



Think and Go Higher: A Metacognition-based Attainment Raising Programme

A Go Higher West Yorkshire
Evaluation Report

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About Go Higher West Yorkshire

Go Higher West Yorkshire (GHWY) is a partnership of 13 higher education (HE) providers across West Yorkshire which seeks to reduce inequalities in HE access, success and progression. This is facilitated by a dedicated central team of staff to enable collaboration in relation to widening participation outreach and higher level skills engagement. Each HE provider subscribes to Go Higher West Yorkshire as a member institution.

Our 13 HE members are:

<i>Bradford College</i>	<i>University Centre Calderdale</i>
<i>Kirklees College</i>	<i>University Centre Leeds</i>
<i>Leeds Arts University</i>	<i>University Centre at the Heart of Yorkshire Group</i>
<i>Leeds Beckett University</i>	<i>(Wakefield)</i>
<i>Leeds College of Building</i>	<i>University of Bradford</i>
<i>Leeds Conservatoire</i>	<i>University of Huddersfield</i>
<i>Leeds Trinity University</i>	<i>University of Leeds</i>

As an organisation we work closely with schools, local authorities, community groups, employers, and the West Yorkshire Combined Authority to enable true collaboration. To find out more about our collaborative initiatives, current projects and strands of work, including the Uni Connect Programme, please visit our website: www.gohigherwestyorks.ac.uk.

You can also follow us on Twitter @GoHigherWY.

Introduction

Ahead of the 2022-23 academic year, the Office for Students (OfS) presented Uni Connect partnerships with a new, additional remit: to “deliver evidence-based collaborative approaches to raise attainment at Key Stage 3, and into and through Key Stage 4” (OfS, 2022a). The brief afforded partnerships the flexibility to approach this new priority based upon existing evidence alongside the need within their own region. Following extensive scoping and evidence review (see section: ‘Rationale for programme’), Go Higher West Yorkshire was able to design and implement a metacognition-based pilot intervention within the inception phase.

Metacognition refers to the cognitive processes we can use to plan, monitor, and assess our own understanding, increasing our ability to recognise and expand the limits of our knowledge or ability and adapt our knowledge to new contexts and tasks (Waters, 2022). Our vision for the programme was therefore as follows:

*To **increase the attainment** of our target learners via **development of their metacognitive skills**. We want to improve metacognitive skills which focus on **processes used in planning, monitoring, critical thinking, communicating knowledge and applying logic**, resulting in learners being more **effective and efficient** in their learning. The outcome of improving these skills will result in **improved attitudes to learning and academic self-efficacy**, which will increase attainment amongst target learners.*

The pilot programme, ‘Think and Go Higher’ comprised of six progressive sessions, each based around metacognitive skills which build upon one another. Sessions are designed to explicitly and accessibly introduce learners to these skills, such as organising and linking information, debating, and analysing based upon metacognitive principles including self-regulation and critical thinking:

Session 1: *Go Think!*

Session 2: *Go Connect!*

Session 3: *Go Debate!*

Session 4: *Go Analyse!*

Session 5: *Go Visit!*

Session 5: *Go Collaborate!*

Learners developed these skills by utilising pragmatic tools and activities including:

Lotus Blossom	A diagram to help learners extract and organise their existing knowledge, and then expand on this further.
Post-it note dominos	A competitive activity to help learners connect fragments of information and justify those connections.

Yes, but	An activity for two or more learners to debate the benefits and risks of any given situation or topic.
Enterprise challenge	A team challenge to present an enterprising idea to a judging panel, drawing upon the skills they have learnt throughout the programme
Survival game	A team activity to help learners prioritise, by choosing and justifying which items they would take to a desert island.

Think and Go Higher was delivered by GHWY Outreach Officers, supported by Student Ambassadors. Learners from five schools in West Yorkshire took part in the pilot. Sessions took place in school, sometimes during the school day and sometimes after school, depending on the preference of the school. Sessions were delivered separately (where possible) to Year 8, 9 and 10 cohorts at each school, with the intention for Year 8 and 9 cohorts to return to the programme in subsequent years, to help them build their skills as they progress through their schooling and approach their GCSEs.

Rationale for programme

Sustained and progressive approach

There is growing evidence that a sustained and progressive approach to widening participation is more effective at improving access to HE than single interventions (CFE Research, 2022; GHWY, 2020; OfS 2022). This holds when considering the number of hours in an intervention as well as the number of interventions.

Further evidence suggests a need (and a local appetite) to begin non-academic raising attainment interventions earlier than the GCSE stage, particularly at KS3 (Applied Inspiration, 2022). Internal gaps analysis supports this, identifying need across the entire secondary school stage. A progressive approach which engages younger learners on a sustained journey towards their GCSEs addresses this identified gap in provision.

The value of metacognition

GHWY worked closely with TT Education¹ and, later, Dr Gill Waters (Associate Professor at the University of Bradford) to develop a conceptual and pragmatic understanding of metacognition and its links to raising attainment in schools. The learning from this consultation work was further validated and strengthened by the external evidence base.

¹ School improvement provider: <https://www.tteducation.co.uk/>

Following a comprehensive evidence review from 208 evaluations, the Education Endowment Foundation (EEF, 2021) recommends teaching pupils metacognitive strategies, including how to plan, monitor and evaluate their learning, as well as teaching pupils how to organise and manage their learning independently. Their analysis rates metacognition and self-regulation development as a high impact, low-cost approach to improving the attainment of disadvantaged learners.

Further evidence from EEF (EEF, 2021) suggests:

- There is some (modest) evidence linking lower metacognition and self-regulatory skills with socio-economic disadvantage;
- Programmes are most effective when the teaching of metacognitive strategies is explicit;
- It's important for metacognitive skills to be modelled and applied through dialogue and collaboration.

Programme objectives

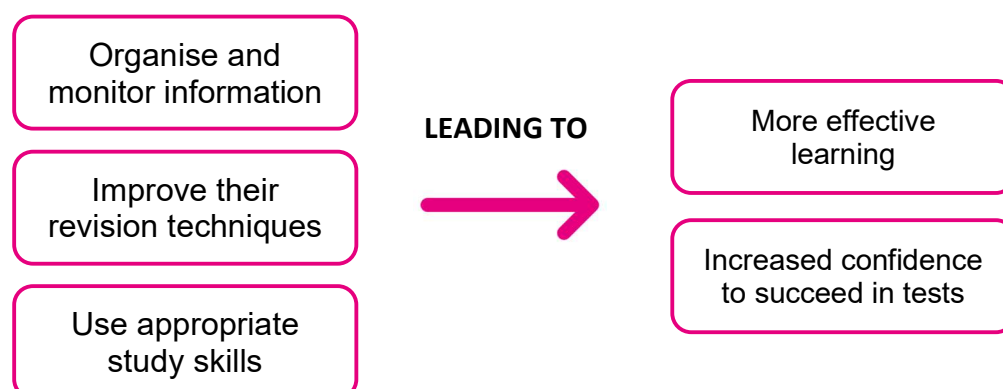
Based on the evidence and our consultation work, we developed a metacognition-focused programme designed to enhance participants':

- Learning abilities
- Communication of ideas
- Approaches to learning

Our evaluation was therefore based upon demonstrating improvements to learners' metacognition, as proxy measures for the programme's ability to raise learners' attainment.

Learning abilities

As a result of the programme, learners should be able to:



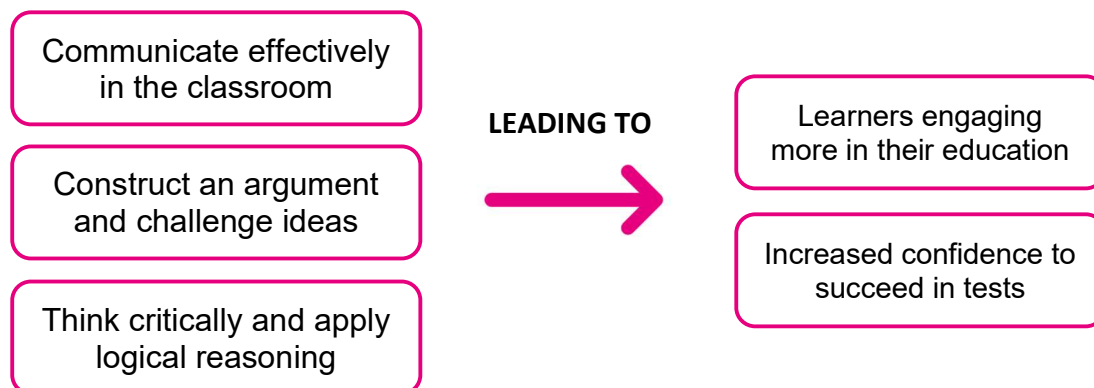
Key indicators:

- 1 I have control over my ability to learn well.

- ② I am good at remembering information.
- ③ I am good at organising and linking information
- ④ I know when I have understood a new concept or idea.

Communication of ideas

As a result of the programme, learners should be able to:

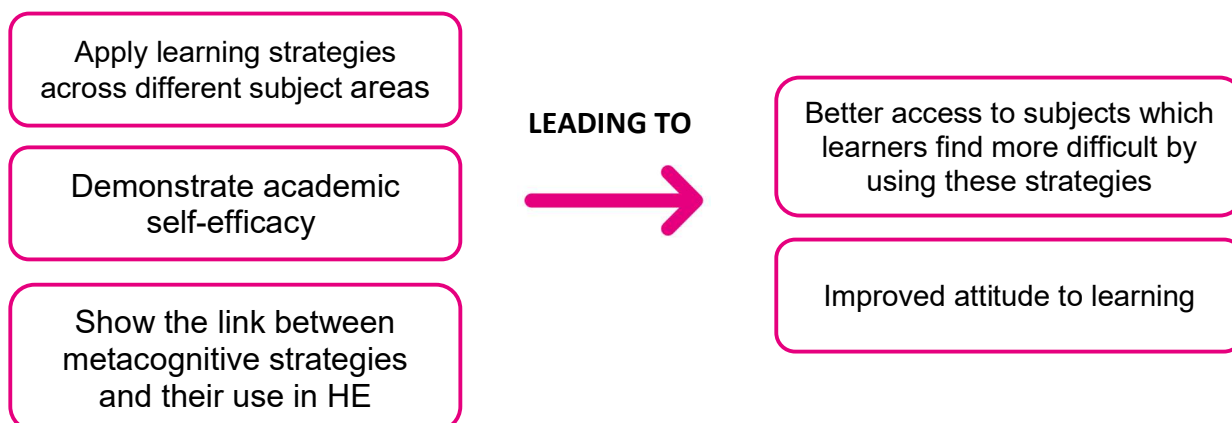


Key indicators:

- ① I can express myself easily and explain my ideas in group discussions
- ② I am comfortable asking questions when I need more help to understand something, or I want to improve my knowledge
- ③ I know how to construct and communicate an argument, using evidence to support my ideas
- ④ I can build on and/or challenge other people's ideas in a thoughtful way

Approaches to learning

As a result of the programme, learners should be able to:



Key indicators:

- ① I know which techniques work best for me when I am learning and studying

- 2 I feel prepared to handle new and challenging tasks
- 3 I am comfortable using feedback to improve my work
- 4 I reuse learning methods and study skills if I know they have worked before

Learner journey

The below table shows how skills related to these outcomes build over the course of the programme:

Outcome type	Session	How skills build
Learning abilities	Go Think!	Organising info
	Go Connect!	Making connections
Communication of ideas	Go Debate!	Discussing ideas
	Go Analyse!	Analysing own and others ideas
Approaches to learning	Go Visit!	Applying skills developed to new contexts and as part of a team
	Go Collaborate!	

Evaluation methodology

An in-depth, multi-method evaluation was designed to thoroughly capture the impact and effectiveness of the pilot programme, engaging with multiple stakeholders. Analyse of qualitative and quantitative methods remained distinct, enabling a clearer interrogation of the findings and efficacy of the methods used. However, for conciseness, findings from different methods have been synthesised in this report.

With learners

- A pre/post survey was designed to measure intervention change in relation to the specified intended outcomes
- Focus groups, to uncover nuanced experiences on the programme and any unintended outcomes
- Analysis of reflective journals, which learners added to throughout the programme

With other stakeholders

- Interviews with GHWY Outreach Officers, who delivered the programme
- Analysis of journals kept by Outreach Officers to capture their reflections on delivery
- Interviews with school staff, who observed the delivery of the programme

Findings and impact

As Think and Go Higher is a newly designed pilot programme, the evaluation has been designed to extract any promising signs of being an impactful programme, and provide comprehensive learning to help develop and improve the programme. Large-scale impact was not expected from the pilot iteration. This report therefore disseminates initial progress towards achieving the intended outcomes and highlights significant learning points to build on and develop further. To ensure maximum validity, findings have been presented in alignment with the three core objectives² outlined earlier in the report.

Learning abilities

Headline insights from qualitative enquiry:

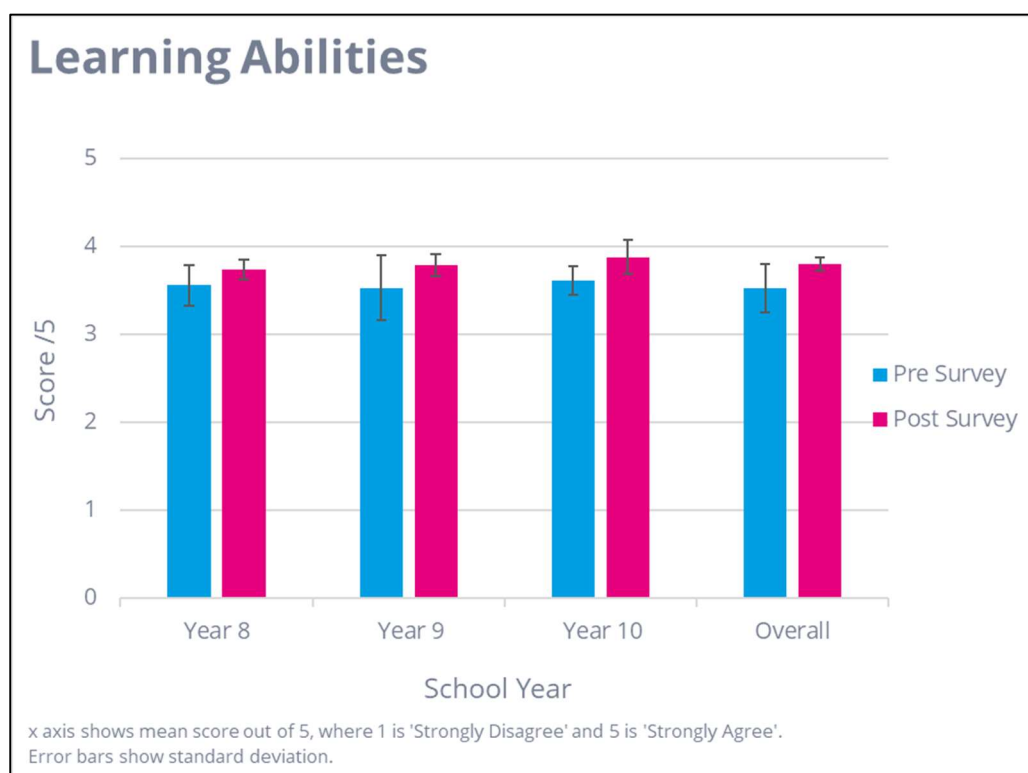
Learners identified **improvements** to their skills in **organising and linking information**, mostly via the Lotus Blossom activity.

However, learners' **understanding** of how to **apply these skills** was **limited**. Teachers also reported that **greater clarity** around how to **apply skills** developed to learning tasks (like essays) and specific subjects **was needed**.

Biggest indicator of improvement: *I know when I have understood a new concept or idea.*

Most impact on: *Year 10*

Table 1: Progress against intended outcome types related to learning abilities



² Each table presents responses from amalgamated survey questions that align with the labelled outcome type

Communication of ideas

Headline insights from qualitative enquiry:

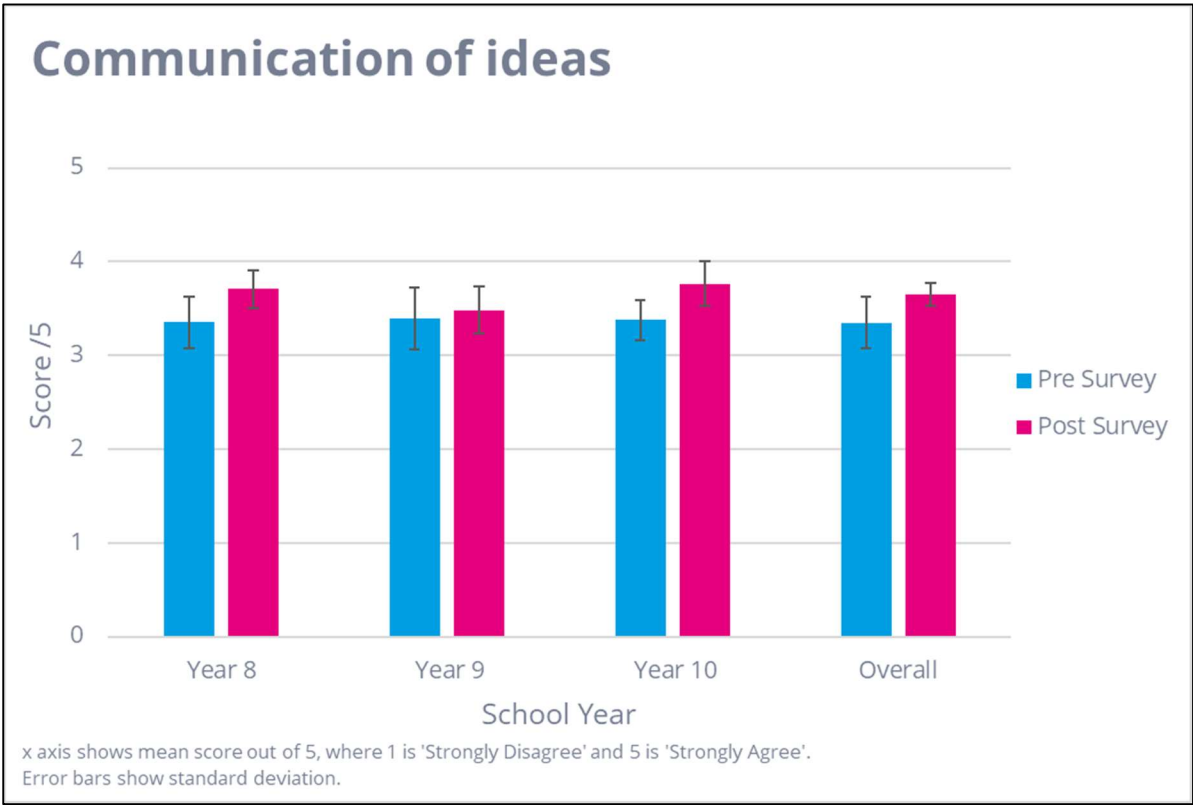
Learners identified the **value** of developing **debating skills** for their learning in and outside of school, incl. being more **confident to ask questions**. School staff and Outreach Officers also observed increased confidence in learners.

Learners made **connections** between **oral debating** skills and developing analytical thinking in **written work**.

Biggest indicator of improvement: *I can build on and/or challenge other people’s ideas in a thoughtful way.*

Most impact on: *Year 8&10*

Table 2: Progress against intended outcome types related to communication of ideas



Approaches to learning

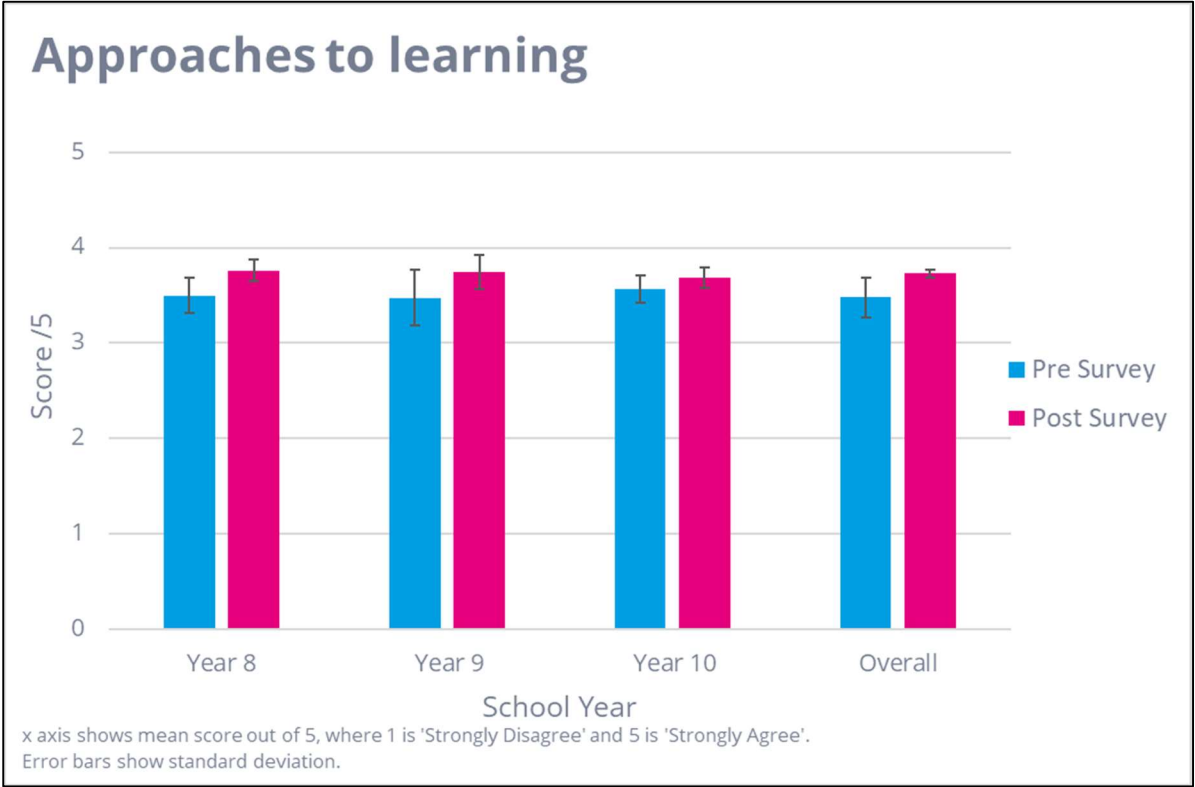
Headline insights from qualitative enquiry:

Learners **self-reported** an **improvement** in their **grades** and **revision skills** since participating in the programme.

Learners also highlighted that **collaborating** with other pupils **outside of the typical classroom environment** enhanced their **communication skills**.

Most impact on: Year 8
Biggest indicator of improvement: *I feel prepared to handle new and challenging tasks.*
Most impact on: Year 8

Table 3: Progress against intended outcome types related to approaches to learning



Discussion

Across all three outcome types, very modest gains can be seen in the survey data. This is promising, as it suggests the programme is on a positive trajectory towards achieving its aims to improve learners’ metacognition as a proxy for raising attainment. It’s interesting to note marginally higher gains for indicators related to the communication of ideas, and particularly among the Year 8 and 10 cohorts. However, these gains should not be overstated and should be treated with caution; from the quantitative data the programme cannot be claimed to be having any significant impact on learners’ metacognition (or consequently their attainment) so far.

The qualitative data reveals more encouraging insights in relation to learners’ absorption of the programme material and, to some extent, its desired objectives. This can most clearly be seen through the repeated exposure to certain tools, such as the Lotus Blossom, which learners frequently cited to be a helpful way of organising information and narrowing down

their ideas. However, insights from both learners and school staff also highlight a gap in learners' abilities to subsequently apply these tools to their everyday learning, such as planning essays and helping to make sense of different subjects and topics. In relation to debating skills, many learners discussed how these had benefited their communication and negotiation skills outside of schoolwork, with less emphasis on applying these skills to their learning. These insights also help us to interpret the limited gains seen in the survey data; learners' limited understanding of the purpose and applied value of the skills they developed may restrict their perception (and the reality) of what they have achieved.

A repeated theme from learners, school staff and Outreach Officers relates to the value of spending part of the programme outside of school, in a HE environment. This is highly valued by teachers and sticks in the minds of learners as an inspirational experience associated with the programme. This approach supports evidence that campus experiences can be effective when delivered as part of a multi-intervention programme (CFE Research, 2023). The skills developed throughout the programme were most clearly applied by learners during the Dragon's Den collaborative activity in the final session on a HE campus. While this is promising, there is still work to do to ensure learners can identify and understand the skill development journey they undertake while on the programme and beyond.

A review of the evaluation approach provides further insights into why the survey gains are limited. There were flaws in the implementation of the surveys which are being remedied in the 2023-24 iteration of the programme, alongside further improvements to the evaluation to strengthen its validity and demonstration of impact. These changes include:

- Collection of baseline and post programme attainment data, where available
- Introduction of a matched cohort process to allow comparison between participants and non-participants with very similar characteristics
- Improved matching of participants' pre and post survey data
- Dedicated time for discussion and reflection of survey questions
- Sustained multi-method evaluation for cohorts of learners returning to the programme for a second year.

Recommendations

As a pilot programme, conducted in the early stages of OfS's newly developed focus on raising attainment, there is much to learn and share about the potential of a programme of this nature. The following recommendations apply to further iterations of GHWY's programme, as well as other organisations who may wish to deliver something similar.

1. Ensure learners understand the purpose and potential applications of metacognitive skills they are introduced to.
2. Provide opportunities for learners to practice their new skills through collaboration and creativity, potentially outside of the classroom where possible.
3. Encourage metacognitive practice from the start by guiding learners to self-reflect on their baseline and post-programme behaviours and skill and confidence levels.

References

1. Applied Inspiration. 2022. *Research into the 'Raising Attainment' context based on needs and experiences in schools in West Yorkshire, York, And North Yorkshire*.
2. CFE Research. 2022. [*An independent evaluation of Uni Connect's impact on intermediate outcomes for learners \(Wave 3\)*](#)
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4. Educational Endowment Foundation. 2021. [*Metacognition and Self-regulated Learning: A Guidance Report*](#)
5. Go Higher West Yorkshire. 2020. [*Care to Go Higher: Equipping key influencers of care experienced young people*](#)
6. Office for Students. 2022a. [*Uni Connect: Guidance on priorities*](#)
7. Office for Students. 2022b. [*Uni Connect annual report Phase two, August 2020 to July 2021*](#)
8. Waters, G. 2022. *Metacognition and Academic Outcomes* [PowerPoint presentation].