Enhancing Metacognitive Skills in Primary Learners: The Role of University-Third Sector Partnerships in Addressing Regional Educational Disadvantage and Strengthening Educational Interventions

Dr Emily Magrath
Director of Programme Development & Impact **Into**University

Dr Chloe Cheetham
Impact & Evaluation Manager **Into**University

Bilal Hazzouri
Impact & Evaluation Manager ARU

IntoUniversity Model

Place-based intervention - **Into**University has been working at the heart of communities since 2002. Each centre offers a welcoming home-from-home for young people: a safe space to learn, explore and succeed and an innovative programme that supports young people aged seven and up including in after school programmes, mentoring and partnering with schools.

No academic selection to admit students. Anyone who meets our eligibility criteria based on rigorously researched metrics for educational disadvantage can take part.

Early and sustained intervention - Long-term work starting in Primary school is the best solution for communities with entrenched intergenerational disadvantage and low educational achievement.

IntoUniversity Theory of Change

Improve attainment

Develop a range of skills (including social, emotional and employability)

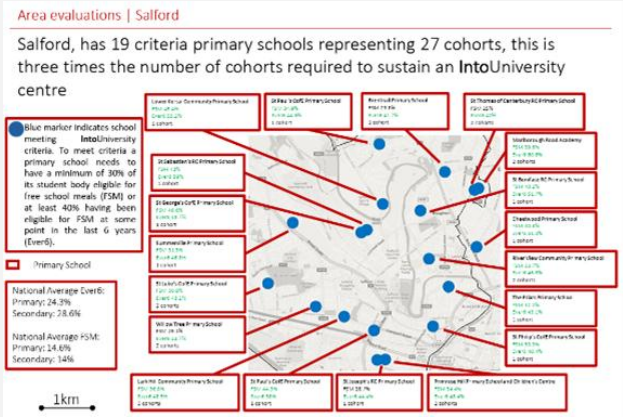
Belief in future success

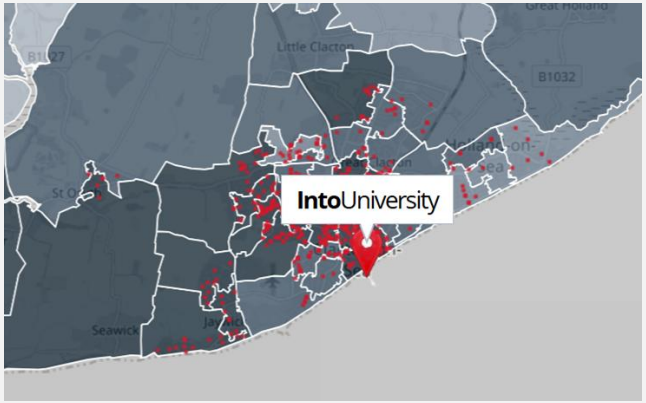
Knowledge about HE and career options

Our young people are more likely to…

1. Succeed in public examinations
1. Have a positive post-school outcome
1. Enter Higher Education

Targeting areas of need: regional operation





Project Overview

Office for Students

One of only 11 projects

Aim to support collaborative and innovative projects

Addressing Risks 1, 2 ,3 & 9 from Risk Register (EORR)

Metacognition

Buzzword

EEF High Impact: Low Cost

Supporting young people to learn more effectively

IntoUniversity

Design and Delivery of Programme

Operating in sites across network

Logistical oversight of project and data collection

Anglia Ruskin University

Supporting with evaluation resource and knowledge

Connection to academic staff and research

Presentations and Publishing

Collaboration

Project design

Evaluation and Reporting

Knowledge Sharing

Staged intervention:
Year 1 - 8 centres in two regions (Nottingham & Peterborough; South West)
Year 2 - Additional regions

Project Aims

This project will address the effectiveness of the development of metacognitive skills in early intervention measures out-of-school, both to support primary **students' attainment** and to **build knowledge and understanding of Higher Education**.

The project will support students to **learn and practise cognitive skills** to support their learning. The will over time be supported to embed these practices and, we hope, **develop their metacognitive thinking** and become self-regulated learners.

What are we doing?

"[Self regulated learners] are **proactive** in their efforts to learn because they are **aware of their strengths and limitations** and because they are guided by **personally set goals** and **task-related strategies**... These learners **monitor** their behaviour in terms of their goals and **self-reflect** on their increasing effectiveness. This enhances their **self-satisfaction** and **motivation to continue to improve** their methods of learning."

(*Zimmerman, 2002)*

Key questions

1. How should metacognition be assessed in primary age children?
2. How can metacognitive practices that are shown to be effective in a school environment be adapted to out-of-school interventions, and do they remain impactful?
3. Does teaching metacognition as part of a wider University Access programme affect other outcomes of interest?

Project Design

Phase 1: January – August 25

Review metacognition practice within Primary AS, design programme and evaluation framework, select sites and deliver training to staff

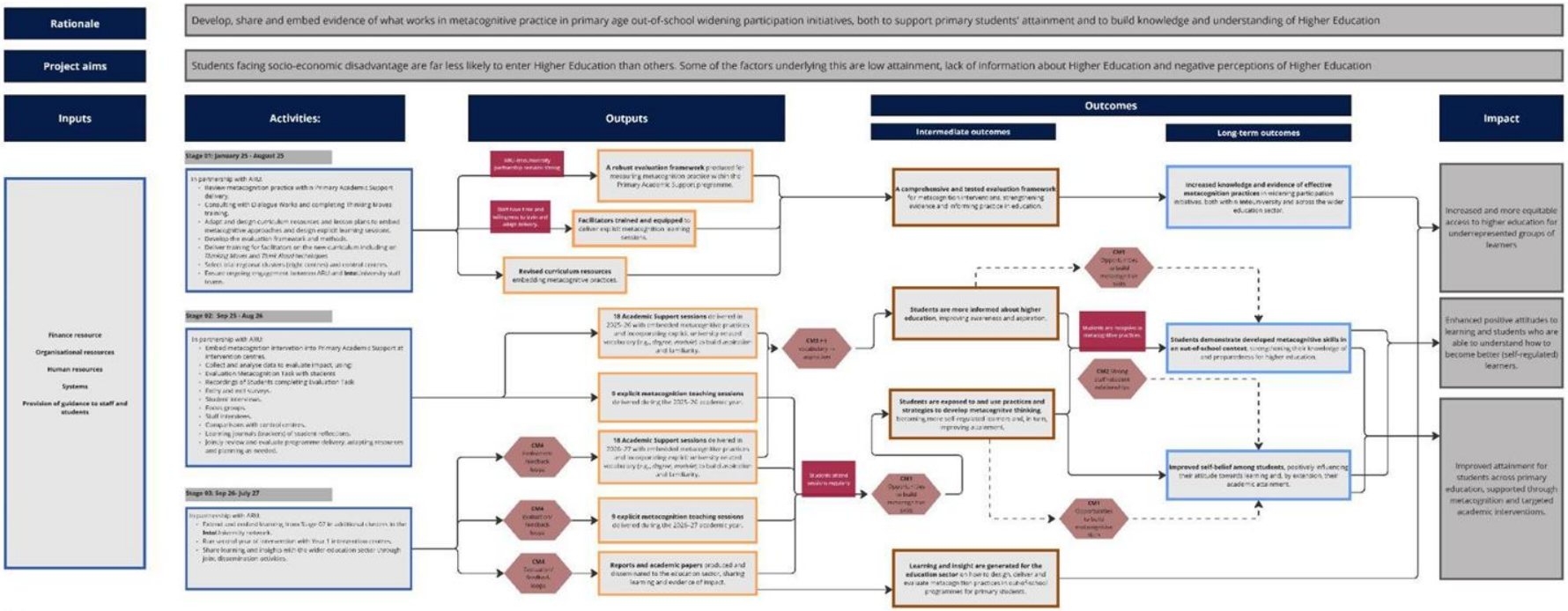
Phase 2: Sept 25 – August 26

Start delivery of programme in two clusters (8 centres) while matched control groups run usual programme, evaluate programme, collate learning from year 1

Phase 3: Sept 26 – July 27

Embed learning and run second year of delivery in additional centres, share insights with sector and publish. Final Report due October 2027

The Big Thinking Project Theory of Change



Change Mechanisms (CMs, cross-cutting)

- **CM1:** Direct teaching about metacognition and opportunities to build metacognitive skills and strategies enhances learner confidence and development.
- **CM2:** Staff model and teach strategies in learning sessions, reinforcing learning through strong staff-student relationships.
- **CM3:** Student development of metacognitive strategies enhances positive attitudes to learning, and consistent use of HE-related vocabulary normalises university pathways and raises aspirations.
- **CM4:** Continuous evaluation and feedback loops refine delivery, ensure fidelity, and amplify programme impact.

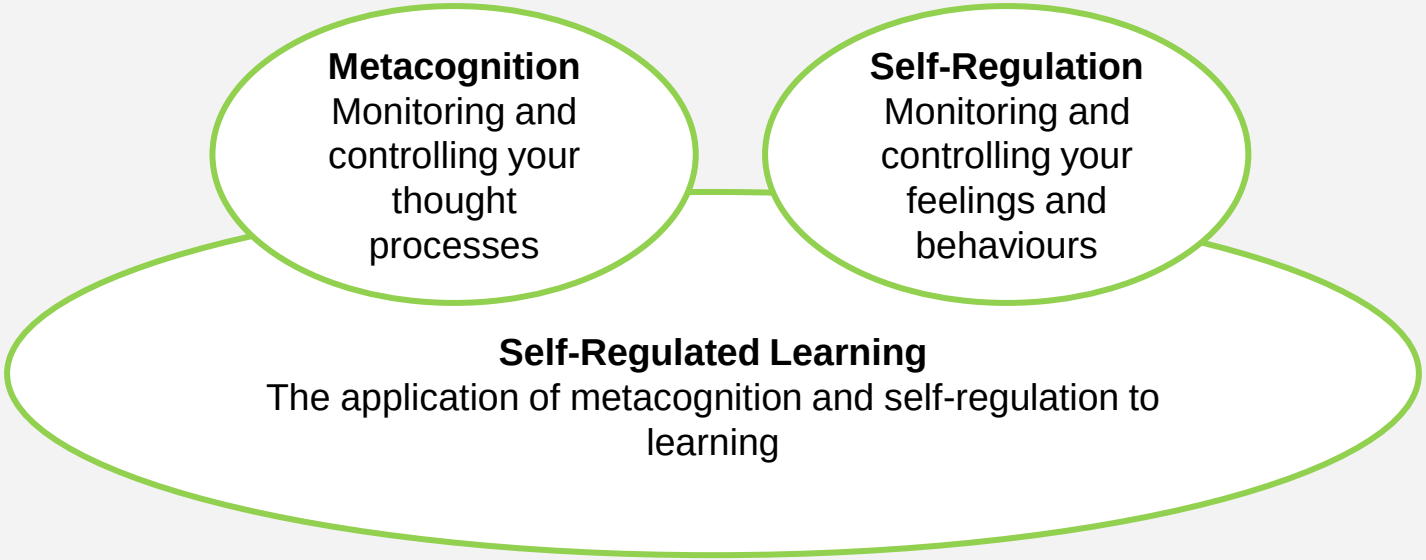
Foundational Assumptions

- Staff have time, capacity, and willingness to train and adapt delivery.
- Students attend sessions regularly and consent (with parents/guardians) to research participation.
- ARU–IU partnership remains strong and collaborative.
- Students are receptive to metacognitive practices.
- No major external disruptions significantly interrupt delivery.
- Data can be collected ethically and reliably to evidence impact.
- Building metacognitive skills will support raised attainment

THE BIG THINKING PROJECT

Office for Students

What are we doing?



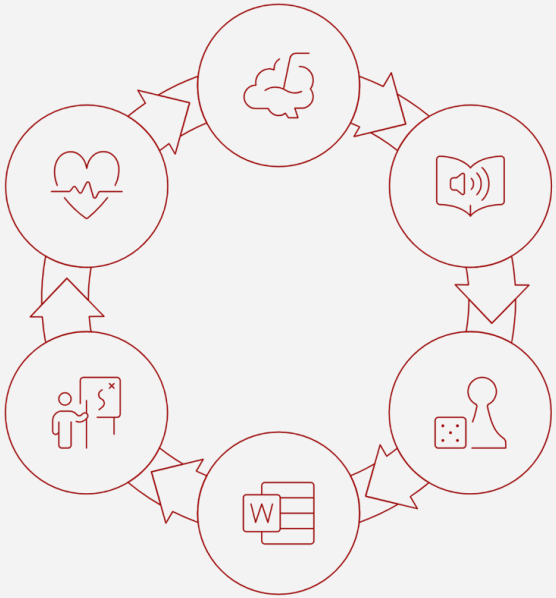
Mannion & McAllister (2020)

What are we doing?

Metacognition is broken down into three areas:

- Being able to have **knowledge of what a task** is
- Being aware of **knowledge about yourself,** evaluate your cognitive ability and reflect on your performance
- Having **knowledge of learning strategies** and being able to appropriately choose the right one for a task

Core Elements



Think Alouds

Verbalizing thoughts and thought processes

Oracy

Developing effective communication skills

Thinking Moves

Learning and using the 26 A-Z structured moves - a structured framework for thinking

Shared Vocabulary

Establishing a common language for thinking

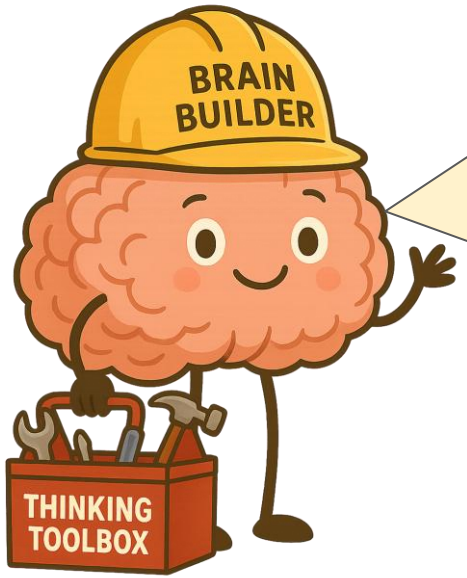
Teaching Strategies

Modelling and using cognitive strategies and supporting students to practice metacognition

Emotional Regulation

Managing and understanding emotions

Welcome to…



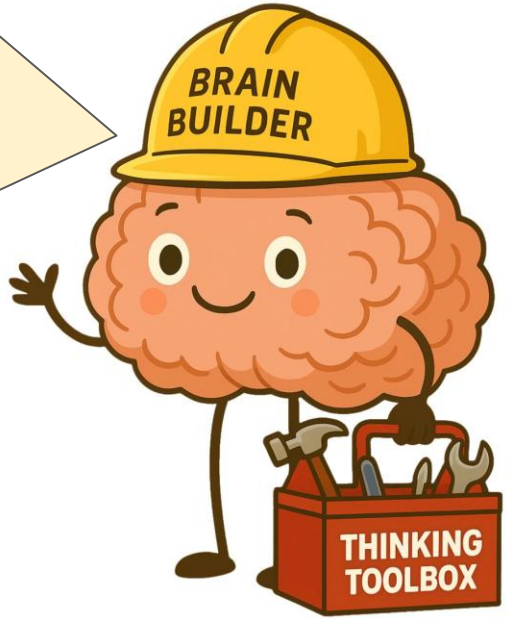
This project is a really exciting opportunity to do some big thinking and turn in to a **brain builder** - like me!

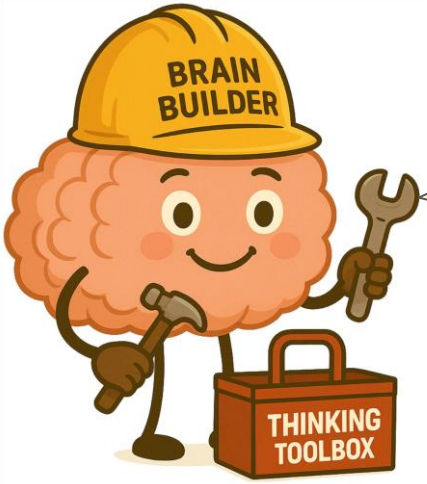
Brain builders are excellent learners, and just like normal builders are experts at choosing the right tool for the job.

Don’t worry we aren't building houses!

We are thinking about the different things our brain can do when presented with a challenge. When we become more aware of these, we become better learners.

Describe someone who is really good learning and thinking, **picture** them, what are they like?





In this session, we are focusing on **five thinking moves**, lets see how we can **use** them.

Ahead	Back	Listen/Look	Picture	Zoom
				
See what's ahead	Remember what's happened	Use your senses	See eyes shut	Look more closely / step back from

Delivery and Evaluation Year 1

Explain Project and Collect Permissions

Staff explain project, run through guidance and collect permissions for AAH and students

Administer Pre-programme Survey

Students complete survey; submitted by staff (September 2025)

Computer Science Curriculum (Metacognition)

Autumn 2025

Visit from Metacognition Team

Autumn Term 2025

Chemistry Curriculum (Metacognition)

Spring 2025

Middle Point Evaluation Task

Spring Term 2025

Visit from Metacognition Team

Spring Term 2026

Ancient Civilizations Curriculum (Metacognition)

Summer 2026

Administer End of Year 1 Evaluation

Post programme surveys; staff & student interviews; Student focus group; Student Evaluation Task

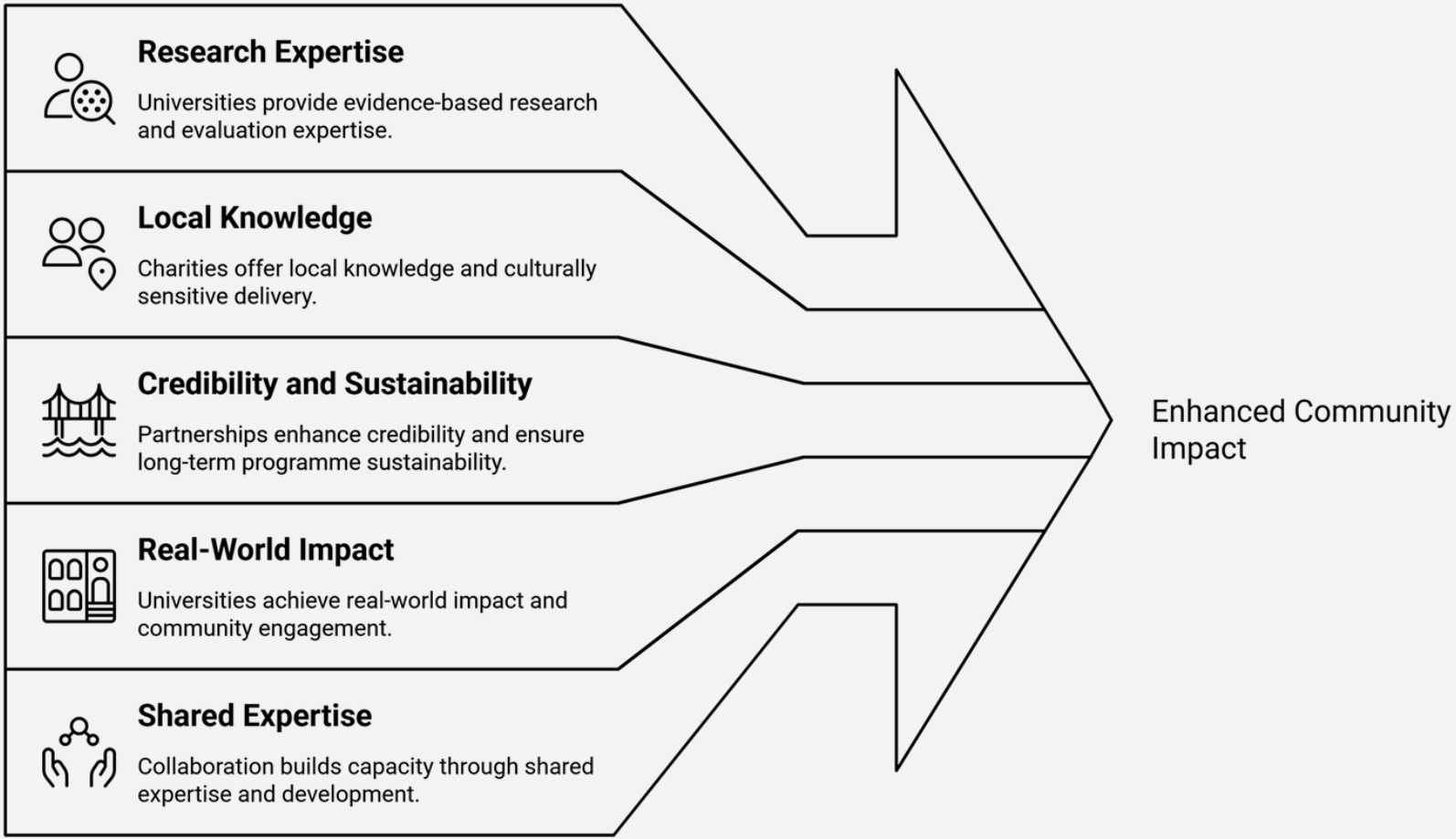
Why University-Third Sector Partnerships Matter

Bridging Theory and Practice
Universities bring research and evaluation expertise; third sector delivers outreach programmes to underrepresented learners.

Improving Access to Higher Education
Combined efforts address barriers faced by disadvantaged students and raise aspirations

Enhancing Credibility and Impact
Rigorous evaluation supports evidence-based practice and attracts further investment

Benefits of University–Third Sector Collaboration



Benefits for Students, Communities, and Civic Responsibility

Student Learning Outcomes

Enhancing metacognitive skills for improved academic performance.

Community Interventions

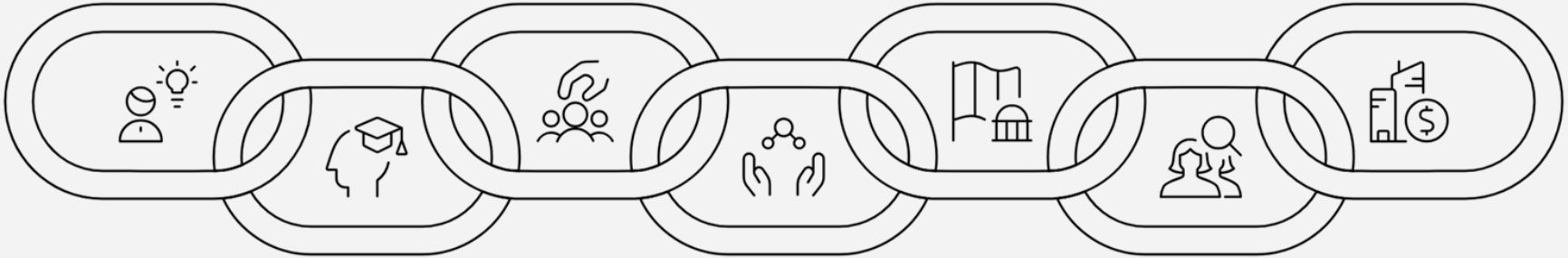
Addressing educational inequalities in local communities.

Civic Responsibility

Demonstrating commitment to local community development.

Long-term benefits

Contributing to long-term economic growth and resilience.



Aspirations and Beliefs

Inspiring higher education aspirations through early exposure.

Social Capital

Building strong networks between families, schools, and universities.

Lived experiences inform research and practice

Integrating community voices into research and practice.

Reflections on Phase 1

- Making time to build relationships across partnership
- Translating setting to setting
- Theory to actions means decisions (and testing)
- Sometimes things don’t happen in the right order
- Things can be slow at scale but communication is key
- Easy to forget what you know (that others don’t)

Questions?

Dr Emily Magrath
Director of Programme Development & Impact IntoUniversity
emily.magrath@intouniversity.org

Dr Chloe Cheetham
Impact & Evaluation Manager IntoUniversity
chloe.cheetham@intouniversity.org

Bilal Hazzouri
Impact & Evaluation Manager ARU
bilal.hazzouri@aru.ac.uk