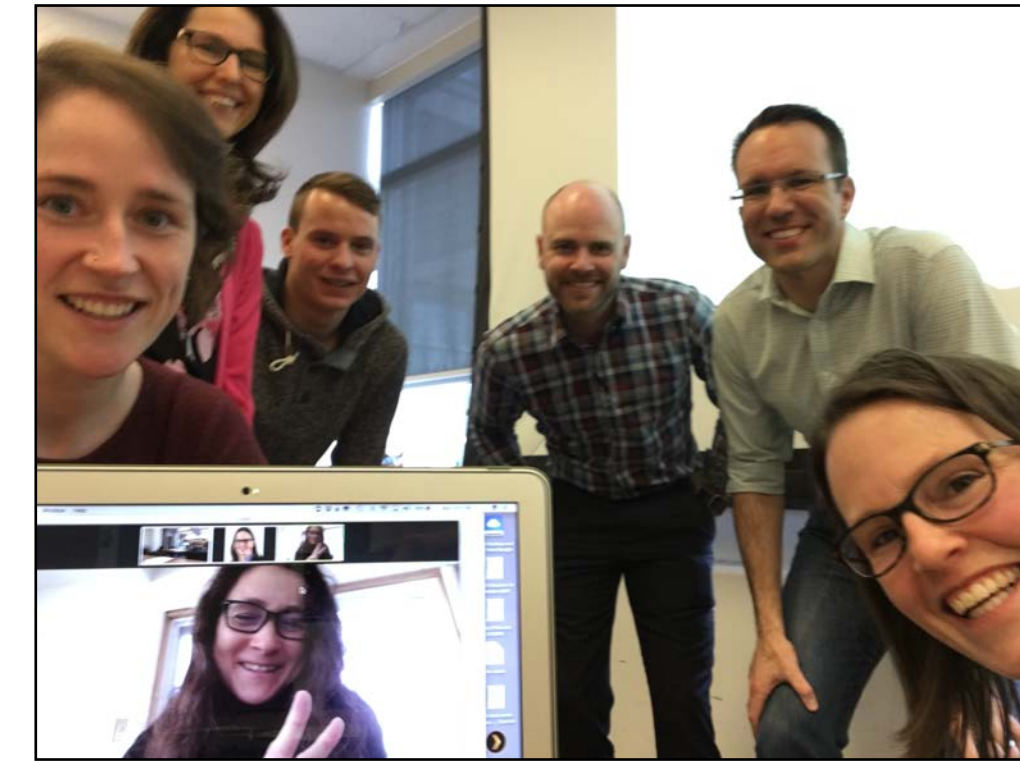
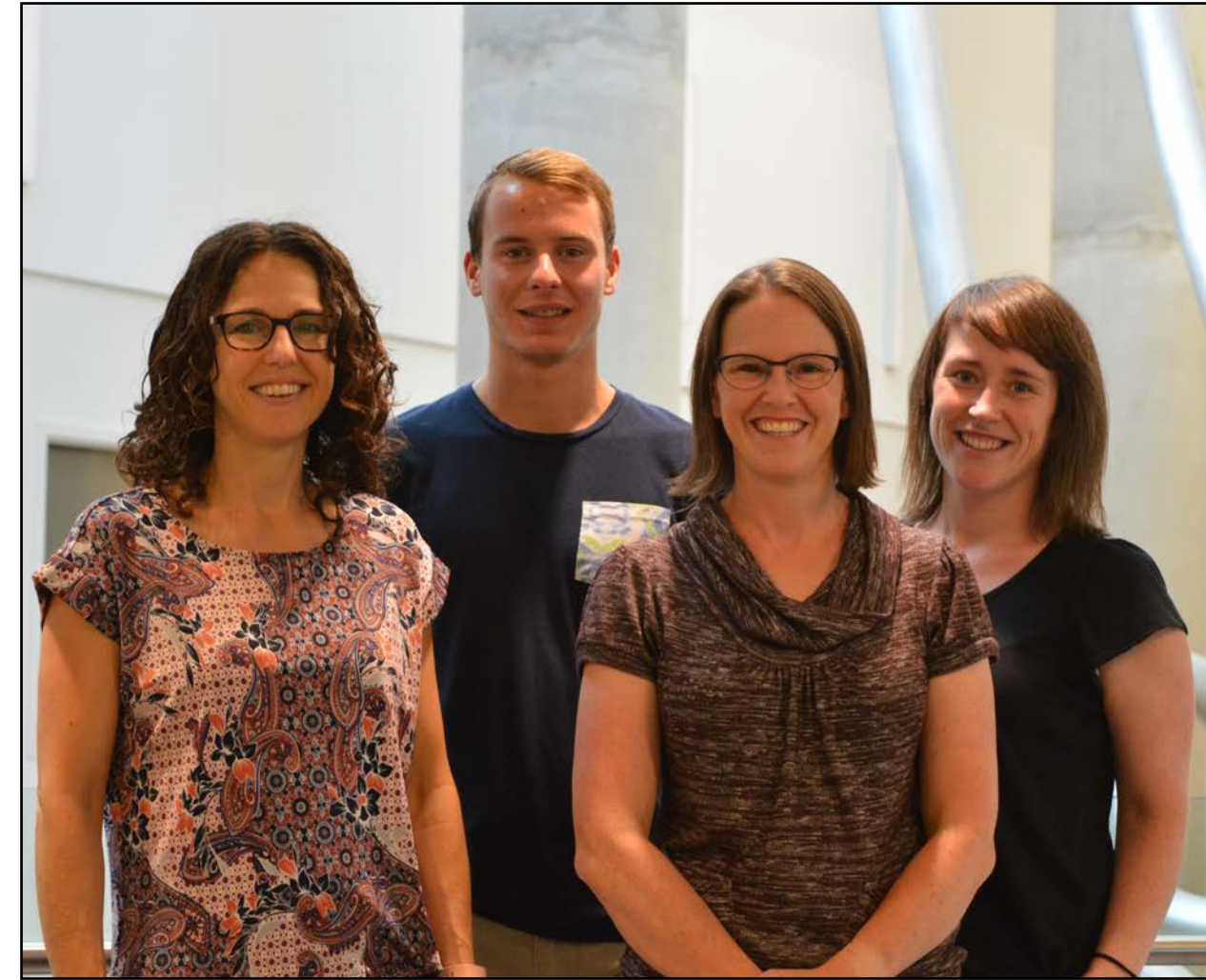
Plans for the future



Thank you!



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