

April 2018
Coventry University
Christine Broughan and Caroline Wilson

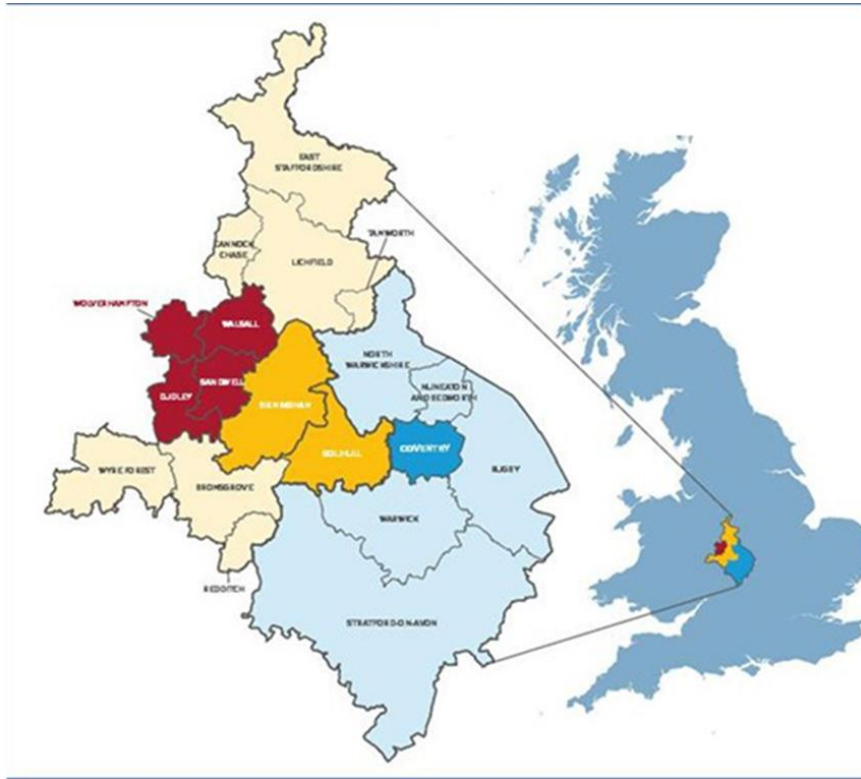
DRIVER  **Data Response Initiatives as a Vehicle**
for achieving **Equity in Results**



This presentation will...

- Outline current HEFCE project
- Introduce the framework we are using to design and evaluate our project
- Show you how it works in practice
- Illustrate how it might work for your organisation

A regional project addressing barriers to student success



- Two overarching functions:
 - Using learner analytics to personalise support for HE students
 - Deploying an institutional change model of inclusion
- Timeline: Start March 2017 – end February 2019
- Total Project costs £937,500 (Catalyst funding £375,000)

HEFCE Catalyst Fund: Addressing Barriers to Student Success PROJECT OVERVIEW

Why/Issue to be addressed

Students entering HE who are not reaching their full potential, in particular students from disadvantaged backgrounds are less likely to achieve a 'good' degree

How to address/Solution

- Develop and implement an intervention using learner analytics to personalise support for HE students
- Deploy an institutional change model of inclusion through a multi-layered process of micro-adjustments, with methodologies transferable to other institutions

Who/Target Group

Students entering HE from colleges where students from disadvantaged backgrounds (BME, commuter, mature, low socio-economic backgrounds, etc.) are highly represented, yet less likely to achieve a good degree

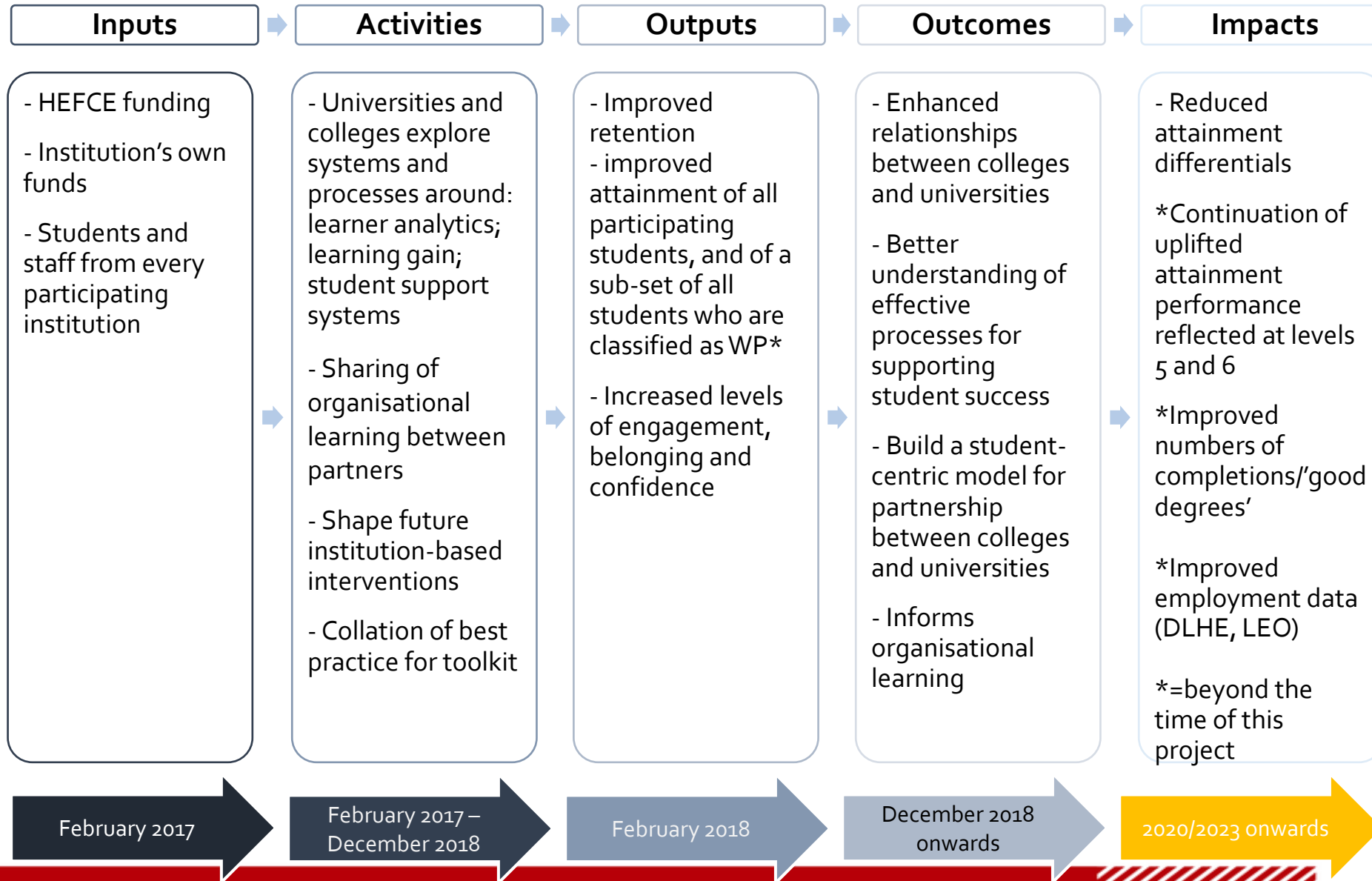
What/Intermediate Activities

- Knowledge exchange workshop: whole institution change model
- Identification of effective practice
- Identification of common challenges
- Benchmark data or activities pre and post interventions
- Systems approaches: review and student support interventions

What/Ulimate Activities

- Scaling up use of existing data sets to inform business intelligence models for institutions
- Creation of an inclusive practice organisational toolkit to transform the culture and practice to:
 - a) Support disadvantaged students
 - b) Develop staff

Logic Chain of Intervention (s)



- Whole project quantitative analysis of student data featuring incoming UCAS tariff points, End Yr 1 attainment, WP data, and ‘intervention’ participation.
- Localised focus on transitioning students:

Coventry
University
College

130 students

Coventry
University

Halesowen
College

140 students

University of
Wolverhampton

Stoke on Trent
College

112 students

Staffordshire
University

The 6th Form
College,
Solihull

71 students

Birmingham
City University

Common Framework

- The Theoretical Domains Framework (TDF) identifies 14 key barriers/enablers to a person adopting a voluntary behaviour, making for better design of and higher impact behaviour change interventions¹.
- The TDF aligns with the logic chain conceptualisation of the DRIVER project, in that that the theorised problem is addressed by an activity designed to address and overcome the problem, with the increase in a specific voluntary behaviour as a result².
- TDF is not a theory – it is a theory-informed guide for implementers

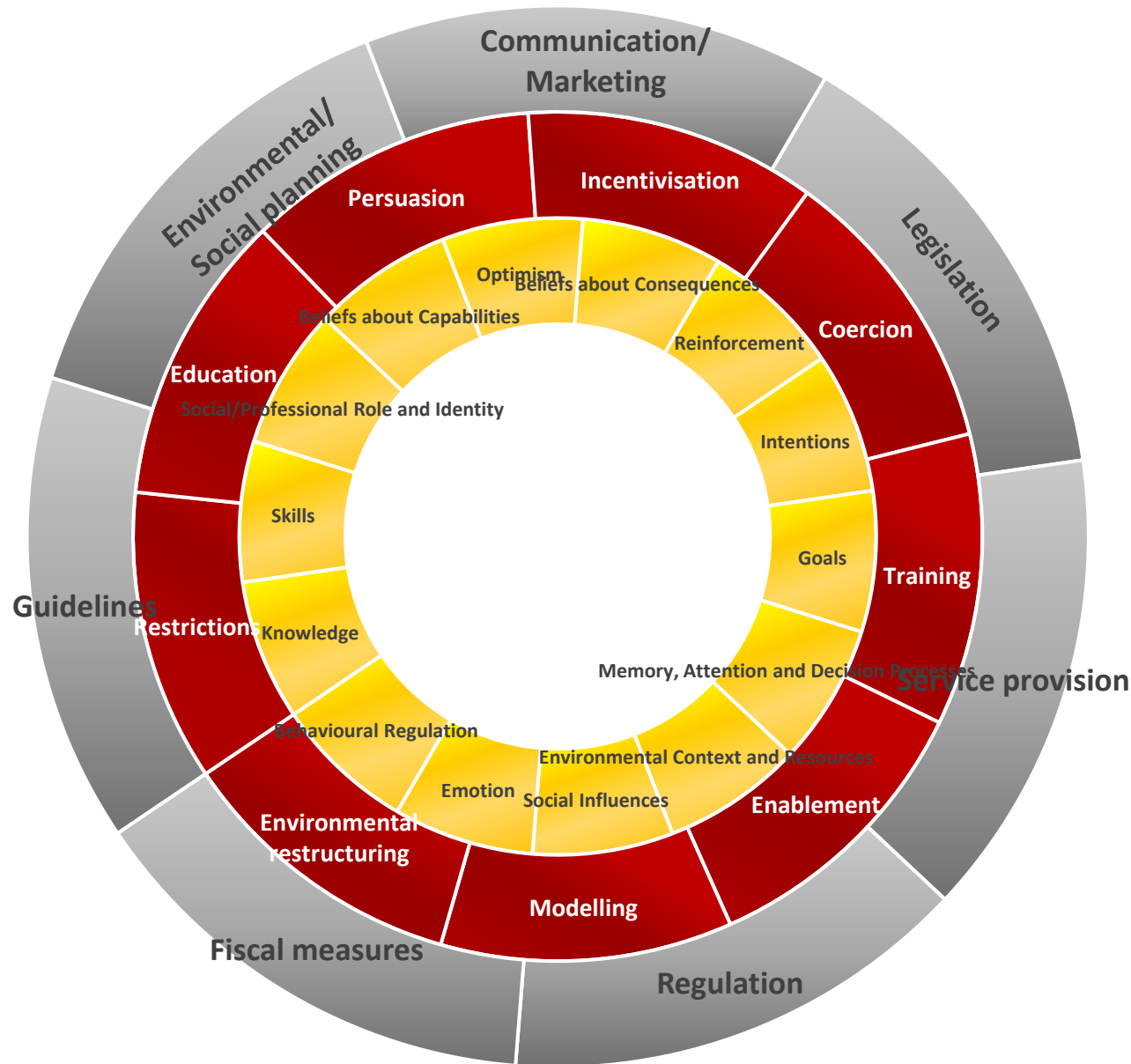
¹Huijg, J. M. et al., M. R. (2014).

²Atkins, L., et al. (2017).

Common Framework²

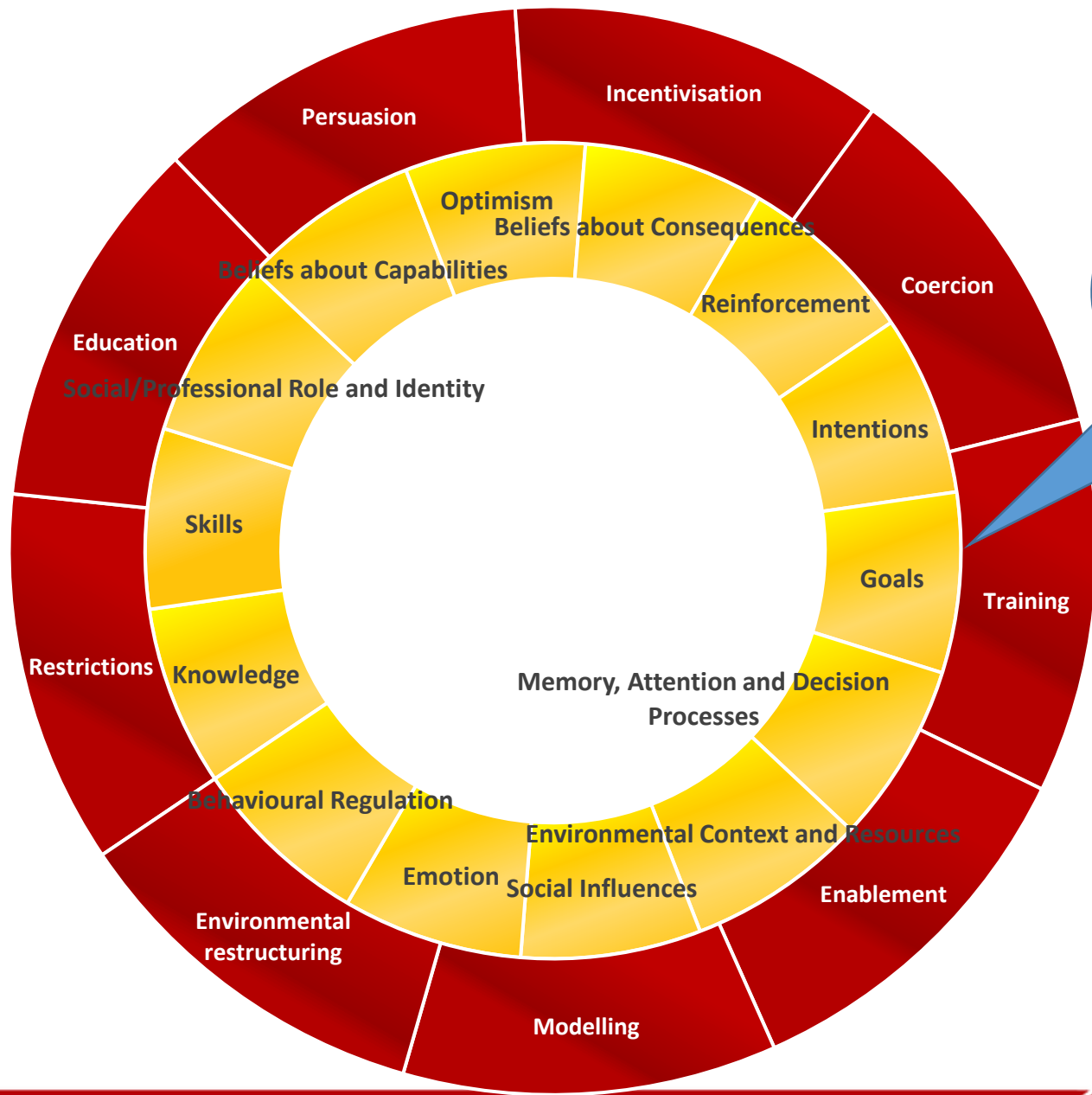
- A key output of DRIVER will be detailed descriptors of each intervention, the context in which they were used, and associated results (outcomes)
- Helps organisational learning, guidance for further roll-out/scalability
- Combinations of techniques may enhance, or reduce effects.
- Intervention descriptions which leave out detail about how it was delivered, may lead to sub-optimal adoption in another context¹

¹ Abraham, C., & Michie, S. (2008)



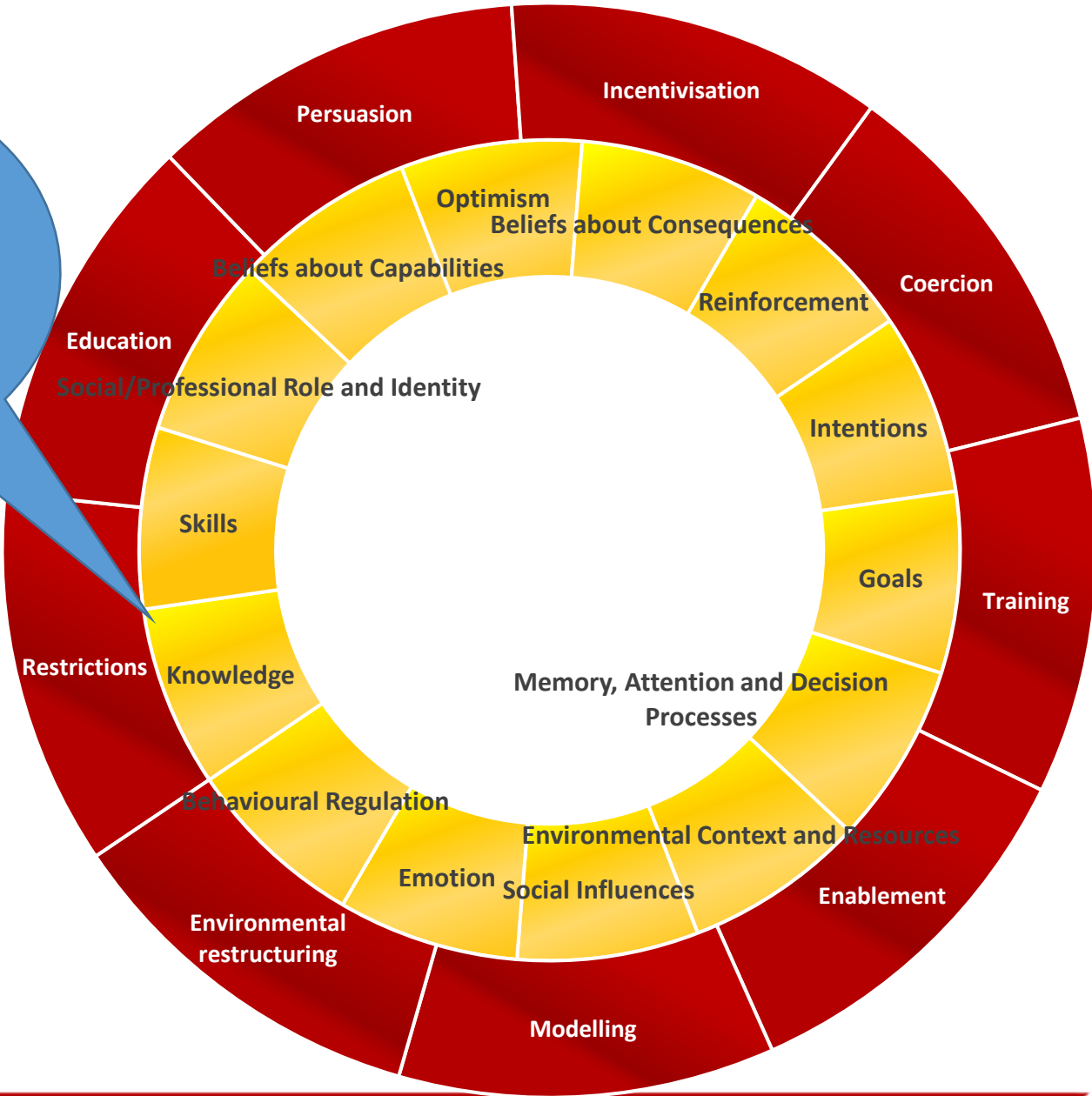
Based on Behaviour Change Wheel (Michie, S., van Stralen, M. M., & West, R. 2011).

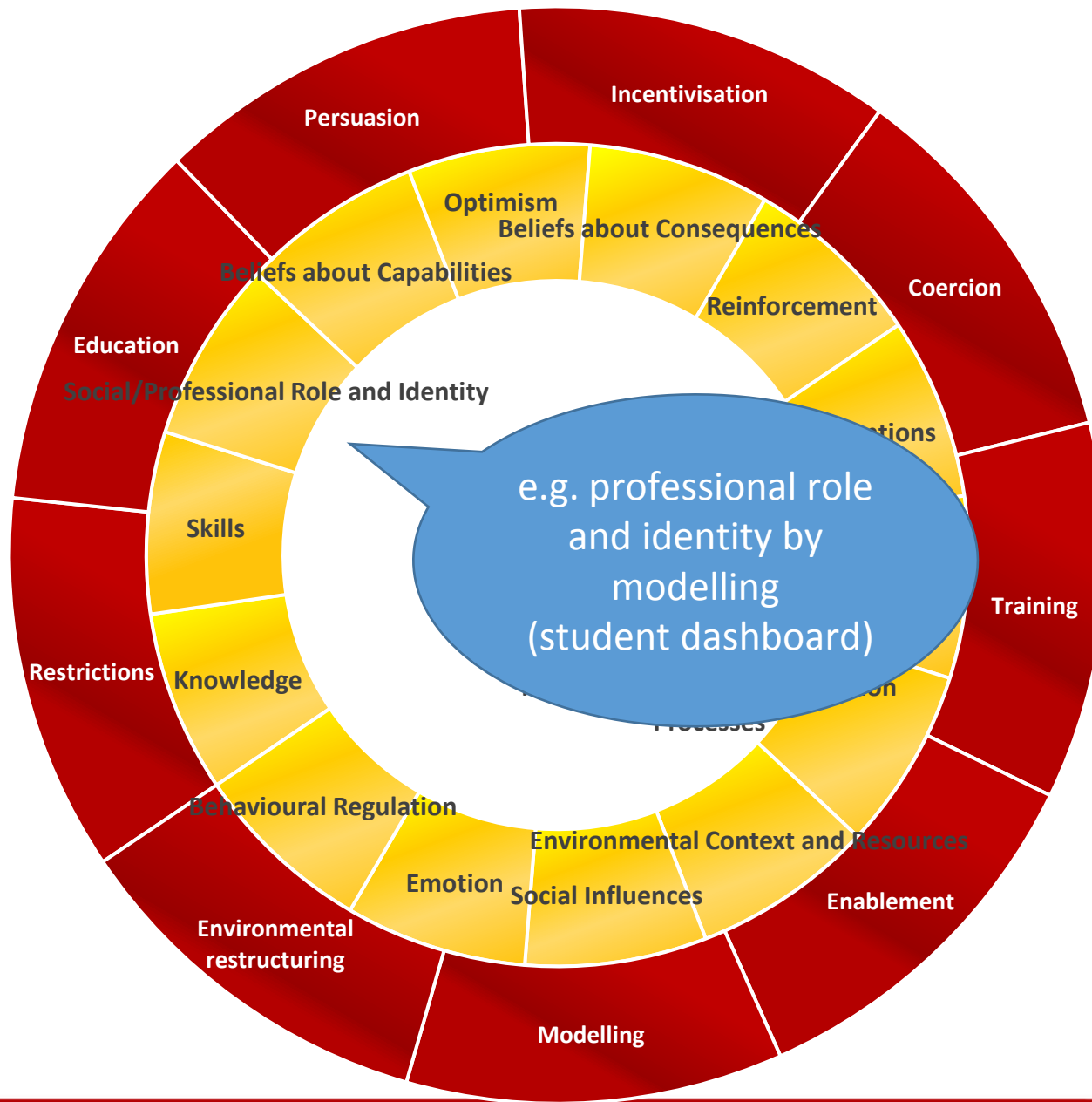
Augmented by Theoretical Domains Framework (Cane, J., O'Connor, D., & Michie, S. 2012).



Not a fixed wall – need a turntable here!

e.g. knowledge enhanced through education intervention





Categorising interventions - Step 1 of specifying for scalability

- Think of an transitioning activity at your institution. Using TABLE 1, try to fit your activity to one category only (if you have picked a holistic or multi-faceted activity consider splitting into constituent parts)
- Share your reasoning with your table

Interventions	Original BCW Definition	Constructs and examples from other BCW analysis or frameworks	Higher Education examples
Education	Increasing knowledge or understanding		<i>Learning Discipline-specific knowledge and practices</i>
Persuasion	Using communication to induce positive or negative feelings or stimulate action		<i>Communication of high expectations Communicate relevance of curriculum/skills development Inspire students to aim high</i>
Incentivisation	<ul style="list-style-type: none"> • Creating an expectation of reward • <i>Creating an expectation of reduced cost</i> 	<ul style="list-style-type: none"> • Feedback on behaviour⁶ • Commitment⁶ • Discrepancy between current behaviour & goal⁶ 	<i>Timely feedback on progress Enriching educational experiences Fair assessment Student prizes</i>
Coercion	Creating expectation of punishment or cost	<ul style="list-style-type: none"> • Feedback on behaviour⁶ • Commitment⁶ • Discrepancy between current behaviour & goal⁶ 	<i>Attendance monitoring Institutional monitoring of departments, and programmes with poor progression and completion numbers</i>
Training	Imparting skills	<ul style="list-style-type: none"> • Demonstration and instruction on how to perform a behaviour⁶ • Feedback on behaviour⁶ 	<i>The use of web and computer to support learning and access resources Assessment technique</i>
Restriction	Using rules to reduce the opportunity to engage in the target behaviour		<i>Submission deadlines, library fines Measures to combat plagiarism</i>
Environmental restructuring	Changing the physical or social context	Adding objects to the environment ⁶	<i>Welcoming, well equipped study spaces Real time displays of availability/app-enabled booking Subsidies, loans, grants Group learning opportunities</i>
Modelling	<ul style="list-style-type: none"> • Providing an example for people to aspire to or imitate 	Demonstration of behaviour ⁶	<i>Dashboards allow students to compare with peers/average performances and set goals Guest speakers from industry Role models</i>
Enablement	Increasing means/reducing barriers to increase capability (beyond education and training) or opportunity (beyond environmental restructuring)	<ul style="list-style-type: none"> • Goal setting⁶ • Problem solving⁶ • Action planning⁶ • Commitment⁶ • Discrepancy between current behaviour & goal⁶ 	<i>Loans, grants Readily available study skills support Establishment of a learning community Regular opportunity for interaction between student and staff A culture of trust between lecturer and student</i>

Adapted from Table 1 of Wilson, Broughan & Marselle (2018)

	BCU/Sol	Wlv/Hal	Sta/Sto	Cov/CU
Knowledge	2		1	1
Skills	2	2	2	2
Social/Professional Role and Identity	1	2	2	1
Beliefs about Capabilities	1	2		2
Optimism	2			
Beliefs about Consequences	2			2
Reinforcement	2			
Intentions	2	2	1	2
Goals	2	2	2	2
Memory, Attention and Decision Processes	2		2	
Environmental Context and Resources	2	1		2
Social Influences	2	2	2	2
Emotion	2		2	
Behavioural Regulation	2		2	

Barriers and Drivers chosen by partners


TDF: value?

- Good evaluation tool? Is helping us match up perceived problem and a suitable intervention (plus also to assess whether intervention is successful at tackling perceived problem)
- Before teams start with an intervention, use to find out what *type* of intervention is needed? (rather than scale up or imitate an intervention used elsewhere which was successful in another context)
- Good audit tool? Are in danger of doing ‘same old same old’ – e.g. another intervention to pass on knowledge (to students or staff) but not skills/physical opportunity?
 - Our own research into student engagement guidance shows emotional motivation (Emotional motivation, e.g. Social/Professional role and Identity) to be a common missed opportunity (Wilson, Broughan & Marselle, forthcoming)

Next steps for DRIVER

Building our toolkit of what worked with context to enable scalability/replication.

Colonel Brandon



A Top Trumps card for Colonel Brandon. The card features a portrait of the character, a 'TOP TRUMPS' logo, and a list of attributes with their respective values: WEALTH 8, WIT 17, INFLUENCE 14, ATTRACTION 60, and TOP TRUMPS RATING 68. The card is framed by a blue border.

WEALTH	8
WIT	17
INFLUENCE	14
ATTRACTION	60
TOP TRUMPS RATING	68

By treating the Dashwood's with respect, generosity and kindness, this retired officer eventually gets his reward by marrying the loving Marianne Dashwood. As Jane observes, "her regard and her society restored his mind to animation, and his spirits to cheerfulness."

		Mode (how was the technique delivered)	Content (what was delivered)	Further description
Intervention name	Who needs to do what differently	(e.g. if 'education', was it on the phone, via virtual learning environment, in class?)	Make sure to use verbs (e.g., provide, advise, arrange, prompt) that refer to the action(s).	Free text - any further information which might be needed to aid someone with no knowledge of the intervention to adopt it successfully elsewhere
Student Engagement Calls (Coventry)	Students with low digital footprint need to increase engagement	Check in' phone call to student with low engagement to ask if any help needed	Advice given, services referred to as necessary	Call centre receives alerts when student digital footprint is lower than cohort. Calls made to students by trained call handlers from student services

Questions?

Contacts:

- Prof Christine Broughan
- Christine.broughan@coventry.ac.uk
- Dr Caroline Wilson
- Caroline.Wilson@coventry.ac.uk
- Twitter: @CovUni_GLEA

Key literature

- Michie, S., van Stralen, M. M., & West, R. (2011). The behaviour change wheel: a new method for characterising and designing behaviour change interventions. *Implementation science* : IS, 6(1), 42.
- Cane, J., O'Connor, D., & Michie, S. (2012). Validation of the theoretical domains framework for use in behaviour change and implementation research. *Implementation science* : IS, 7(1), 37.
- Wilson, C., Broughan, C., & Marselle, M. (in press) A new framework for the design and evaluation of a learning institution's student engagement activities. *Studies in Higher Education*