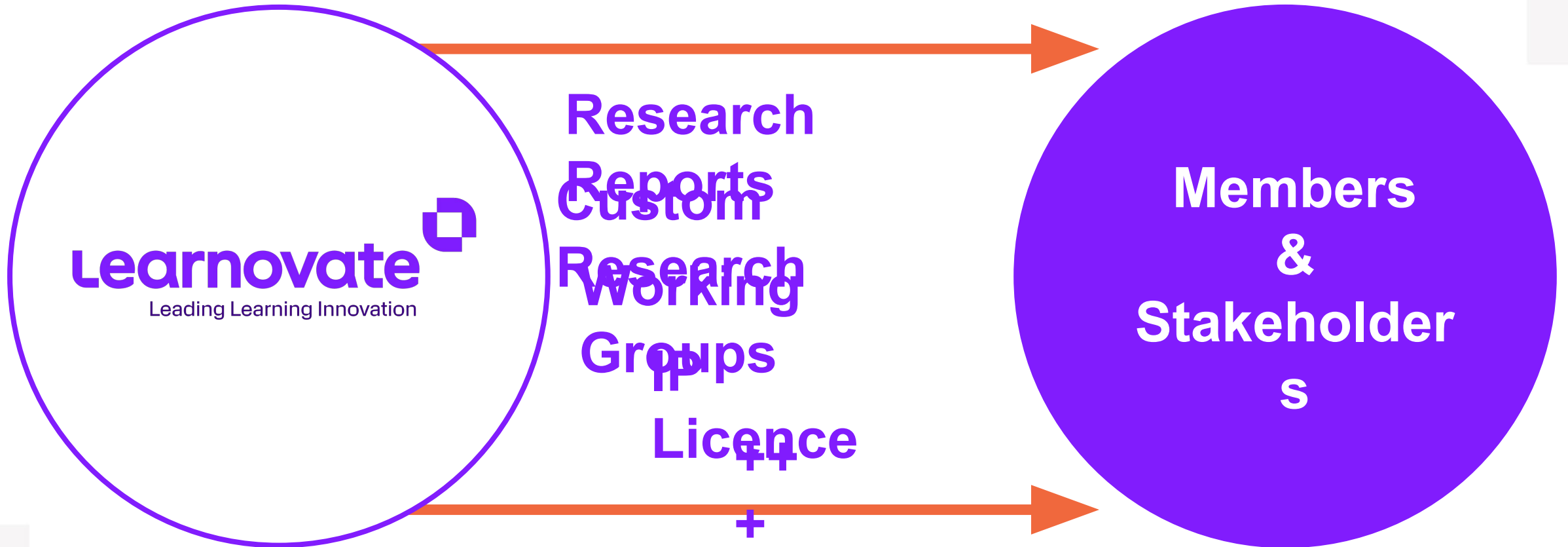![Learnovate logo]

From research to impact – how Learnovate is translating deep research into impactful initiatives in the real world

Dr. Peter Gillis – Innovation Team Lead

Research to Impact

Research Reports

Custom Research

Working Groups

IP Licence

+

+

Members & Stakeholders

Commercialisation Fund Projects

Enterprise Ireland's Commercialisation Fund supports third-level researchers to translate their research into innovative and commercially viable products, services and companies.

Enterprise Ireland
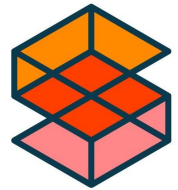
SoapBox

- Accessed 100m+ times by 2m+ children prior to

- Nov 2023 Curriculum Associates (CA),
  now available to over 14 million children

- SoapBox team >> AI Innovation Hub for CA (AI Labs)

- Secured over 45 high value roles in Ireland

- CA = 2500+ roles in US, India, Ireland and Australia

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Deep Research to Impact
Commercialisation Fund Projects

ALPACA

Spun out 2024

Principal Investigator
Dr. Jennifer O'Sullivan
Marino Institute of Education

Collaborated with Learnovate to create a digital assessment for early childhood literacy, changing the world of dyslexia interventions.

integrityIQ

Spun out 2025

Principal Investigator
Dr Daniel Malan,
Trinity Business School

Collaborated with Learnovate to create a corporate integrity management platform to fight the global problems of bribery, corruption, nepotism and other unethical decision making.

Diotima

Spinning out 2026

Co-Principal Investigators
Dr Ann Devitt,
School of Ed. Trinity College Dublin.
Dr Carl Vogel,
School of Computer Science.

Collaborating with Learnovate to create an AI powered assistant to ease the challenges with delivering formative feedback on written assessments.

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Deep Research to Impact

Commercialisation Fund Projects

Principal Investigator
Dr. Peter Gillis
Learnovate, Trinity College Dublin

Collaborating with Learnovate to create an intervention model to profile and alleviate academic amotivation for undergraduate students.

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A (global) problem worth solving

Ireland - **11%** of higher education new entrants in 2022/23 did not progress to the following academic year. (HEA 2024)

U.S. - First-time, full-time undergraduate freshmen have a 12-month dropout rate of **23.3%** in the U.S. (Hanson, 2024).

Spain - **20.8%** of incoming students dropped out of undergraduate university
for good. (Fernández-Mellizo, 2022).

University College Dublin - 29% of students reported academic motivational concerns
in the first semester
(Gibney, Moore, Murphy, and O'Sullivan, 2011).

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Academic Amotivation

Self Determination Theory of Motivation (SDT),
(Deci and Ryan, 1985)

Start with the problem

Spectrum of SDT		
Amotivation	Extrinsic Motivation	Intrinsic Motivation

Negative Internally Held Beliefs			
Ability	Effort	Value	Task Characteristics
Performance	Self-esteem	Problem Behaviours	Drop out
Negative Academic Outcomes			

(Legault, Green-Demers and Pelletier, 2006)

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SotA - the research gap

no evidence found of a personalised 'nudging' approach, directly with students, to alleviate academic amotivation in 1st year undergraduates.


Undergraduate dropout has been shown to have the negative effects across; the student, the institution, and society, Sarra, Fontanella, & Di Zio, 2019; Sosu & Pheunpha, 2019; Ulriksen, Madsen, & Holmegaard, 2010.

Ryan & Deci, (2019), more SDT intervention studies in education.

Physical Ed. & 2nd Language
Shen, Wingert, Li, Sun, & Rukavina, (2010), Jackson-Kersey & Spray, (2016) , Burden (2015)

Leroy & Bressoux, (2016) amotivation link to academic performance understudied.

A meta study of 92 motivation studies relating to motivation and performance did not feature the word 'amotivation' (Lazowski & Hulleman, 2016).
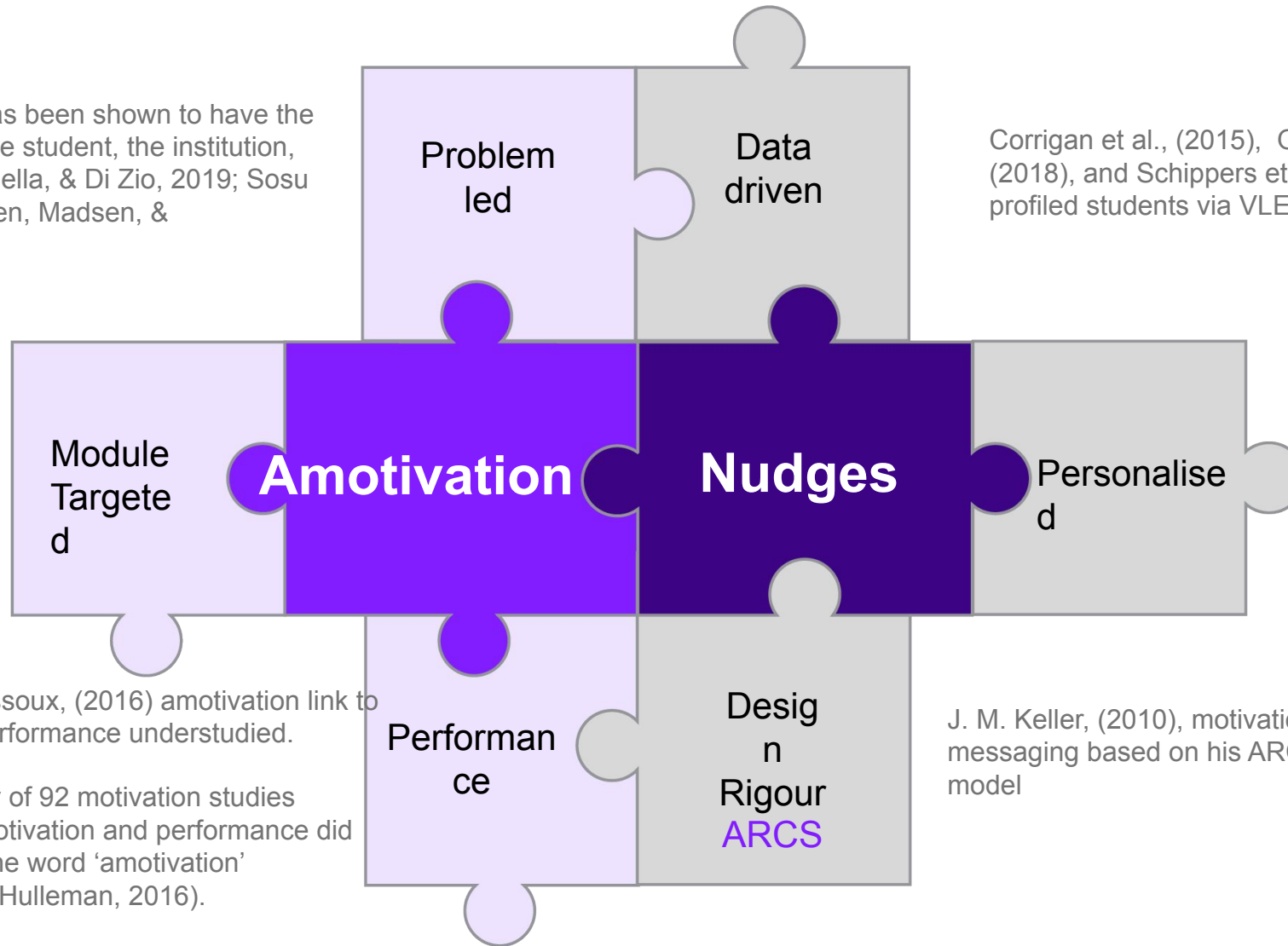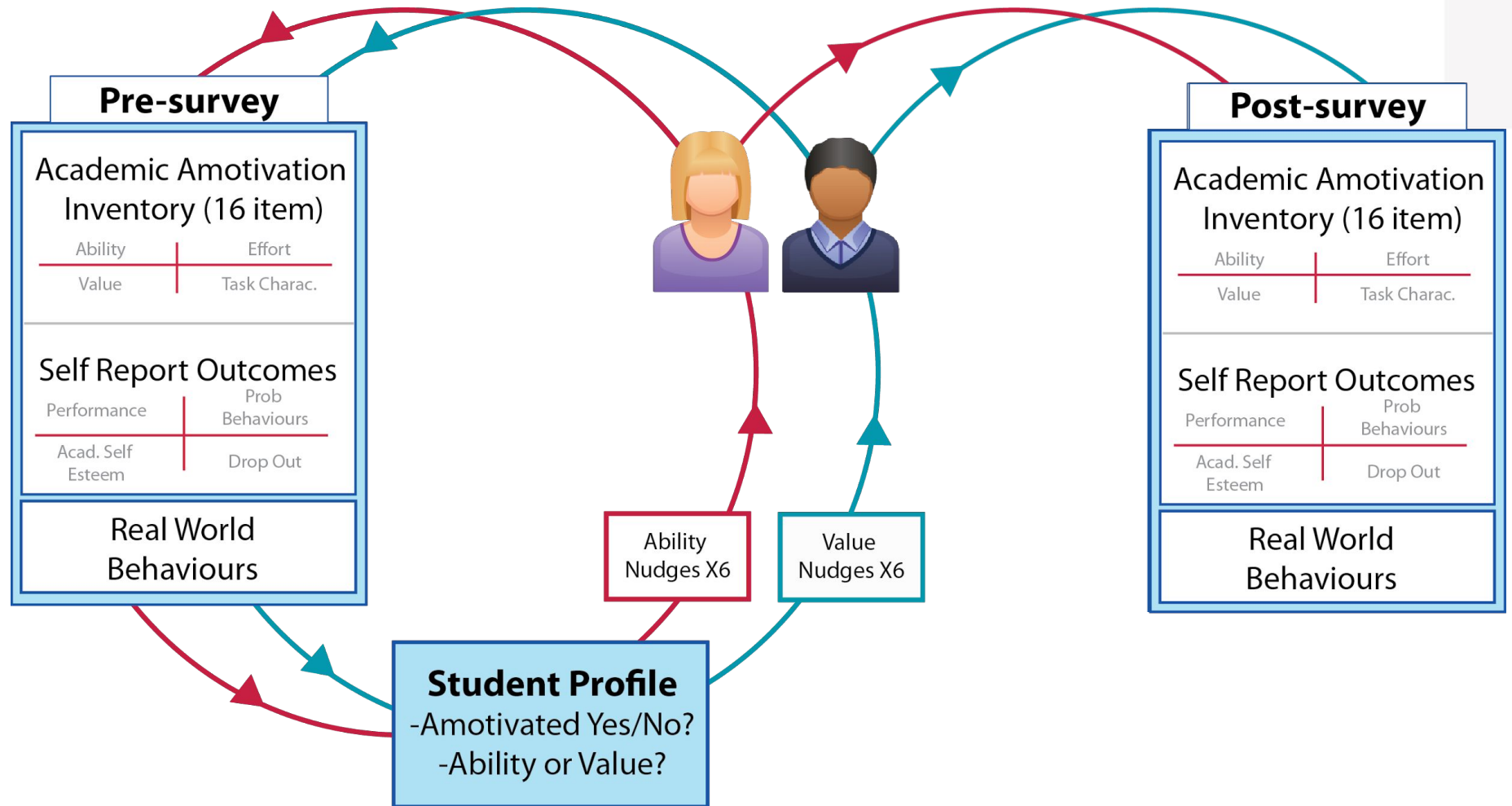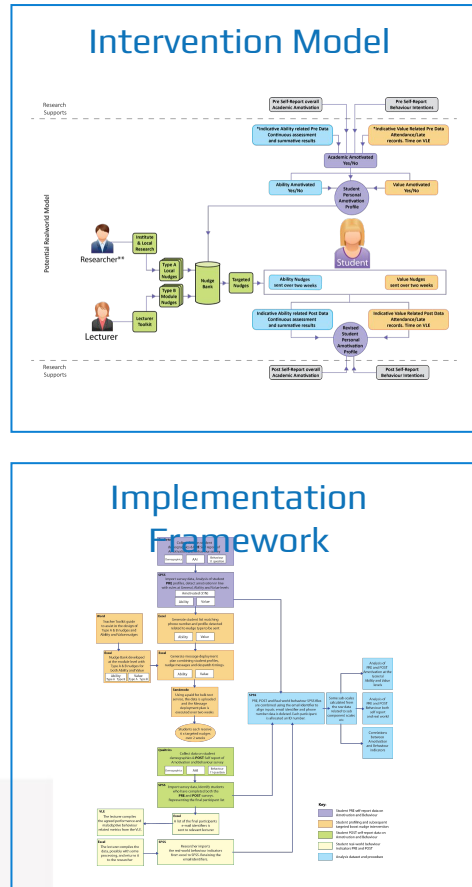
Corrigan et al., (2015), O'Connell & Lang, (2018), and Schippers et al., (2015) also profiled students via VLE indicators

Historical data, last log-in. Corrigan et al., 2015; O'Connell & Lang, 2018; personalised but not amotivation focused

J. M. Keller, (2010), motivation messaging based on his ARCS model

Problem led

Data driven

Module Targeted

Amotivation

Nudges

Personalised

Performance

Design Rigour ARCS

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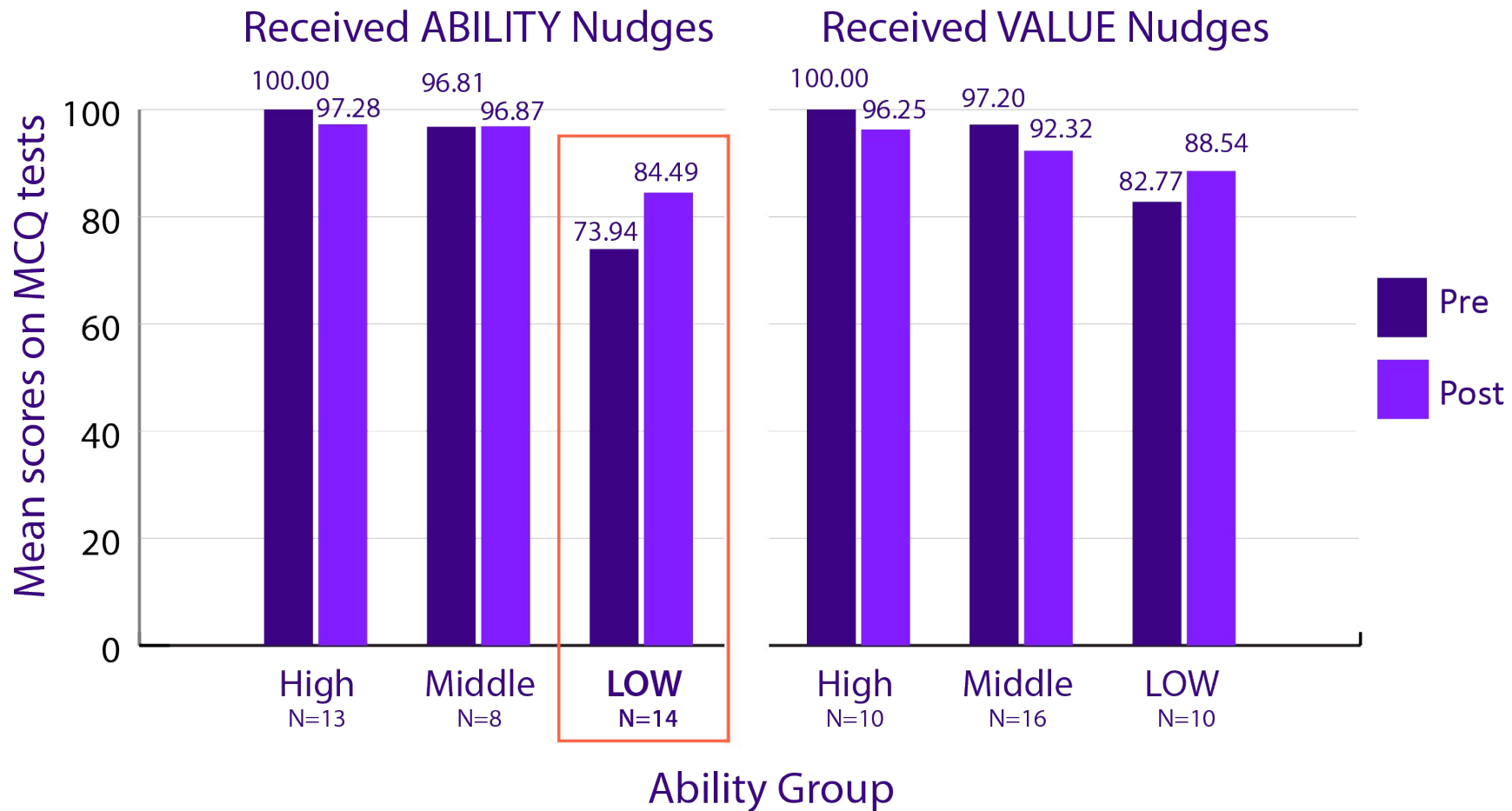# Intervention – Intervention Model & Implementation Framework

Primary Research - findings

Experiment 3: 125 1st year undergraduate participants over two academic years.

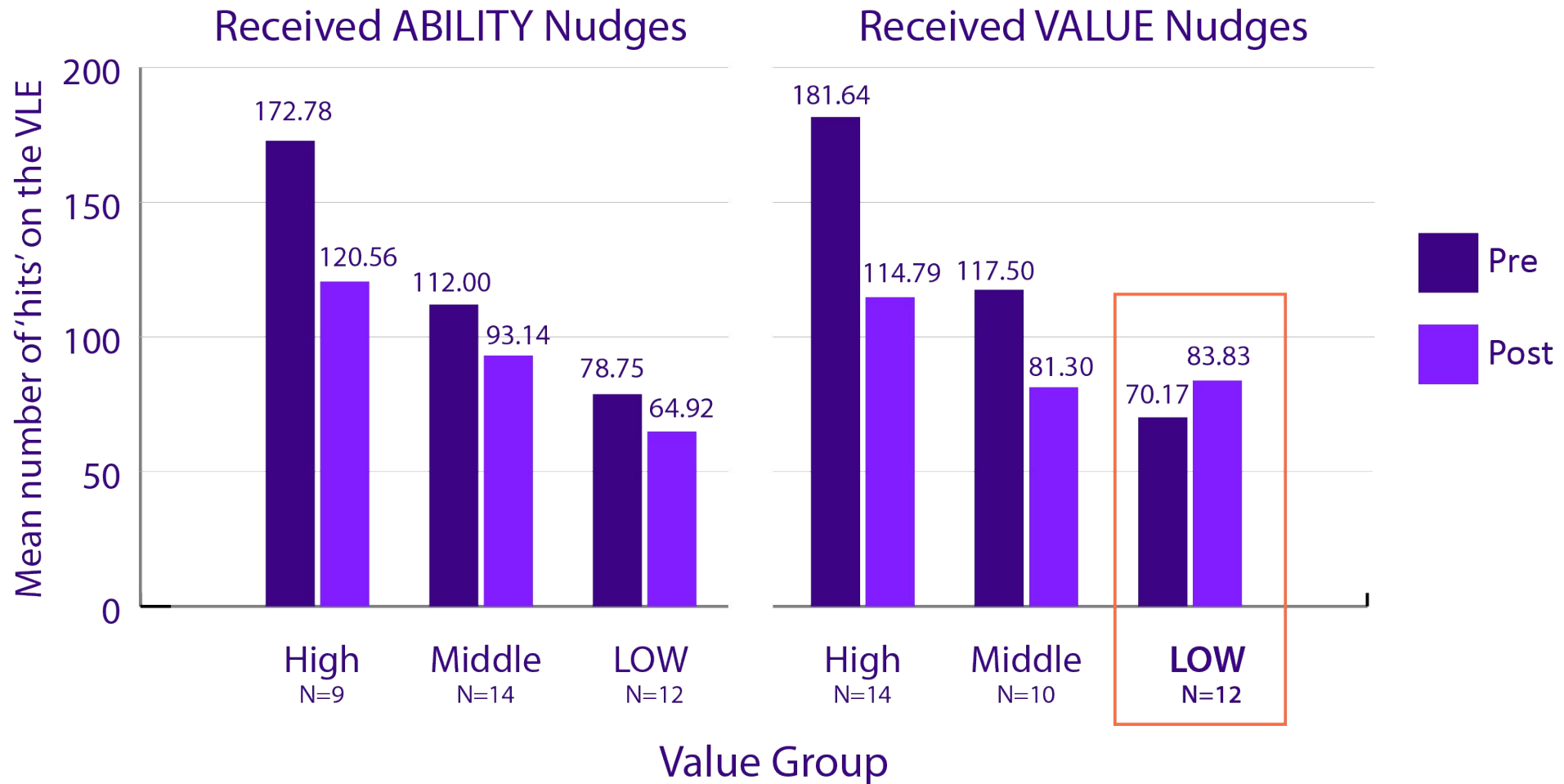| Amotivation Group	N	Nudge Type Received	Wilcoxon		AAI Ability Subscale Pre to Post	AAI Value Subscale Pre to Post
Not Amotivated – Ability dominant	16	Ability	Z		-.859	-1.029
			Asymp. Sig. (2-tailed)		0.390	0.303
Not Amotivated – Value dominant	23	Value	Z		-.914	-.316
			Asymp. Sig. (2-tailed)		0.361	0.752
Middle Group – Ability dominant	20	Ability	Z		-2.190	-.728
			Asymp. Sig. (2-tailed)		0.028	0.466
Middle Group – Value dominant	21	Value	Z		-.066b	-.667
			Asymp. Sig. (2-tailed)		0.947	0.505
Amotivated – Ability dominant	29	Ability	Z		-2.690	-1.271
			Asymp. Sig. (2-tailed)		0.007	0.204
Amotivated – Value dominant	28	Value	Z		-.637	-2.926
			Asymp. Sig. (2-tailed)		0.524	0.003

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Primary Research - findings

Ability amotivation is linked with performance

Primary Research - findings

Value amotivation is linked with maladaptive behaviour

Received ABILITY Nudges — Received VALUE Nudges

Mean number of 'hits' on the VLE vs Value Group

Received ABILITY Nudges:
- High (N=9): Pre 172.78, Post 120.56
- Middle (N=14): Pre 112.00, Post 93.14
- LOW (N=12): Pre 78.75, Post 64.92

Received VALUE Nudges:
- High (N=14): Pre 181.64, Post 114.79
- Middle (N=10): Pre 117.50, Post 81.30
- LOW (N=12): Pre 70.17, Post 83.83

Legend: Pre, Post

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Deep Research to Impact

Commercialisation Fund Projects

FIRST SUPPORT

Principal Investigator
Dr. Peter Gillis
Learnovate, Trinity College Dublin

Collaborating with Learnovate to create an intervention model to profile and alleviate academic amotivation for undergraduate students.

- A product that could support your organisation

- A product you may be interested in discussing further

- Have an idea for a different product

- Core projects can lead to products, get involved

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Thank you!

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