



Aimhigher Plus+

Evaluation Plan

NCOP Phase II

[Version 3.0 - July 2019]



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Section 1: Introduction

This document outlines the Aimhigher Plus' NCOP phase two evaluation plan, which has been developed by collaborating with colleagues across the partnership, to inform on effective practice in terms of 'what works' in which contexts and for which learners. This builds on our phase one evaluation plan that was rated by CfE research as outstanding. The plan is aligned to the Office for Students (OfS) Phase two National Collaborative Outreach Programme (NCOP) and Access and Participation Plan (APP) evaluation guidance and the developments to local evaluation practice the partnership have identified by completing the SEF. The plan is organised into the following sections:

Section 1 - Introduction: provides an overview of the national and local context of the NCOP and evaluation priorities

Section 2 - Strategic Context: provides an overview of Aimhigher Plus programme delivery models, staff skills, expertise and CPD, strategic and operational structures that support oversight and the embedding of a robust evaluation culture across the partnership.

Section 3 - Programme Design: provides an overview of theoretical frameworks underpinning the evaluation plan, including a Theory of Change, a logic model and the progression framework that shapes the delivery of interventions.

Section 4 - Evaluation Design and Implementation: provides an overview of the cycle of phase two evaluation activities, and the associated methods, toolkits and data collection mechanisms that will support the measurement of short, medium and long term outcomes and impact. This section also outlines project management structures and funding allocated to support evaluation across the partnership.

Section 5 - Planning to Learn from the Evaluation: outlines how the partnership incorporates learning from evaluation to inform and strengthen both local and national evaluation practice.

1.1 NCOP the National Context

The NCOP is funded by the OfS and aims to increase higher education participation rates of young people in particular disadvantaged areas. Funding for the national programme is distributed across 29 consortia areas, which are supported by partnerships of universities, FE colleges, schools, employers and other providers. The NCOP aims to provide targeted sustained and progressive higher education outreach programme to young people (aged 9-13) domiciled within specific disadvantaged wards. The purpose of the NCOP programme is to support the following outcomes:

- Reduce the gap in higher education participation between the most and least represented groups in 997 specific targeted wards in England where participation in higher education is low and lower than might be expected given local GCSE results¹ ('a participation gap').
- Support young people in years 9 to 13 to make well-informed decisions about their future education
- Support effective and impactful local collaboration by higher education providers working together with schools, colleges, employers and other partners
- Contribute to a stronger evidence base around 'what works' in higher education outreach and strengthen evaluation practice in the sector.

Phase 2 of the NCOP will include an outreach hub within each consortia area. The funded NCOP outreach hubs aim to:

- Support schools and colleges in the allocated 'local authority units' to find out about the existing outreach provision which is available to them
- Pro-actively engage with and support schools and colleges in the allocated 'local authority units' to improve outreach provision for young people from under-represented groups
- Provide a platform for collaborative, innovative and tailored outreach which supports young people from under-represented groups in the allocated 'local authority units' to make well-informed decisions about their future education

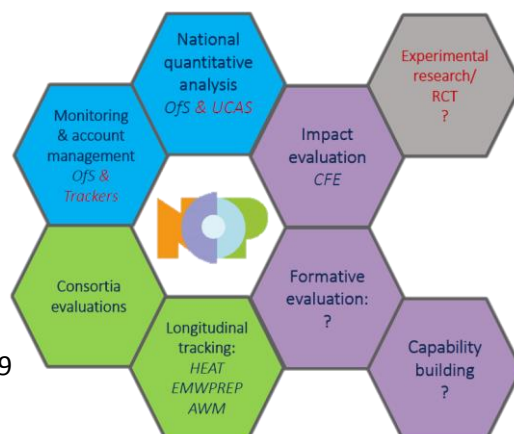
¹ This includes wards with low levels of young participation (YPR POLAR3 Q1 or 2) and lower than expected levels of young participation, considering Key Stage 4 attainment and ethnicity.

Both the national and local evaluation of the NCOP will be supported by the following components outlined in figure 1.

The OfS NCOP phase two local evaluation plan guidance sets out a number of expectations for local consortia:

- 1) The primary focus of evaluation must be on understanding the effectiveness of outreach work (in which contexts, and for which learners) to improve activities and contribute to the wider evidence base in terms of 'what works'.
- 2) Develop a robust and credible evaluation plan which maps onto the progression framework
- 3) Be informed by a self-assessment² (SEF tool) of the partnership's phase one evaluation approach and identify improvements for phase two
- 4) Cover the period of funded NCOP activity from August 2019 to 31 July 2021³

Figure 1: Phase 2 National Evaluation



1.2 Overview of Local Evaluation

The NCOP is still in the early stages and it is not currently possible to identify the impact of interventions on learners' higher education entry rates (HESA data)⁴. However, there are early signs that the local programme is having a positive impact on learners. Our local evaluation has provided empirical evidence of an association between engagement and improved attainment, a linear association between engagement in NCOP activities and HE progression (UCAS acceptances) and qualitative evidence from recently commissioned case studies to support these findings. Further, a report published by the OfS outlines that the partnership is progressing very well when performance is benchmarked against other consortia. The programme was recently ranked fourth out of twenty nine NCOP consortia in terms of the proportions of NCOP learners engaged on a sustained progressive programme (over 34% against a minimum target of 20% from January 2017 to June 2018). Furthermore, our phase one evaluation plan was rated as outstanding within an assessment commissioned by the OfS.

Aimhigher has well-established evaluation tools and methodologies that have been highlighted as good practice by HEFCE, The Sutton Trust, HEA and OFFA. Our evaluation approach is peer reviewed by academics within the University of Birmingham's Schools of Education and Economics. A key aspect of our evaluation framework involves employing a quasi-experimental approach to track learners that have engaged within NCOP activities (treatment group) against a non-treatment comparison group who have not engaged. Controls are employed to match both groups to support robust comparisons of short, medium and long-term outcome/impact measures, via quantitative (local and national) administrative data sets. Our approach also triangulates evidence from qualitative approaches to identify 'what works' and in what contexts. In phase two we are planning on building on this progress by testing for causality between interventions and learner outcomes. In phase two we will also be piloting an innovative learner analytics approach to ensure resources are directed in efficient manner by identify learner needs (e.g. barriers to HE participation) and aligning interventions to meet these needs / progression barriers.

Section 2: Strategic Context

Aimhigher is a well-established partnership of local higher education providers that have been delivering widening participation outreach programmes together since 2004 (Excellence Challenge, Partnerships for

² Self-assessments and the phase two evaluation plan will be reviewed by an external expert and used to inform the design of the NCOP evaluation capability building support commissioned by the OfS for phase two.

³ or beyond if key data sets and evidence fall after these dates

⁴ Most NCOP programmes were not fully operational until the 2017/18 academic year. HESA impact data for this cohort will not be available until early 2020.

Progression, Aimhigher, Aimhigher local funded programme (APP), NNCO and NCOP). The Aimhigher Plus partnership was formed in 2016 to meet the requirements of the NCOP. Delivery partners include six local HEIs (Aston University, Birmingham City University, Newman University, University College Birmingham and the University of Worcester), several FE Colleges and commissioned services. The programme operates in over 80 NCOP schools/colleges. The Programme is overseen by Strategy and Management Groups comprising of senior representatives from all delivery partners. The consortium also manages the Aimhigher Learner Tracking Database, one of the three national databases approved by the OfS.

Over a four year period (2017-2021) Aimhigher has been awarded £10.5 million in NCOP funding to work across 25 NCOP rural and urban wards, with a resident population of circa 18,000 domiciled learners. The aim of the local programme is to improve HE progression rates of learners from NCOP wards where there is a gap in higher education progression rates relative to KS4 attainment ('participation gap'). The partnership recognises that in order to improve higher education entry rates, the persistent barriers that learners face will need to be addressed to enable them to progress to level 3 and higher education pathways. Within our phase one and two NCOP operating plans we have set a number of high level output targets (engagements) and short, medium and long term outcome/impact targets (see logic model pages, 15-16) that are aligned to national and local strategic priorities.

Delivery Models

The models of delivery vary across rural and urban schools / FE colleges, in order to meet local needs. To ensure consistency the central Aimhigher co-ordination team (the hub) provide support to the partnership in terms of marketing, finance, monitoring and evaluation processes and procedures across the programme.

Urban Area Delivery Model

There are five universities within the urban area. Each university is known locally as a spoke and has two members of staff to support the co-ordination of activities within schools / FE colleges. Within the urban areas, schools / FE colleges have been ranked in terms of the numbers and proportions of NCOP learners on roll. This data supports how schools / FE colleges are funded and targeted by the programme. Organisations with large proportions of NCOP learners receive higher levels of funding and resource and are locally known as being part of the embedded NCOP programme. Organisations with fewer NCOP learners receive less funding and are eligible to access 'wrap-around' NCOP activities.

Recent graduates known as Aimhigher Progression Ambassadors (APAs) are placed within embedded schools to deliver support to learners (mentoring, information, advice and guidance, and workshops for learners and parents / carers) and facilitate their access to commissioned and wrap-around activities delivered by partners. Urban schools are provided with additional funding in the form of Teaching and Learning Responsibility (TLR) payments which help to secure resource from a member of staff to build capacity to support the co-ordination of the programme. Funding was allocated in this way, as before the NCOP programme commenced Aimhigher conducted a consultation with schools and FE colleges to identify the barriers they faced in terms of engaging in widening participation activities. A key theme that emerged was a lack of resources and staff to co-ordinate the programme.

Rural Area Delivery Model

Due to the very nature and remoteness of some of the rural NCOP areas, it can be more difficult, expensive and time consuming for schools and FE colleges to engage in widening participation outreach activities. The rural area has a number of NCOP co-ordinators linked to particular schools / colleges in order to support their participation within the programme. As these areas are often remote the programme does not provide Aimhigher Progression Ambassadors. Instead Graduate Ambassadors and Further Education mentors are commissioned to visit and offer online support. The rural area runs a commissioning model, where schools / FE colleges bid for funding to deliver activities to meet the needs of learners and address gaps in provision within their organisation.

Across the NCOP partnership working has been supported by a central-co-ordination team, including evaluation officers based at the University of Birmingham (outreach team). Providing this consistent resource has enabled Aimhigher to build formal structures and embed and 'joined up' approach of evaluation across the partnership. The next section provides an overview of the strategic context of the partnership in terms of

how effective deployment of resources, support and expertise has enabled the partnership to embed a robust culture of evaluation across all aspects of the programme.

2.1: Support

Budget and Resource

Senior leaders and staff across the partnership are highly committed to the importance of ensuring robust evaluation is embedded across WP programmes. Since 2008 to the present day, the Aimhigher partnership has demonstrated a continued commitment to evaluation, by funding a dedicated full-time evaluation post and continued to fund this post in the absence of national funding streams (from 2011-2015). NCOP funding has enabled the partnership to increase evaluation capacity within the central co-ordination team to two full-time roles, addition staffing across the partnership to support evaluation and a budget for commissioning evaluation (see section 4.3(m)). In line with best practice the partnership allocate approximately 5% of the NCOP budget to support evaluation and research.

Strategic Overview Mechanisms

The partnership has a number of formal structures in place that enable staff to engage in discussions around evaluation. The Aimhigher Strategy group, consisting of six Pro-Vice Chancellors from partner universities, supports oversight of the programme and evaluation. Evaluation is a standing agenda item within quarterly Management Group meetings (attended by six senior outreach managers), monthly operational practitioner meetings and team planning days. Regular meetings ensure that all staff from senior management to practitioners are heavily involved in terms of supporting the development of evaluation plans, design (toolkits/questions), data collection and the implementation of findings into programme design.

The Management Group provides a mechanism to support the strategic overview and embedding of the partnerships evaluation plan. The group are responsible for agreeing the partnerships evaluation strategy, reviewing evidence in terms of ‘what works’ and in what contexts and implementing findings and learning to inform programme design and the efficient use of resources. As an outcome of the SEF the partnership have agreed that it would be beneficial to build on these structures by establishing an NCOP Evaluation Working group to increase capacity and expertise. This group will be responsible for supporting the overview of programme evaluation and increasing university collaboration in terms of joint research projects, commissioning and bids (e.g. TASO funding) in line with the partnerships priorities. This group will include a multi-disciplinary team and draw on academic and outreach practitioner expertise from across partner institutions. This group will significantly increase the skills, capacity, resource and commissioned research into ‘what works’ and in what contexts. It is envisaged that the establishment of this group may also help to support the future sustainability of evaluation and research post NCOP funding.

2.2: Developing an Evaluation Culture

The resources, staffing and formal structures discussed have helped to increase staff engagement and ownership across all aspects of evaluation. This has enabled the partnership to garner a ‘joined up’ approach to evaluation and in turn has fostered a culture of learning and evidenced based practice. This joined up approach has also been supported through the development of standardised evaluation toolkits aligned with programme outcome measures. Staff training and guidance documents (evaluation and monitoring) have also provided useful resource to support understanding and consistency in approach. The following sections will explore these themes and our approach in more detail.

A ‘Joined-up’ and Standardised Approach to Evaluation across the Programme

Our NCOP phase one and two evaluation plans support a co-ordinated and joined up’ approach to data collection, evaluation and tracking learner outcomes across partner universities, schools and FE colleges. The development and embedding of this approach has been supported by working in collaboration with partners including senior managers, officers, practitioners, academics⁵ and learners. The central team and designated

⁵ Our Research and Data Officer is completing a PhD evaluating the impact of our partnership APP work at the UoB School of Education. Contact with leading academics across the Birmingham School of Education and Economics has supported the development of our evaluation methodology and sampling approach.

evaluation staff are responsible for co-ordinating this approach across the partnership through the development of processes and by providing guidance, training, resources and toolkits that support the consistent measurement through alignment to the progression framework (see page 17) and strategic priorities in terms of learner short, medium and long term outcomes/impact measures (see pages 15-16). Resources that support a consistent approach include:

- a) **Standardised evaluation questionnaires** that are employed across activities to measure short term learner shifts in intentions and knowledge of higher education etc. These toolkits are deployed pre and post intervention (see section 4.3(c)).
- b) **The Learner Evaluation and Progression (LEAP) Toolkit** supports a programme level evaluation. This is completed by learners on an annual basis to measure short/mid-term outcomes and is also employed as an assessment toolkit to support a needs led learner analytics approach to widening participation interventions (see section 4.3 (d)).
- c) **A standardised approach to tracking medium and long term learner outcomes** via a quasi-experiment approach (matched groups design) and access to national administrative data sets (e.g. NPD, ILR, UCAS and HESA) and supported by learner survey data (LEAP Toolkit).
- d) **Standardised data collection processes** supported by forms and the Aimhigher learner tracking database and aligned to local and OfS monitoring requirements. Our partnership wide privacy notice supports the access to and the flow of data from schools / FE colleges, learners and parents.
- e) **Training and guidance materials** support a robust, standardised and systematic approach to data⁶ collection (standardised forms and Aimhigher Tracking Database) and evaluation by outlining processes, systems, roles, responsibilities and reporting deadlines to provide staff with a clear understanding of expectations in line with points a, b, c and d.
- f) **School / college collaboration agreements** that outline requirements and expectations in terms of engaging within the programme. These are signed off by senior staff and support the flow of data and engagement within evaluation projects.
- g) **Project definition statements** that are completed by staff before interventions are delivered to ensure that they incorporate content that is fully aligned to the learner outcomes specified within the progression framework and strategic objectives. These forms also enable practitioners to align evaluation toolkits and question items accordingly to the content of activities and target audience group(s).

The engagement of staff, robust standardised monitoring and evaluation toolkits/systems, guidance and training has facilitated the robust collection of data across the partnership. The collection of robust data is also supported via data quality checks and audit across our university partners, managed by the central-co-ordination team.

These standardised evaluation and monitoring toolkits and processes have enabled the partnership to compare the impact of different types of activities. These processes have helped to embed a joined up approach and nurture a robust culture of learning and evaluation practice across the partnership. This has further supported the buy in of staff and an understanding of the importance of evaluation to improve interventions and subsequent learner outcomes.

Reflection of the Effectiveness of Interventions

Periodic planning cycles are supported by reviewing monitoring data and evaluation findings (impact and gaps in engagement) before the end of each academic year. The data supports the planning process in terms of identifying which types of interventions should be re-commissioned and how the programme should be targeted to increase impact. Evidence is presented at both strategic and operational meetings.

The NCOP programme has enabled the partnership to pilot and review new types of interventions such as MyTutor (online subject tutoring) and the Access Platform. After initial piloting the partnership decided to cease funding for the Access Platform, due to low learner engagement. Following initial piloting of the MyTutor programme, data showed that the programme had a significant impact on learner grades when compared to a comparison group (type 2 empirical evidence) and this impact was greater when learners attended on a regular basis. To maximise the impact of the programme we have worked with schools to improve learner selection and agreed targets to outline expected standards of engagement. This has significantly improved engagement and the cost-effectiveness of the programme.

2.3: Skills for Evaluation

Staff Skills, Expertise and CPD

Previous sections have outlined the level of funding allocated to evaluation, staffing structures and resources (e.g. toolkits) supporting the co-ordination of this work centrally and across the wider partnership. Dedicated staff within central team are responsible for co-ordinating evaluation and monitoring systems (Aimhigher Tracking Database) in terms of design, implementation, analyses, reporting, data protection and ethics. The central team have high levels of expertise within the field of data and evaluation. Two full-time members of the team have degrees and postgraduate qualifications within the field of Social Sciences and education and considerable expertise in evaluating the impact of education and health intervention programmes. Our Research and Data Officer has been employed within roles supporting disadvantaged communities and intervention programmes since 2001 and is currently completing a PhD in widening participation at the University of Birmingham. This has supported access to leading academics⁷ who have supported the development of aspects of our evaluation plan. This expertise has enabled the partnership to implement a cutting edge approach to evaluate WP programmes via the use of a quasi-experiment approach and matched groups design. This approach is a robust step forward in terms of evaluating widening participation programmes. Over the years this approach has been shared widely and adopted across the sector as an example of good practice in terms of methodology to inform on 'what works'. Key members of the central team have received ONS Safer Researcher training to access national administrative data sets (NPD, ILR and HESA).

The partnership expertise in terms of widening participation evaluation has helped to shape national practice. Examples include contributing HEFCE good practice guides and associated toolkits, being cited as good practice in terms of evaluation methodology by the Sutton Trust and OFFA and recently having our phase one NCOP evaluation plan rated as excellent by CFE, with no areas for improvement. This evaluation plan has been shared widely across the sector. Our Research and Data Officer is a member of the OfS NCOP tracking and outcomes group and has provided expertise to support the national NCOP evaluation impact approach in terms of design, methodology and scoping requirements in relation to national administrative data sets (NPD, ILR and HESA).

The partnership are also fortunate to have a wealth of wider experience and knowledge across delivery providers. A recent audit found that a large proportion of NCOP staff have completed degrees or post graduate qualifications within subjects that have an extensive research component (e.g. Sciences and Social Sciences). The partnership provide ongoing opportunities for continued professional development to enhance staff understanding of widening participation and evaluation practice. Increasing knowledge and skills across the partnership is supported by training and guidance delivered by the central co-ordination team to practitioners, with a focus on evaluation toolkits, sampling, data protection, data collection systems and using the Aimhigher database to record activity and learner engagement. The NCOP team also engage in widening participation policy, practice and evaluation debates within local, regional and national networks (e.g. OfS tracking and outcomes advisory group, Action on Access, HELOA and FACE events/conferences, NCOP national evaluators group and OfS/CFE webinars). Partner universities have their own budgets to support access to such events and CPD is discussed within annual personal development reviews.

⁷ Claire Crawford and Peter Davies – Schools of Economics and Education (UoB)

The partnership also commission research to external consultants to explore aspects of programme impact where it is deemed appropriate to do so (e.g. [impact case studies](#)). Such external projects are managed through working groups. As previously outlined we intend to increase our expertise by establishing a new evaluation working group, consisting of academics and practitioners across our partner universities. This group will increase our capacity to undertake additional evaluation and research to identify what works, to further support evidence-based practice.

Reflective Practices

Previous sections have outlined how partnership structures and standardised evaluation toolkits employed across the programme, have supported a culture of reflective practice from senior managers, officers, practitioners, learners and schools/colleges. A 'joined-up' and standardised approach to programme monitoring and evaluation enables staff to compare the impact of different activities and reflect on what does and does not work. Practitioners are also supported in their reflective practice through data dashboards on the Aimhigher database which are aligned against national and local performance targets. Live data feeds enable practitioners to quickly identify and address any areas of underperformance at institutional or school level (e.g. engagement targets). Reflective practice is embedded across the partnership to ensure resources are deployed effectively to maximise the impact of interventions in terms of supporting learner outcomes. A number of examples of how evaluation and consultation has supported reflective practice and programme design are outlined below.

Identifying Barriers to Programme Engagement via Consultation with Schools and FE Colleges: During the early phases of the NCOP, the partnership consulted with local schools and colleges to identify the barriers they faced in terms of engaging within widening participation activities. Findings highlighted a lack of funding to cover transport costs for university visits and a lack of staffing capacity to co-ordinate WP work. The senior management group reflected on these findings and addressed these barriers by providing funding for transport and staffing (Aimhigher Progression Ambassadors and staff TLR payments within the urban area) in schools with large numbers/proportions of NCOP learners.

Feedback from Learners: Reflective practice is also supported by the Learner Voice Group which provides a forum for learners to feedback on the development and content of interventions. Practitioners have incorporated this feedback to support the planning and improvement of activities. In phase two learners will also be deployed as mystery shoppers across NCOP activities.

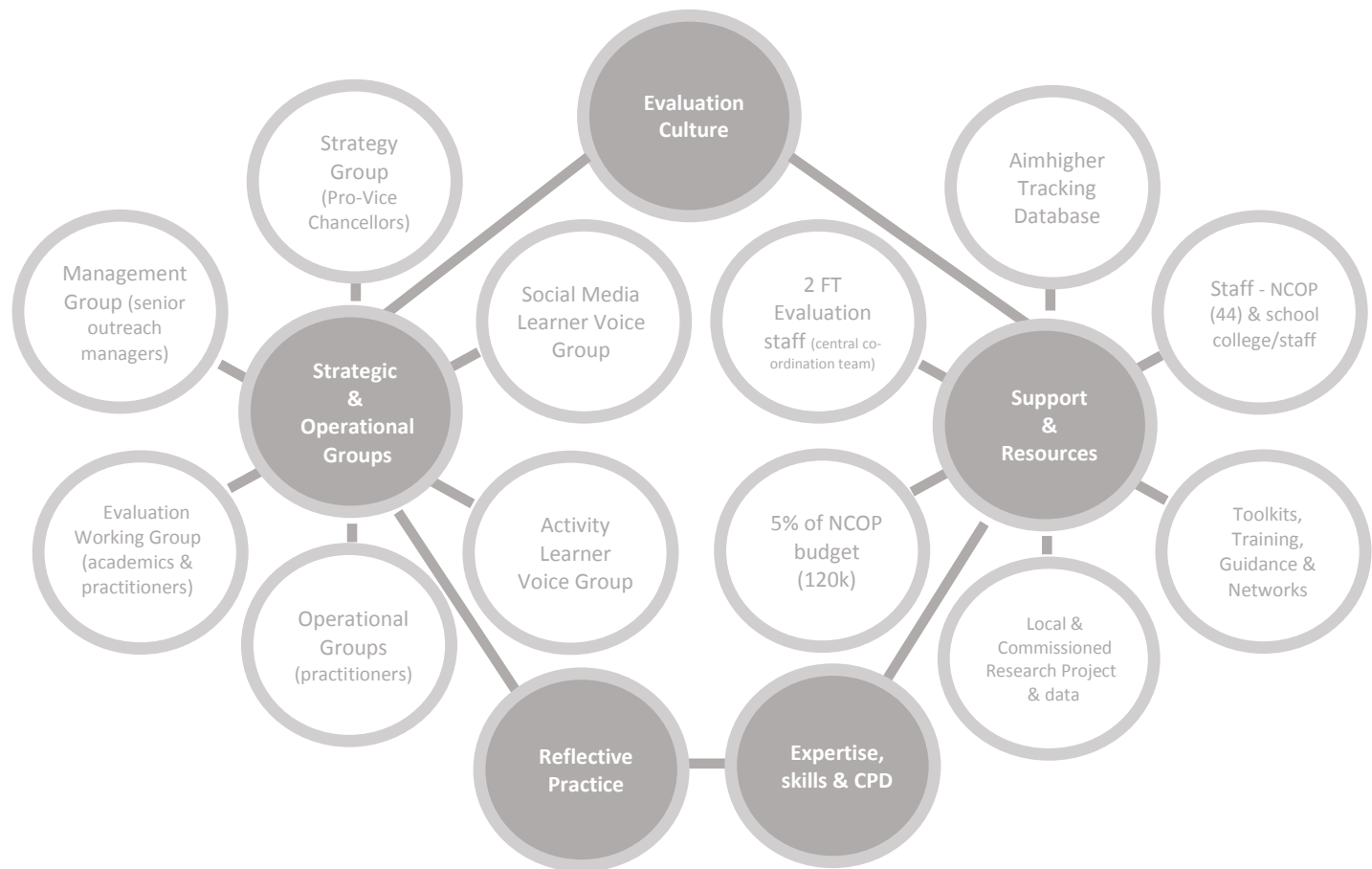
Gaps in Engagement: Our recent UCAS progression analysis report highlighted a number of gaps within the programme and provided data to support more effective targeting of NCOP learners. Analysis of learner cohort data showed that since the NCOP programme had launched, over 25% of urban sixth forms had closed and subsequently the numbers of NCOP learners attending FE provision had increased. In turn a greater focus has been placed in terms of collaborating with FE college providers to engage these target learners. The partnership has faced a number of challenges in terms of engaging FE colleges within the programme, initially with mixed success and more recently engagement has improved across the vast majority of providers. Further, at the start of the NCOP programme we initially prioritised funding and engagement with schools/colleges that had larger numbers and proportions of target (NCOP) learners. The UCAS report provided new contextual data to show the HE progression rates of target NCOP cohorts across all partner schools and colleges. This data will support how we target schools and colleges in phase two of the NCOP.

Social Media Content and Delivery: The NCOP University Insiders Programme develops content on social media platforms to improve learners and their parents' awareness and understanding of higher education. Feedback from learners within focus groups has ensured that social media content is targeted at the platforms that they and their parents are most likely to use and ensured that the content is relevant and interesting to them.

A continuous cycle of reflective practice involving all staff from across partner universities, schools, including learners and their parents has helped to inform planning and decision making by improving models of programme delivery and inform on which interventions are most and least effective. In phase two we will continue to support these structures to encourage reflective practice. Further, the launch of the LEAP Toolkit, which will provide an assessment framework to measure the barriers that learners face in terms of progressing

to HE, will further support this process by enabling practitioners to deliver more refined needs led interventions. This toolkit will encourage practitioners to employ a continuous cycle of reflective practice to support improved programme impact. Although evidently the programme has well established systems in place to support reflective practice, improvements could be made to formalise a framework to embed such processes across all teams. This process will be supported by the establishment of the evaluation working group that will be launched in phase two of NCOP.

Fig 2. Strategic Context



Section 3: Programme Design

This section outlines how narrative and empirical evidence has informed and continues to inform the design and selection of Aimhigher interventions. The section below and figure 4 (page 14) outlines the Aimhigher Plus Theory of Change, which underpins the partnerships programme of targeted interventions and the processes aimed to support positive changes in learner outcomes. Figure 5 (pages 15 and 16) provides an overview of our logic model and specific details in terms of programme outputs, outcomes and impact targets.

Narrative Evidence

Our programme design and selection of targeted interventions (see figure 3, page 13) are supported by a strong narrative in terms of identifying the potential causal factors that may serve as barriers to disadvantaged learners' progression to higher education. This narrative evidence includes:

- A *theoretical understanding* of Sociological and Psychological theory and the key factors that may inhibit and enable positive educational outcomes
- *Academic research* evidence exploring key barriers to HE progression
- 15 years of partnership working with local universities, supporting ongoing *consultation with stakeholders* to ensure their knowledge and understanding of the local context (e.g. learner needs and the barriers they face in terms of progressing to higher education) is incorporated into programme design.

The Aimhigher Plus Programme is grounded on the concepts of cultural, social and intellectual capital (Pierre Bourdieu, 1977), the psychological concept of self-efficacy (Bandura, 1977) and widespread research that demonstrates a strong association between socio-economic status and attainment⁸ through all key stages (DfE, 2014; Gorard 2012; BIS 2013; Goodman et al., 2010; Chowdry 2013) and progression to HE (DfE, 2009; Department for Business Skills and Innovation, 2015 and HESA entry rates 2008-2019).

The concepts of cultural, social and intellectual capital provide a relevant framework for widening participation programmes to address social inequalities. The theory postulates that learners from disadvantaged backgrounds lack forms of capital, as their families are less likely to have been to university⁹ and their family environment does not provide the knowledge, experience, connections and ownership or resources that enable them to progress to university, compared to their more advantaged counterparts (see Bourdieu, 1977).

Research suggests that non-cognitive psychological factors such as aspirations/expectations, attitudes and behaviours (known as AABs see Goodman et al, 2010, DCSF LYPSE study, 2009), knowledge and understanding of HE (Dumais and Ward; 2010; Davies and Qui, 2012) and self-efficacy (Bandura, 1977; Zimmerman et al, 1992) play an important role in attainment and HE participation (Bowles & Gintis, 2002; Farkas, 2003; Heckman et al., 2006; Jencks, 1979; Lleras, 2008). Dumais and Ward (2010) found that *‘that greater cultural knowledge and parental help with information about HE increased the likelihood that students would apply to college’*. Davis and Qui (2012) found associations between cultural capital (parental employment and education) and intention to go to university. Davis et al suggest that *‘Cultural capital may provide students with increased awareness of information about HE and a greater ability to accurately interpret this information’*. Heckman et al (2006) suggest that developing non-cognitive functions may help close the attainment gap between advantaged and disadvantaged young people and Chowdry (2013) suggests that learner’s non-cognitive skills could be the key determinant of their likelihood of going to university.

In line with ‘Cultural Capital’ theory and research into AAB’s the Aimhigher Plus Programme aims to address the following barriers concerning that; (a) NCOP learners are less likely (than advantaged learners) to have an awareness, knowledge and understanding¹⁰ of higher education and progression pathways (e.g. lack of transmission) (b) due to this lack of parental HE experience and socialisation practices they are less likely to see university as a place for people like them (c) have lower confidence in their academic ability and lower aspirations to progress to HE. The Aimhigher programme aims to address these issues by working with learners and their key influencers such as parents/carers, peers and schools/colleges. The programme provides these key influencers with information advice and guidance about higher education pathways. Within phase two of NCOP, we plan on increasing engagement with parents/carers to increase their understanding of HE pathways and the associated benefits. NCOP practitioner’s and recent graduates (Aimhigher Progression Ambassadors) support this process (influencers) by providing one-to-one and group support. Learners are also provided with opportunities to access a wide variety of widening participation activities. The aim on the programme is to address these barriers to HE progression by raising learners’ aspirations, motivation and confidence and by increasing their awareness, knowledge and understanding and positive attitudes towards HE, so that they can make informed choices.

Our Theory of Change model (see page 14) synthesises these Sociological and Psychological factors to provide an explanation of the possible casual factors that support the persistent inequalities in higher education progression rates between different socio-economic groups, throughout the learner lifecycle. In developing our Theory of Change, we have operationalised these concepts into five key barriers known as the 5As (Awareness, Aspirations, Attainment, Application and Access - see progression framework page 17) to be addressed through six key targeted intervention types (Campus visits, Information, Advice and Guidance (IAG),

⁸The initial analysis that supported the national funding of the NCOP programme found that across certain wards there was a gap in HE entry rates, than what would be expected considering the students KS4 results. However, funding was provided on the basis of the all 15 year olds domiciled within these wards, some of whom will be low, medium and high attaining. The OfS have provided no local breakdown on the scale and context of the issues. As evidence suggests that attainment is the key factor limiting disadvantaged students’ progression to HE, the local Aimhigher programme is targeting some intervention to support such students (e.g. via subject specific tutoring).

⁹ NCOP students are less likely to have parents who have progressed to HE (100% of local NCOP wards are AHE quintiles 1 and 2).

¹⁰ For example disadvantaged students may also lack awareness of how to apply to university, the choices available, hold misconceptions of student finance arrangements and the potential benefits of HE (graduate premium and employment prospects etc.) and consequently do not have the relevant information to make an informed decision on whether to go or not.

Masterclasses, Mentoring, Tutoring and Summer Schools), which aim to increase the likelihood of disadvantaged learners progressing to HE.

Moving from Empirical Evidence to Causation

Our local programme evaluation evidence provides a stronger basis for these narrative claims in terms of empirical enquiry evidence (standard type 2) via observations of improvements in the 5As via pre-post intervention learner shifts and qualitative in depth case studies which also identified the most effective interventions (via 360 reviews – learners, parents, NCOP and school staff). To date our most convincing empirical evidence is supported via observations of higher rates of attainment and HE progression rates (UCAS acceptance) for learners that have engaged within our interventions than those that have not (comparison group). A limitation of these findings is that it is likely that samples are biased, as we do not currently have access to learner socio-demographic data to incorporate controls (e.g. prior attainment, ethnicity and gender etc.) to support a matched group design between the intervention and comparison groups. We are currently in the process of gaining access to this data via an NPD request. This data (NPD and UCAS) will provide an early indication¹¹ of causality, until HESA data is released for the first tracked cohort in 2020¹². Our in depth literature review of widening participation research has informed our evaluation design (quasi-experimental approach – see sections 4.1 and 4.3) which will address gaps in previous research (sampling bias, a lack of robust comparison groups and controls - see Gorard and Davies, 2012). The standards of evidence that underpins the Aimhigher Plus programme design and selection of activities is summarised within figure 3 on the following page. Alongside this evaluation we will also continue to focus on establishing ‘what works’ via event evaluation toolkits and annual surveys to measure short and medium term shifts in learner outcomes.




Assumptions

Evidence suggests that the primary factor that influences whether or not learners’ progress to higher education is their prior attainment (intellectual capital) through all key stages and that this is associated with demographic factors. There is less evidence (causality) to support the claim that increasing learners’ cultural capital and AAB’s through interventions aimed at raising their confidence, awareness and knowledge of and aspirations towards higher education will lead to improved HE entry rates. However, as outlined earlier we have both a narrative and empirical evidence to support such an association and the partnership are building on this evidence base and will soon be in a position to test for causality. This will enable the partnership to identify the effectiveness of interventions and also by incorporating survey data (baseline and follow up) will enable the partnership to identify the importance of the 5 A’s (barriers) and the extent to which they are strong predictors of HE entry. Further, our local evidence shows that around 70% of NCOP learners aspire to go to higher education. However, the extent to which intentions/attitudes are a valid predictor of actual behaviour is problematic as is extremely unlikely that such a high proportion of the cohort will go on to enter higher education.

¹¹ If causality is demonstrated this will only provide an indicator of impact as we cannot assume that all those that are accepted (UCAS) to higher education actually go on to enter (HESA) higher education.

¹² Our research and data officer is also conducting a similar evaluation for our partnerships APP work. The study has been in a position to test for causality for the past two years, but has been held up due to GDPR and delays in obtaining access to NPD data.

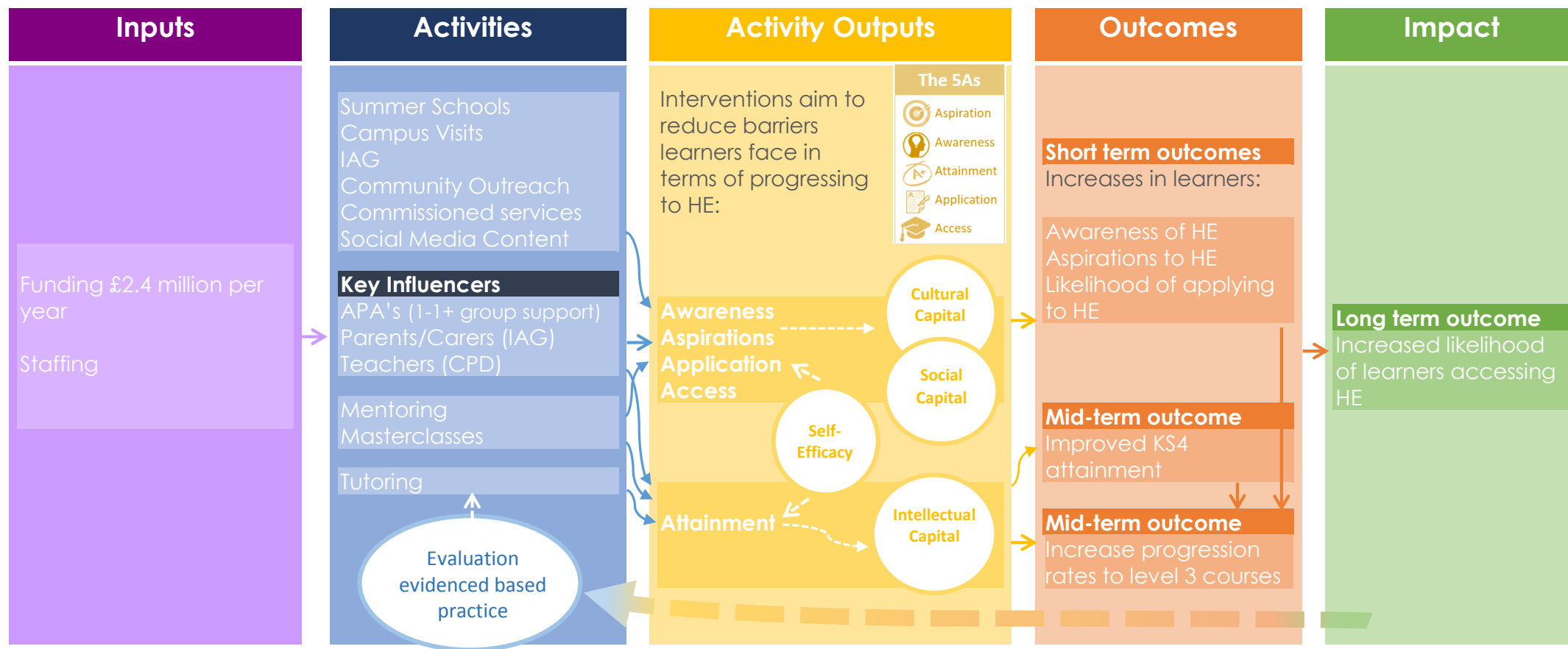
Figure 3: Standards of Evidence Supporting Programme Design and Selection of Activities

Activity ¹³	Purpose / Rational	Standards of Evidence		
		 Type 1: Narrative	 Type 2: Empirical Enquiry	 Type 3: Causality
Campus Visits	These activities usually involve a visit to a university where learners are taken on a tour, meet university students and staff and find out about higher education. Activity supports learners understanding of university learning environments and sense of belonging.	<ul style="list-style-type: none"> • Theory: Cultural, Social & Intellectual Capital (Bourdieu) and self-efficacy (Bandura, 1977) • Theory of change and detailed logic model • Evidence of an association between AABs and attainment / HE progression (Dumais et al, 2010; Davis et al, 2012) • Formative and process evaluation – consultations with schools / colleges and learners to develop needs led models of delivery • WP practitioners/managers understanding of HE participation barriers faced by learners • Education Endowment Foundation - evidence of tutoring/peer tutoring and improvements in attainment (moderate impact) 	<ul style="list-style-type: none"> • 300+ local evaluations (NCOP & APP) conducted over the past 11 years, and NCOP case studies demonstrating pre-post event positive shifts in learners' awareness and knowledge of HE, confidence and aspirations to progress to HE across campus visits, summer schools, mentoring, masterclasses and IAG activities. • Evaluation of tutoring programme showing an improvement in learners attainment (intervention vs comparison group) • UCAS Aimhigher evaluation – showing a linear association between increased engagement and increased likelihood of applying to HE (intervention vs comparison group) • APP evaluation also shows learners engaged in AHWB mentoring and summer school programmes access higher education at an accelerated rate compared to the West Midlands benchmark (comparison group) 	We are currently in the process of gaining access to NPD data which will allow the partnership to form a matched group design, control for confounding variables and compare HE application outcomes of intervention and comparison group learners in a more robust manner.
Information, advice and guidance	These activities usually consist of interactive and engaging sessions to give learners the information they need to make an informed decision about their future. Interventions may be on a 1-2-1 or group basis. Large scale events often include contributions from employers. Activities support learners to explore various avenues and make informed decisions about their future.			
Masterclasses	These activities usually involve learners attending an intervention with a subject-specific or employer focus. They can take place on campus or in industry/business settings. Activities give learners the opportunity to engage with academics, and employers exploring various avenues. Masterclasses enable learners to explore and test various subject areas and vocations not always available to them, whilst building confidence.			
Mentoring	These activities usually involve ongoing 1-2-1 support for learners within their school, delivered by a graduate or undergraduate student. In addition to providing IAG, mentors work with learners to agree aims and identify and overcome barriers to success.			
Tutoring	These activities support learners' attainment through ongoing tutoring either in a 1-2-1 face-to-face setting or online.			
Summer school	These activities aim to give learners an immersive experience where they are able to explore university life. Typically residential, summer schools include sessions with academics, current HE students, employers and motivational speakers, and opportunities for parental engagement.			

¹³ Campus visits and IAG activities specifically support schools / colleges in meeting government expectations in terms of the Careers Strategy and the delivery of Gatsby Benchmarks with particular relevance to the HE elements

Fig 4: THEORY OF CHANGE

Ambition: Through effective partnerships with local HEIs, Schools & FE Colleges, deliver a programme of innovative, needs led and evidence based higher education outreach interventions to help to reduce the gap in higher education participation rates between the most and least represented groups (25 NCOP target wards)*.



Context: A number of key levers may have a positive or negative impact on our ambitions, including the political landscape, OfS NCOP & wider higher education policy (e.g. Augar review, fees, funding & places), education policy (changes to curriculum and Gatsby benchmarks & Careers Strategy), local and regional context and the economic environment

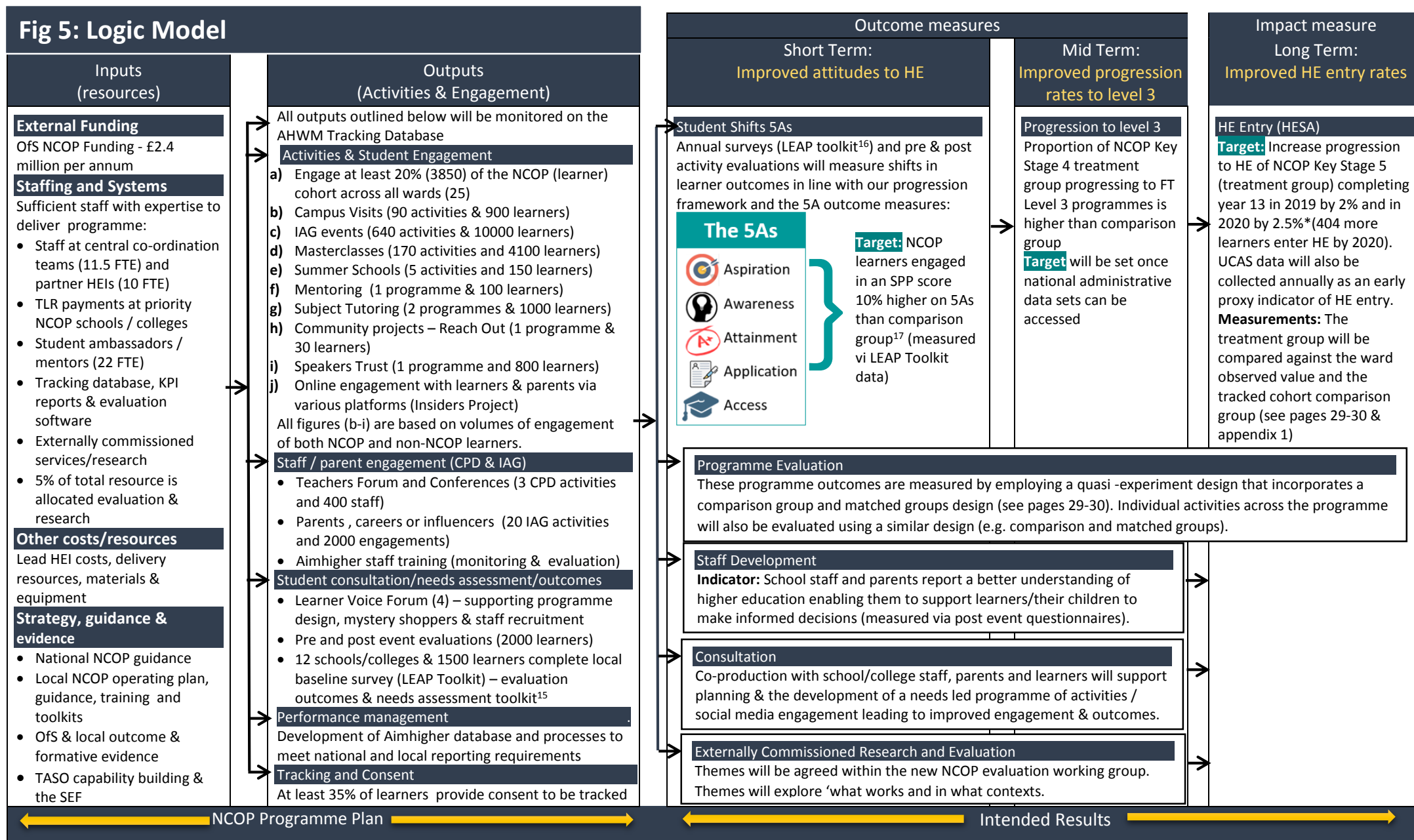
*where participation in higher education is low and lower than might be expected given local GCSE results

3.1: Logic Model

The logic model (page 16) covers phase two of the NCOP (19/20 – 20/21) and summarises the planned programme of activity in terms of resources / inputs, outputs (activity milestones) and the intended results in terms of short, medium, long term outcomes and impact measures/targets. The output, outcome and impact measures are discussed in more detail in later sections. Success in terms of measuring overall impact of the programme is dependent on staff recording student engagement within the Aimhigher Tracking database, effective local and national evaluation, consent to enable the partnership to track learners in terms of specified outputs, outcomes and impact. Mid to long term outcome and impact measures will be accessed via local/national administrative sets (see sections 4.1 and 4.3). To measure the short-mid term impact of activities we have developed a standardised bank of evaluation questions. Both activity delivery and evaluation questions are aligned to the Aimhigher Plus Progression framework (see page 17) and associated outcomes (The 5 As – Awareness, Aspiration, Attainment, Application and Access). The outcomes of activities vary depending on the audience group (e.g. age) and needs of participants (e.g. gaps in knowledge about HE). As we have delivered over 1700 activities it would be excessive to list the evaluation themes and questions explored within each activity. The logic model includes output targets for activities to be delivered¹⁴. These targets are not set in stone as the Aimhigher Plus NCOP employs a needs-led approach of engagement with schools, colleges and learners (e.g. see LEAP Toolkit section 4.3).

¹⁴ This plan does not outline monitoring and evaluation requirements for NCOP outreach hubs as OfS guidance had not been released before this Evaluation Plan was shared and agreed within our partnership governance structures. The Evaluation Plan will evolve to include any national and local requirements.

Fig 5: Logic Model



¹⁵ The LEAP Toolkit serves a dual purpose and will enable the partnership to monitor shifts in learner outcomes and support a learner analytics approach to assessing and addressing learner HE progression needs and barriers.

¹⁶ Further, information on the LEAP toolkit is provided in section 4.3 and outlines how question items are aligned with the progression framework outcomes.

¹⁷ A matched group design will be employed where both groups will be matched in terms of prior attainment and learner background characteristics

Fig 6: The Aimhigher Plus Progression Framework

The Progression Framework is divided into three important phases (Exploring, Progressing and Affirming) following learners through each key stage. The Framework includes learning and progression outcomes for each phase and associated 5As (Aspiration, Awareness, Attainment, Application and Access). The 5As are mapped against six key intervention types delivered by the Aimhigher Plus programme (Campus visits, Information, Advice and Guidance (IAG), Masterclasses, Mentoring, Tutoring and Summer Schools). Whilst the framework offers structure, it is not rigid as it remains learner focused and supports practitioners to develop a programme of interventions that meet learners' needs. The framework is designed to enable practitioners to offer meaningful engagements with learners that are appropriate to them over a period of time, supporting learners to make decisions about higher education pathways and careers. Our evaluation framework and associated short, medium and long term measures are aligned to the outcomes within the progression framework.

Phases	Learning Outcome & the 5As				
	Aspiration	Awareness	Attainment	Application	Access
Exploring [KS3-KS4] Phase Description Time given to investigate future educational and career pathways	Feel motivated and confident to succeed in school	Recognise and understand the full range of options available in key stage 4 and / or post 16 and higher education	Recognise the importance of succeeding at school • Recognise that GCSE and post 16 qualifications are required to access higher education	Recognise that higher education is complex and competitive, offering learners great choice and requiring active and informed decision-making	Have an awareness of the learning environment in higher education and student life
Progressing [KS4-KS5] Phase Description Time given to build on and develop expectations, attitudes, experiences, knowledge and skills associated to future educational and career pathways.	Feel motivated and confident to progress to post 16 option	Recognise how post 16 choices impact on future progression • Understand the necessity of higher education for progression to certain careers • Understand the finance support available whilst attending higher education • Recognise different higher education pathways and options (e.g. FT/PT, home or away etc)	Achieve the GCSE grades required to progress to post 16 and higher education • Develop the commitment and study skills to perform well	Recognise the various entry requirements and routes to higher education • Identify and apply to a post 16 option	Make a successful transition to post 16 • Recognise the opportunities that may arise from attending higher education
Affirming [KS5] Phase Description Time given to establish future educational and career pathway goals and strategies to access them.	Feel motivated and confident to succeed at higher education	Recognise the skills and qualifications required for chosen higher education pathway • Understand the financial support available for students in higher education and the means to access this • Identify the potential career options following participation in higher education	Achieve the grades required at level 3 to progress to higher education	Understand the higher education application process • Understand the significance of the choices made • Develop and submit a strong higher education application	Successfully engage with the entry process following level 3 results, including confirmation and clearing if required • Prepared for a successful transition to higher education study and life as a student

Section 4: Evaluation Design and Implementation

Section 4.1: Evaluation Design

The Aimhigher Plus evaluation plan is informed by national and local strategic objectives for the NCOP, our theory of change, logic model, progression framework and associated learner outcomes (The 5 A's) and developments identified within the SEF. The evaluation plan will provide a robust evidence base by triangulating both quantitative and qualitative evaluation including outcome/impact, formative and process evaluation approaches and secondary data sets to explore 'what works', in what contexts and for which learners. The primary focus of our evaluation plan involves tracking learner engagement within NCOP activities via the Aimhigher Database and measuring short, medium and long term learner outcomes/impact by employing a quasi-experimental design across all programme¹⁸ activities. Our approach employs a matched-groups design, where outcomes are compared between learners that have (intervention group) and have not engaged (comparison group) within widening participation activities. This evaluation is supported by national (CfE) and local survey data (e.g. shifts/changes in attitudes) and via access to school / college and administrative data (NPD, ILR, UCAS and HESA) sets to support tracking and the analysis of learner outcomes (attainment, progression to level courses and entry to HE). The partnerships data sharing arrangements (see section 4.3 (k) and systems such as the Aimhigher Database and evaluation toolkits, support the collection of learner personal data (e.g. name, date of birth and postcode). Data sharing agreements enable the partnership to match and link datasets for individual learners to local and national administrative data sets. The data available to the partnership also supports cohort and subgroup analysis in terms of comparing outcomes of learners that have (intervention group) and have not engaged (comparison group) within the programme, level of engagements, types of activities engaged in and by pupil characteristics (year group, prior attainment, postcode socio-economic, FSM, Ethnicity, Disability, Gender, EAL etc.). This evidence base will also be complemented by both formative and process evaluation, including feedback from NCOP staff, school / college partners and learners to ensure programmes and associated content effectively meet learner's needs and programme objectives. Section 3 outlined the evaluation completed in phase one of the NCOP and our plans to strengthen our evidence base by testing for causality as the programme progresses and more data becomes available (e.g. access to national administrative data supporting the formation of matched comparison groups). At an activity level, the scale and scope of the evaluation is aligned to the intensity of activity and stage of development, where less evaluation is conducted with activities that have a stronger evidence base of impact.

Figure 7 (page 21) provides an overview of the cycle of phase two evaluation activities that will support the a) measurement of short, medium and long term outcomes, impact and b) improvements to programme and activity design. The diagram also outlines the standards of evidence that these evaluations support. Further, information on data collection and the design of these evaluations is provided from sections 4.3.

Data Analysis

Both descriptive and inferential statistics will be employed within the analysis of results. When learners are matched to national administrative data sets, it is highly likely that there will be some missing data in terms of learner's background characteristics. Imputation will be employed for missing data. A matched groups design will be employed to ensure that both the intervention and comparison groups are similar in terms of characteristics, which have been shown to be associated with differential levels of educational attainment (e.g. prior attainment, school/college, socio-economic background characteristics including POLAR, IDACI and FSM6, ethnicity, gender, disability status and EAL)¹⁹. Propensity Score Matching (PSM) will be employed to

¹⁸ The partnership are responsible for managing one of the OfS approved learner tracking databases and in turn this system supports the tracking of the long term impact of the programme. The partnership will continue to measure the long term impact of the programme in terms of HE progression (UCAS/HESA) as the CfE impact evaluation will only provide analysis at a national level and in turn findings will lack local context (e.g. activities that are identified ineffective in one consortia area may work in another area due to differences in content and delivery). Our quasi-experimental approach and supporting qualitative evaluation, is best suited to measuring short, medium and long term outcomes/impact and providing evidence and local context in terms of 'what works' as activities do not happen in isolation (e.g. students can attend multiple activities) and in turn it is not possible to distill or proportion learner outcomes and importantly impact (HE entry) solely to one activity using event evaluations.

¹⁹ It is possible that any differences in outcomes between groups may be due to factors that we have either not measured or controlled for within the design.

match the intervention and comparison groups and to estimate the treatment group effect size. Analysis will also employ other statistical methods as appropriate including regression analysis (starting with OLS for continuous outcomes and probit/logit for binary outcomes) and odds/risk ratio.

The partnerships quasi-experimental approach employed to evaluate WP activities was developed in 2012, with the purpose of improving evaluation practice by addressing the limitations of previous studies (e.g. poor sampling techniques, lack of or poor comparison groups and a lack of controls/matched group design). The design was supported by an extensive literature review of widening participation research and heavily influenced by journal articles by Gorard and Davies (2012). Since we have developed and refined this approach, it has been highlighted as good practice (OFFA and the Sutton Trust) and shared widely across the sector, supporting a step change in practice and the employment of similar robust experimental approaches. Our approach has supported and influenced the design of the national impact evaluation of NCOP being completed by CfE research. Despite the relative merits of our approach, it is not perfect and still has limitations which need to be considered. The previous section outlined how a complementary mixed methods approach will be employed to reduce the narrow reliance on one approach and how comparison groups and controls (matched group design) will help to reduce sampling bias.

Limitation of Methods

Some limitations of methods employed within our evaluation plan have been discussed on page 12, in terms of how programme content that focuses on addressing barriers to HE participation (5 As) is assumed to improve HE progression rates of disadvantaged learners. There is theoretical and empirical evidence to support such claims, but a lack of causal evidence. This section explores a number of other limitations of the methods employed.

Sample Sizes

Obtaining and maintaining good sample sizes will be a key factor to enable the partnership to provide a robust evidence base and make inferences on what works. Currently the partnership only track learners when consent has been obtained. Since the programme was launched, 34% (6300) of the NCOP (target cohort) have provided consent to be tracked. We estimate that we will have permission to track 8700 learners by 2020/2021. It is likely attrition rates will increase as a small proportion (5%) will not match to national administrative data sets (this will be addressed through imputation) and further a proportion of these learners will not be able to be tracked, due to the end of NCOP funding in 2021. Both the CfE and LEAP toolkit annual surveys only sample a small proportion of learners and there will be attrition rates in terms of fewer learners completing follow up surveys. Small sample sizes and attrition rates may lead to biased samples across our tracking approach, meaning that findings are not representative and generalizable to the wider population. However, the partnership are in discussion with the NPD and HESA teams to limit such issues, by exploring access to data via public task and research conditions (without need for consent) laid out in data protection law. This approach would significantly improve sample frames and the validity and reliability of findings.

Questionnaires

Both pre and post intervention and annual questionnaires (LEAP Toolkit and CfE survey) are employed to gather evidence in terms of short-term outcomes associated with shifts/changes in learners' aspirations etc. (see sections 4.3 c and d for more detail). Many of the items within these questionnaires focus on exploring learners attitudes and future intentions towards higher education (e.g. aspirations/intentions to go to higher education) and other local question items explore learners retrospective memory (e.g. self-reporting of engagement in non Aimhigher WP activities). There is a wealth of research evidence across the social sciences to suggest that retrospective memory is prone to error and that intentions to do something will not always be associated with actual behaviour. We are also fully aware of other issues that may adversely affect findings from questionnaires, such as acquiescence, response bias (e.g. social desirability) and extreme responding. Many of the measures that can be employed to address these issues have their own inherent problems. Within our reports and findings, we clearly outline such errors and limitations of approach by employing appropriate significance tests and when presenting descriptive data (percentages) including a margin of error statistic.

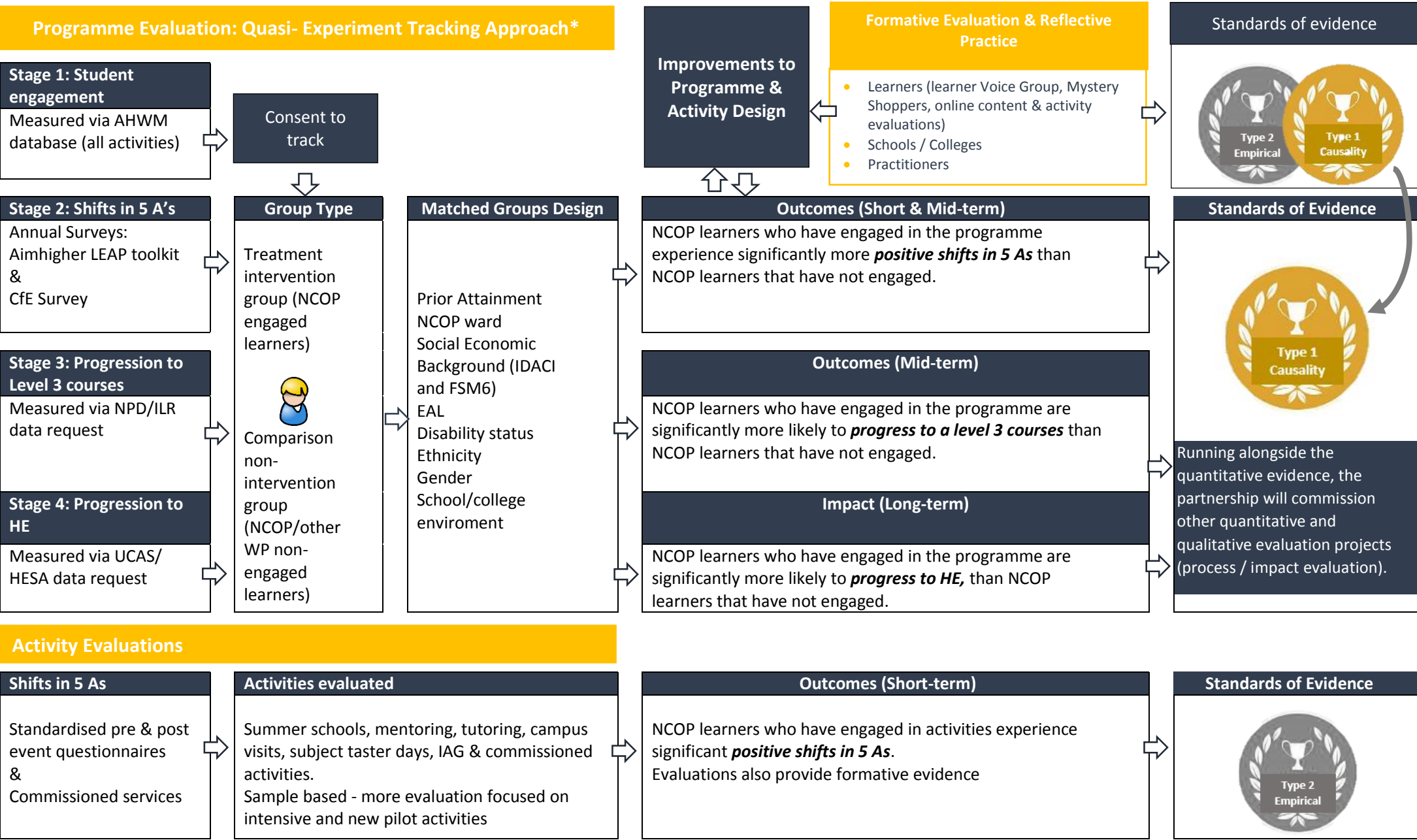
Forming a Robust Comparison Group and Contamination

Other factors that may affect the findings within our quasi-experiment approach include the phenomenon of contamination. This is where learners within the comparison group who have not engaged within Aimhigher

interventions may have actually engaged in other WP interventions. Such contamination would unknowingly suppress the observed effects between the intervention and comparison groups. However, we have put measures in place to reduce the probability of this occurring. Within our annual questionnaires we have asked learners if they have engaged within particular higher education activities within the past year (e.g. campus visits, summer schools and so on). This approach supports the formation of three groups of those engaged in Aimhigher activities (and others), those engaged in other WP activities and those that have not engaged at all. Our research has shown that by **not** applying this measure reduces effect size across intervention and comparison groups (e.g. suppressing the magnitude of observed outcomes). Such confounding variables are important to control, as they could mean the difference between a significant and non-significant result. However, as explained this self-reporting measure is not perfect as it is unlikely that learners will remember all WP interactions (e.g. university activities and more obscure interactions with peers, parents, social media etc.).

Other potential limitations of methods employed are discussed with section 4.3 (see section I: evaluation risk analysis). Section 4.3 also outlines the steps we have taken to improve the validity of tools employed for measurement (see section j: validation of data and toolkits).

Figure 7: Evaluation Methodology and Standards of Evidence



*As the NCOP is still in its early stages we are awaiting for our first administrative data sets to support our initial analysis. However, we have conducted a number of evaluations demonstrating the impact of the programme via learner case studies, UCAS progression analysis and a tutoring programme where initial analysis suggested improvements attainment. The latter two evaluations included comparison groups (type 2 empirical evidence), although we are not yet able to establish causality due to a lack of administrative data to support a matched group design.

Section 4.2: Evaluation implementation

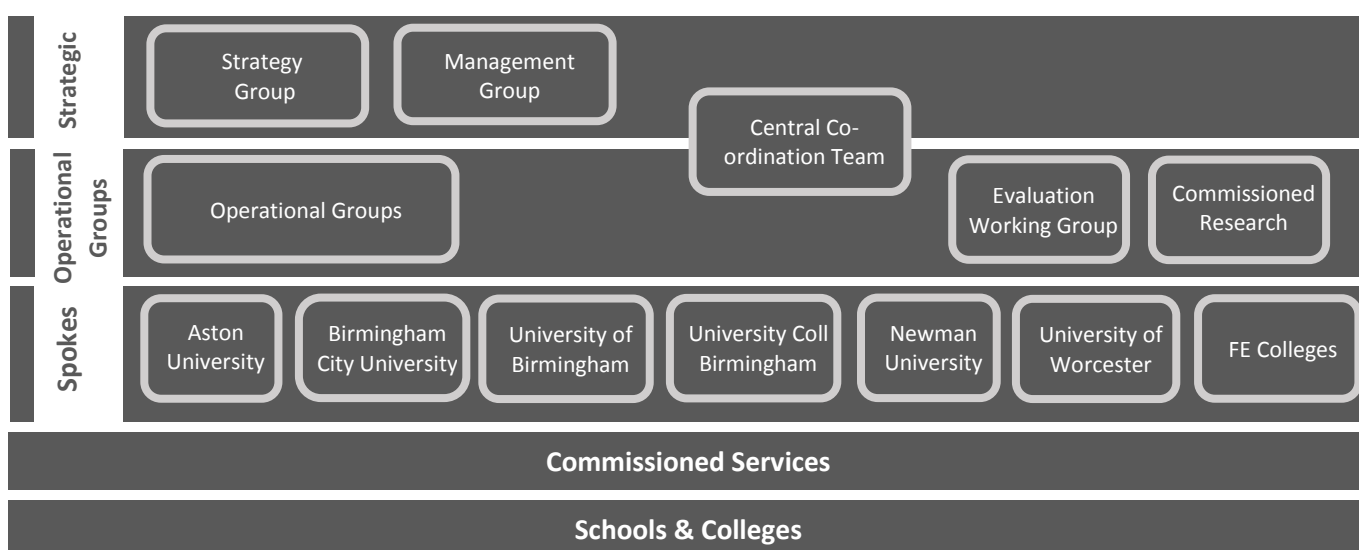
4.2: Project Management

Figure 8 outlines the project management structures embedded across the programme that support the implementation of the evaluation plan at both a strategic and operational level. Section 4.3 provides more detail on the evaluation plan in terms of what, when and how activities will be evaluated and how results will be disseminated and recommendations will be agreed and monitored.

Both the Strategy Group and Management Group²⁰ support governance and management arrangements, strategic direction, approval of OfS returns and oversight of the NCOP evaluation plan and associated outputs. The Management Group works closely with the Coordination Hub to operationalise strategy and evaluation plans. The Coordination Hub at the lead HEI support delivery spokes, overseeing the distribution of funding and providing centrally commissioned resources and materials, large-scale or generic programme components, marketing, promotional support, monitoring and evaluation/research. The central co-ordination team include two full time equivalent NCOP dedicated evaluation staff including a project officer, assistant officer and wider team support. The team are responsible for the co-ordination of evaluation and monitoring across consortium partners, management group and OfS reporting, maintaining tracking systems (the Aimhigher Database) and data access requests via national administrative data sets. The team provide day-to-day support and project management to ensure aspects of the plan are operationalised including the development of evaluation toolkits, training and guidance for staff and compliance in terms of ethics and GDPR. The central team are also responsible for collating and analysing data collected across the partnership to support themed evaluation reports. In phase two of NCOP the commissioning of evaluation and research will also be supported by an Evaluation Working Group with membership consisting of academics, practitioners and a representative from the Coordination Hub evaluation team and the management group.

The collection and inputting of data on systems across the partnership is devolved across NCOP staff situated within spokes, FE colleges and schools. Within the urban area spokes compose of a project officer and assistant project officer who ensure that evaluation plan requirements are met by their allocation of schools /colleges and commissioned services. Within the urban area this work is supported by Aimhigher Progression Ambassadors (APA's) situated in schools and school and FE college staff who receive funding to support this work. Within the rural area this work is supported by a central hub and NCOP staff allocated to local schools and FE colleges. Evaluation and monitoring guidance documentation and training supports this process by outlining staff roles and responsibilities.

Fig. 8: Project Management Structures



²⁰ The Strategy Group membership includes six Pro-Vice Chancellors from across partner institutions and representation from the Management Group. The Management Group memberships consists of senior managers (outreach and recruitment) from partner HEIs. Representatives from the Co-ordination team are represented within both of these groups.

Section 4.3: Data Collection

4.3(a): Fig 9: Data Collection Schedule

The table below summarises the key data collection points for each NCOP cohort in terms of national data sets, learner engagement data and the evaluation activities to be undertaken. Both tracking learner outcomes and evaluation will continue through to phase two of the programme. In phase two, an evaluation working group will be established to lead on implementing evaluation across agreed areas of priority.

Cohort	16/17	17/18		18/19	19/20	20/21		
Tracking, Administrative Data Sets & Annual Surveys								
1	Year 13	CFE Baseline Survey	Cohort will not be tracked			LEAP Survey Toolkit (Baseline)		LEAP Survey Toolkit (Follow up)
2	Year 12		Year 13	UCAS data (Sept 18)	HESA data (NPD) (March 20)			
3	Year 11		Year 12 KS4 & L3 (NPD) (March 18)	Year 13	UCAS data (Sept 19)		HESA data (NPD) (March 21)	
4	Year 10		Year 11	Year 12 KS4 & L3 (NPD) (March 19)	Year 13		UCAS data (Sept 20)	
5	Year 9		Year 10	Year 11	Year 12 KS4 & L3 (NPD) (March 2020)		Year 13	
6			Year 9	Year 10	Year 11		Year 12 KS4 & L3 (NPD) (March 2021)	
7				Year 9	Year 10		Year 11	
8					Year 9		Year 10	
9							Year 9	
Tracking learner Engagement (Aimhigher Database)								
Evaluation								
Pre and Post Activity Evaluations – (2017-2021) (Impact and Formative Evaluation): Campus Visits, Materclasses, Summer Schools, Mentoring, IAG and commissioned programmes								
School Consultation – (April 17) (Formative Evaluation)			Case Studies (May 18 to Feb 19) (Impact and Formative Evaluation)		Annual impact reports: exploring progress to level 3 courses and HE progression rates (2019-2021) (Impact Evaluation).			
					Evaluation Working Group (2019-2021) (evaluation themes to be agreed)			
Learner Voice and Mystery Shoppers (Sept 17 to 2021) (Impact and Formative Evaluation) Insiders Project – learner consultations focused on social media platforms and content								

4.3 (b): Student Engagement Data (Short, Mid-Term and Long Term Output Target)

The Aimhigher West Midlands Database is used to record the frequency and types of activities NCOP and non-NCOP students have engaged in. Within our operational plan, the partnership have set out objectives to:

- Engage 20% (3850) of NCOP learners within both the 19/20 and 20/21 academic years
- Engage 20% of NCOP learners within each NCOP ward across both the 19/20 and 20/21 academic years.

The evaluation will also explore whether there is an association between outcomes and frequency (e.g. a sustained progressive programme²¹) and types of activities engaged in.

Definition: Learners Engaged within the NCOP Programme

KPI Definitions	
Disadvantaged	Learners from NCOP wards (OfS)
Engagement	Learners that have engaged in at least one NCOP activity.
Young People	Year 9-13 including FE year 1 and 2 (age 18-19 on level 3 programmes)
Data Sources	
Local data available from AHWM database. The database records students frequency of engagement (e.g. 0, 1, 2, 3, 4 or SPP) and activities types (e.g. campus visits, summer school, mentoring, tutoring, masterclasses and IAG activities)	
Data Release	
As required in line with local and OfS reporting requirements	

Further, the CFE national survey that is being employed across consortia to measure shifts in learners' knowledge of and aspirations towards HE etc. is also collecting additional data for the local Aimhigher Plus Programme. We have included a question to measure learners' engagement in other non-NCOP widening participation activities (see table below). The activity types are aligned to those collected on the Aimhigher database used to monitor learners' engagement within NCOP activities. This self-reporting question was incorporated to support our quasi-experimental design and the formation of a valid non-treatment comparison group.

Approximately how many times have you been involved in or attended the following University activities during the last year?

University activity type	Activity description	Number of times
University summer schools	<i>This usually involves staying at a university and taking part in a range of activities over a number of days</i>	
University mentoring	<i>This usually involves 1-1 support within your school / college from a university student</i>	
University campus visits	<i>This usually involves a visit to a university where you are taken on a tour and meet university students and staff and find out about university</i>	
University masterclasses	<i>This usually involves activities where you attend a lecture or lesson given by university staff at a university</i>	
University information, advice and guidance	<i>This usually involves university staff visiting your school or college to give information and advice on university life, how to apply, course choices, and student finance</i>	

²¹ A sustained and progressive programme (SPP) includes students that have engaged in at least 2 NCOP activities or an intensive programme of activities (e.g. mentoring/summer schools/tutoring etc.).

4.3 (c): Student Aspirations, Attitudes, Knowledge and Confidence (Short to Mid-Term Outcome Target and Learner Analytics Toolkits)

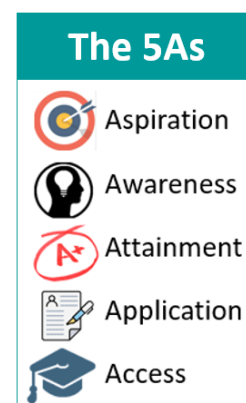
Our quasi-experimental approach incorporates evaluation toolkits to measure how learners' engagement within individual activities or engagement across a range of activities leads to reductions within the barriers they face in terms of progressing to higher education. Two types of toolkits are being employed across the programme. One toolkit will be used to measure the short term outcomes experienced by learners from attending specific NCOP activities through the use of standardised pre and post event questionnaires (see section 4.3 (d)).

A second standardised evaluation toolkit (The LEAP Toolkit) will be employed on an annual basis to measure short to mid-term outcomes in line with the progression framework and associated outcomes (5As) (e.g. progression barriers) and support a needs led learner analytics approach to programme support and design. Both toolkits have been validated (see section 4.3 (J)). Both toolkits are also aligned to Pierre Bourdieu's concept of cultural capital and non-cognitive functions such as self-efficacy. The annual survey will be matched with administrative data sets, complimenting the learner tracking approach.

Learner Evaluation & Progression Toolkit



The Learner Evaluation and Progression (LEAP) Toolkit has been developed by Aimhigher Plus to support both evaluation of learner outcomes overtime and a learner analytics approach to identify and address learner needs and barriers to HE progression through assessment data. Combining both of these aspects supports an efficient approach to collecting evidence in terms of 'what works' and also ensures that data is used in proactive way to support planning and the delivery of needs led interventions, targeted at those most in need and supporting improved learner outcomes. The question items within the toolkit are based on an extensive literature review of the key factors that can enable and reduce disadvantage learners progression to higher education. The LEAP toolkit supports a learner and school needs led approach to meeting these outcomes by assessing prominent needs, gaps, barriers and themes. The toolkit is aligned to the Aimhigher Plus Progression Framework which has been designed to support learners' progress to higher education (see section 3.2 – figure 6).



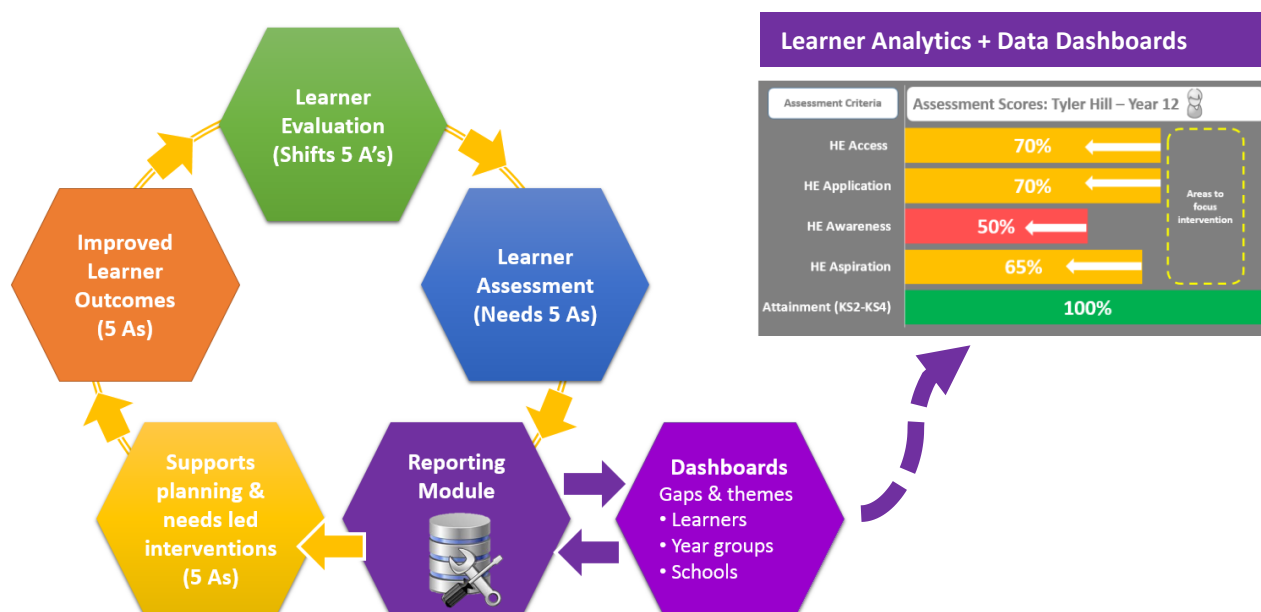
LEAP Toolkit Purpose

The toolkit includes the following modules:

- 1. The Learner Evaluation Module:** The toolkit supports our programme evaluation by aligning with and measuring the outcomes (5 A's) outlined within our progression framework. As the toolkit will be employed on an annual basis, this will enable shifts in these outcomes to be measured to identify the short-medium term outcomes of the programme.
- 2. The Progression Module:** includes assessment question items, which supports an innovative learner analytics approach to widening participation, which is more widely used within the field of student success. Such approaches (Nottingham Trent University and JISC) have been shown to improve student outcomes. The assessment module of the toolkit supports this process with data dashboards that score learners, schools and year groups in terms of their progress towards the 5As. This will allow the partnership to:
 - a) Identify the needs of learners and the primary barriers they experience in progressing to HE** – these factors will be assessed in terms of their progress towards the 5 As
 - b) Identify themes and gaps** - across schools and year groups in terms of their progress to the 5As.
 - c) Ensure interventions are needs-led** - assessment at both individual learner and school / year group level will help to ensure that practitioners employ interventions that are needs led, by addressing gaps, barriers and themes with a focus on particular learners, schools or year groups. This will help to support planning and help ensure that programme resources are deployed effectively and efficiently.

- d) **Improve learner outcomes** – by employing a systematic and standardised learner analytics approach to identify learner needs and barriers to progression and by ensuring this data is used to support planning and appropriate needs-led interventions, will help to ensure resources are effectively and efficiently deployed leading to improved learner outcomes.

Fig. 10. LEAP Toolkit Annual Cycle



Development of the Toolkit

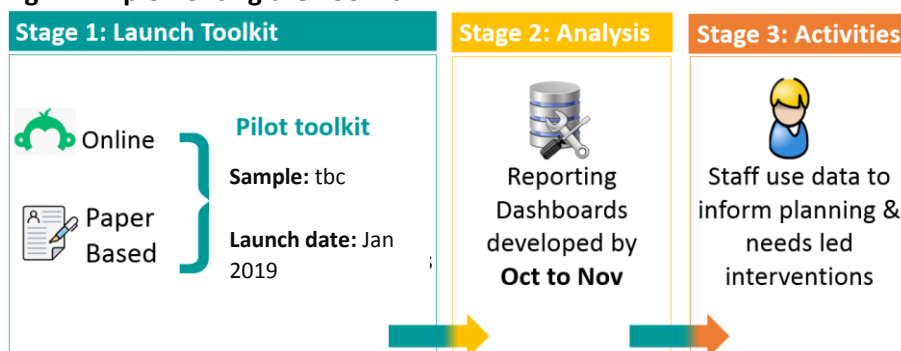
The question items within the toolkit are based on both national and local evidence in terms of the key factors that can enable and reduce learners' progression to higher education. The question items within the toolkit have been developed by the Aimhigher West Midlands programme over the past decade to support the evaluation of activities (e.g. learner shifts across the 5As). Other question items within the toolkit have been used within intensive programmes such as mentoring to support both evaluation of the scheme and also to act as an assessment tool to provide mentors with an understanding of learners intentions in terms of education and careers pathways and the barriers they face in terms of progressing to HE. Further, all question items have been developed from an extensive literature review terms of the barriers that disadvantaged learners face in terms of progressing to higher education.

The toolkit comprises of a separate questionnaire for each year group (9-13). Each questionnaire consists of 10-11 question items. There are five core generic questions which appear across each year group. The remaining questions are either specific to a particular year group or repeated over one or two year groups.

Implementing the Toolkit

Plans are currently being developed to support the piloting and implementation of the toolkit across a sample of schools.

Fig.11: Implementing the Toolkit



4.3 (d): Pre and Post Activity Evaluation Toolkits (Short Term Outcomes & Formative)

A standardised evaluation toolkit has been developed to measure the short term outcomes of activities via learner pre and post event questionnaires. The toolkit includes a bank of questions, from which practitioners can select the most appropriate items that are related to the content and aims of specific activities. Question items are aligned to the progression framework and outcomes (5As). The toolkit allows practitioners to reflect on which activities are most effective (via data dashboards) and whether activities are supporting improved learner outcomes in line with the aims and content of the activity. The toolkit has also been designed to support formative evaluation by allowing learners to provide feedback on how activities could be improved, feeding in to programme design. In phase one of the programme expectations were set out to ensure that the extent of evaluation was aligned with the resources employed within activities (e.g. more evaluation was focused on resource intensive activities and new activities being piloted). Since phase one of the NCOP, partners have completed over 100 evaluations. The evidence has shown significant post event positive shifts in learners' aspirations, awareness, confidence and motivation across all programme activities. We intend to explore and validate these findings further through our quasi-experiment approach by comparing outcomes between learners that have and have not engaged within WP activities.

4.3 (e): National Data Sets: Tracking Student Outcomes and Impact

The next section outlines the national administrative data sets which will support our quasi-experimental approach to track learners by comparing outcome and impact measures between NCOP learners that have engaged (treatment group) and have not engaged (non-treatment group). National administrative data sets (NPD, ILR, UCAS and HESA) will enable the partnership to track learners across their educational lifecycle in terms of level 3 and HE progression. NPD data will also support access to learner demographic data, supporting comparisons and a matched groups design. These data sets will be matched to engagement and annual survey data from the LEAP Toolkit (and CFE survey where questions are consistent). The following sections outline our targets in relation to these outcome measures, timescales and definitions of the data sets. A full timeline for the release of all national data sets and implementation of local evaluations was outlined earlier on page 23.

4.3 (f): Progression to Level 3 (Mid-Term Outcome Target)

Within our operational plan the partnership set a mid-term outcome target to:

- Increase the proportion of NCOP learners progressing to Full Time Level 3

As outlined in section earlier (see page 23) this data will not be available until March 2019 for the second NCOP cohort. Following this the data will be available annually. We intend to compare the level 3 progression rates between NCOP learners that have (treatment group) and have not engaged (non-treatment comparison group) within activities. When this data is available we will be able to develop baseline, benchmarks and milestones/goals for this KPI. We will not be tracking the first NCOP cohort that reached this milestone (year 11 in 16/17) as there was little engagement, due to the programme not being fully staffed and operational until September 2017.

Definition: Learners Progressing to a Level 3 Qualification

KPI Definitions	
Disadvantaged	Learners from NCOP wards (OfS)
Level 3 courses	DFE Level 3 qualifications are: A level, access to higher education diploma, advanced apprenticeship, applied general, AS level, international Baccalaureate diploma, level 3 award, level 3 certificate, level 3 diploma, level 3 ESOL, level 3 national certificate, level 3 national diploma, level 3 NVQ, music grades 6, 7 and 8, tech level.
Progression	Option 1: Enrolled on level 3 FT programme or Option 2: stayed on for at least 3 months

Young People	Aged 16-18 on entry to a level 3 qualification
Data Sources	
NPD/ILR: <i>KS5_TRIGGER_2016, KS5_ACAD, KS5_TLEV and KS5_AGEN</i> Use filter: <i>KS5_TRIGGER_2016 = 1 and (KS5_ACAD=1 or KS5_TLEV=1 or KS5_AGEN=1)</i> The filter selects students at the end of 16-18 study (<i>KS5_TRIGGER_2016 = 1</i>) who entered for at least one approved level 3 academic (includes A and AS levels and other level 3 academic qualifications), tech level or applied general qualification during 16-18 study. This approach should produce student numbers which match the level 3 cohort reported in the KS5 performance tables from 2016 onwards.	
Data Release	
Annually – March	

4.3 (g): Progression to HE (Long-Term Impact Target)

NCOP partnerships are required to increase progression rates within each NCOP ward by 2 percentage points a year to meet Government targets. We have set detailed long-term targets for this measure as outlined in the logic model and our operational plan submitted to HEFCE in 2016. HE progression milestones and goals across the partnerships 25 NCOP wards are outlined in appendix 1. We intend to access this data via HESA entry rates. The partnership will not be tracking cohort 1 (year 13 in 2016/17) as the programme was not fully operational and is unlikely to have had a significant impact on HE entry rates. As there is an 18 month delay from when a student enters higher education to the release of HESA data, the partnership will be locally sourcing UCAS application data for individual learners on an annual basis (September to November). This data will provide an early indication of HESA entry rates, although there is likely to be some attrition (e.g. learners are accepted and either do not progress to HE or delay entry). For cohort 2 (year 13 in 17/18) we have already completed a UCAS analysis and will be able to access HESA data in March/April 2020. For cohort 3 (year 13 in 18/19) UCAS data will be available in the autumn of 2019 and HESA data in March/April 2021. For cohort 4 (year 13 in 19/20) UCAS data will be available in the autumn of 2020. For this cohort and all other cohorts, it will not be possible to access HESA entry data as funding for the programme will have ceased. Due to this inability to monitor the impact of the programme post summer 2021, we have not set any HESA targets within our operational plan for cohorts four and above. The partnership has set the following HE entry goals:

- In 2020 a 2 percentage point increase in HE entry rates across all wards (cohort 2)
- In 2021 a 2.5 percentage point increase in HE entry rates across all wards (cohort 3)

As part of our evaluation plan we will also compare HE entry rates of NCOP learners that have engaged in activities (treatment group) against a non-treatment comparison cohort of NCOP learners that have not engaged in NCOP activities.

Definition: HESA entry rates

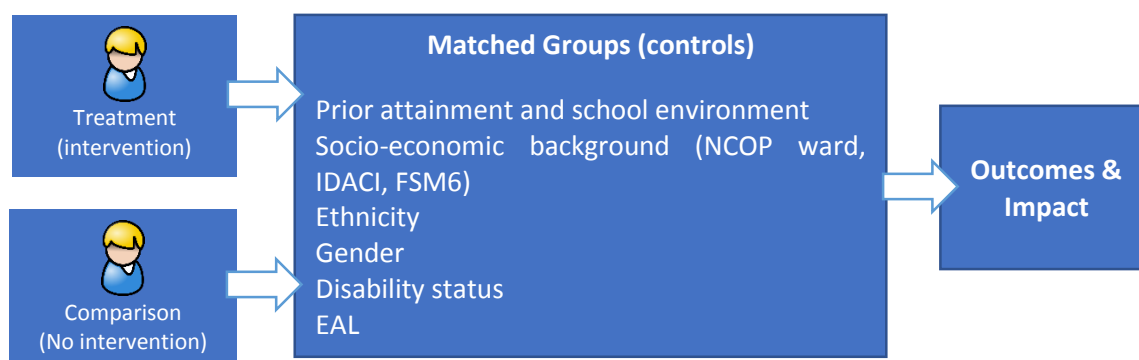
KPI Definitions	
Disadvantaged	Learners from NCOP wards (OfS)
Higher Education	Any course of prescribed HE, whatever the mode of study (HND, HNC, foundation degree).
HE entry	Data is based on a learners enrolled and stayed on a course for a least 50 days
Young People	Aged 18-19 on entry to HE
Data Sources	
HESA entry data field name: HE_COMDATE (Date of Commencement of Programme) ILR data field name: DEST (learner table) - Destination of the learner after completion of learning (code 55 entered higher education (Previous field name L39). Data on learners completing FE in HE	
Data Release	
Annually – March	

4.3 (h): Matched Groups (Control Variables and Contextual Data)

Within our quasi-experiment evaluation approach we will be employing a matched groups' design, where NCOP learners within the treatment (intervention) and non-treatment groups²² will be matched in terms of key variables which have been found to influence attainment and HE progression rates. A key component of our matched group design is that the non-treatment group will only include learners that have not engaged in NCOP or other widening participation activities.²³ Without such a control group comparisons would be made between a treatment-group (for whom the dosage of intervention is known) against a 'so called' control/comparison group (for whom dosage of interventions is only partially known or not known at all). This runs the risk of suppressing any significant impact as the control/comparison group may have engaged in WP interventions.

A large amount of evidence suggests that the most significant factor associated with progression to HE is a learners' prior level of attainment (DfE, 2014 Gorard 2012; BIS 2013; Goodman et al., 2010; Chowdry 2013). Prior attainment and HE progression rates vary across socio-economic groups (DfE 2009, DfE SFR 2013, BIS 2015, Sutton Trust 2010, HESA), gender (DFE SFR, 2016; HESA 2014/2015), ethnicity (DFE SFR, 2016; UCAS End of Cycle Report, 2015), disability (DFE SFR 2016) and EAL (Perry 2016). In addition to the factors outlined above we will also only be comparing learners' outcomes if they are attending the same schools/colleges. Evidence suggests that it is important to control for the school environment/experience in this way (Bandura, 1994; Bryk et al, 2001 Rosenbaum et al, 1988). Learners from NCOP wards will be matched in terms of these characteristics within the treatment and non-treatment comparison groups. Propensity Score Matching (PSM) will be employed to match the treatment and comparison groups and to estimate the treatment group effect size. Figure 12 provides a summary of the variables that will be matched and controlled.

Fig. 12: Matched Groups



²² As outlined previously we intend to obtain a comparison group of NCOP learners who have not engaged in NCOP interventions via consent forms

²³ We accept that this approach of learners self-reporting engagement within widening participation activities is not perfect as there may be issues in terms of learners' retrospective memory. However, this approach is useful and provides a better picture of engagement and reducing the risk of confounding variables biasing the validity of results.

The table below outlines the NPD data sets we will be accessing to form our matched groups design.

Definitions: control variables/contextual data - NPD attainment and Census

Data set	NPD data field														
KS4 attainment	<p>Key Stage 4 Awarding Body data or Key Stage 4 Performance Tables (PT) data:</p> <ul style="list-style-type: none"> Average progress 8 score Average Attainment 8 score % Grade 5 or above including English and maths GCSEs Grade 4 or above including English and maths GCSEs <p>Data will either include a baseline prediction and actual attainment depending on the cohort (See below). We may also collect Key stage 5 data</p> <table> <tr> <th>Cohort age in 16/17 academic year</th><th>Data to draw baselines (NPD)**</th></tr> <tr> <td>Year 8</td><td>KS4 prediction Summer 18</td></tr> <tr> <td>Year 9</td><td>KS4 prediction Spring 17</td></tr> <tr> <td>Year 10</td><td>KS4 prediction Spring 17</td></tr> <tr> <td>Year 11</td><td>KS4 prediction Spring 17</td></tr> <tr> <td>Year 12</td><td>KS4 actual summer 16</td></tr> <tr> <td>Year 13</td><td>KS4 actual summer 15</td></tr> </table>	Cohort age in 16/17 academic year	Data to draw baselines (NPD)**	Year 8	KS4 prediction Summer 18	Year 9	KS4 prediction Spring 17	Year 10	KS4 prediction Spring 17	Year 11	KS4 prediction Spring 17	Year 12	KS4 actual summer 16	Year 13	KS4 actual summer 15
Cohort age in 16/17 academic year	Data to draw baselines (NPD)**														
Year 8	KS4 prediction Summer 18														
Year 9	KS4 prediction Spring 17														
Year 10	KS4 prediction Spring 17														
Year 11	KS4 prediction Spring 17														
Year 12	KS4 actual summer 16														
Year 13	KS4 actual summer 15														
Student characteristics	The fields below will be collected from the school census/ILR*														
Ethnicity	EthnicGroupMinor_[term][yy]														
Gender	Gender_[term][yy]														
FSM6	EVERFSM_6_[term][yy]														
Disability	SENprovision_[term][yy] SENstage_[term][yy] in 2001/02														
EAL	LanguageGroupMajor_[term][yy]														
Data Release															
Annually – March															

*The request will include census data for the Spring Census 2015 to ensure we have full coverage of data for FE students.

**The baselines assume college students are either in year 1 of FE (aged 16-17) or year 2 of FE (aged 17-18) and then we source their school data and not level 2 retakes in college

4.3 (i): Formative and Process Evaluation

Over the course of the NCOP scheme, partnership members will be encouraged to engage in reflective practice to improve the impact of interventions. Reflective practice will be supported through the quantitative, formative and process evaluation strands. Aspects of this work will involve consulting with staff, learners and parents. Consultation and co-production with learners and stakeholders is deeply embedded across the Aimhigher Plus programme. Service user involvement and ongoing consultations will help to ensure that the design of the local NCOP programme is needs led and also help to establish the impact of the programme on learners and partnership working. This approach has ensured that learners have more ownership of the programme and are more motivated to engage. This consultation and co-production is ongoing and involves:

- Pre and Post event evaluations (Formative):** in addition to measuring short term outcomes, evaluations also provide learners with an opportunity feedback in terms of the content of activities and where improvements can be made. This information is constantly reviewed and used to inform the planning and delivery of activities. Within the mentoring programme NCOP staff, complete a needs assessment with learners to inform the future content of sessions (e.g. levels of knowledge about progression pathways and student finance etc.).
- The Learner Voice Forum (Formative and Process):** is attended by young people from NCOP schools. The forum includes representatives from all year groups (9-13) and allows learners to play an active role in shaping the programme. To date this forum has supported the development of the programme by:

- Incorporating learners' feedback to improve activities and engagement of target audiences. This has been supported by discussions within meetings. In phase two of the NCOP opportunities will be provided for learners to become **mystery shoppers** at events
- Consulting with learners via the forum and Insider's Project to improve our **social media content** and engagement of target audiences across relevant platforms.
- Learners' involvement within the recruitment and interview process to employ new members of NCOP staff.

Within phase two of the NCOP there are plans to launch a Parent Voice forum, which will provide ongoing opportunities for parent consultations.

In phase one of the programme we consulted with schools and colleges to identify the barriers they faced in terms of engaging within the NCOP programme. This consultation informed the key programme design elements of the NCOP in terms of providing sufficient staffing resources in schools and funds to cover transport costs to access campus based events. Other consultations within phase one (student case studies) have involved a process evaluation approach, incorporating feedback from learners, NCOP staff and schools/college staff. Process evaluation is also supported by regular monitoring of NCOP learners engagement within the programme and identifying if there are any gaps in engagement across schools, colleges and year groups.

4.3 (j): Validation of Data and Toolkits

Previous sections have outlined the standardised monitoring and evaluation toolkits that have been developed to measure the short, medium and long term outcomes of the programme in line with the Aimhigher Progression Framework and local/national strategic objectives (see logic model). Evaluation toolkits include those employed across activities to measure short-term pre-post event shifts and the LEAP survey measuring similar shifts (and providing assessment data) over the mid-term via annual surveys. The question items within the toolkits primarily focus on attitudes and knowledge of understanding of higher education and the key barriers that learners face in terms of progressing to higher education. The development of question items has been supported by an extensive literature review and are aligned to the concepts of self-efficacy (Bandura) and cultural capital (Bourdieu).

Survey question items incorporated into the LEAP toolkit and pre-post activity evaluations have been tested, refined and validated over the past 10 years. Testing of the toolkits has shown that post intervention learners have demonstrated shifts attitudes towards and knowledge of HE. Further, we have piloted our evaluation questionnaires over a number of years using cognitive testing to ensure they are easy to understand and user friendly. We recently tested these toolkits with the Learner Voice Group. All evaluation tools are tested to improve validity of findings by ensuring that the wording of questions and instructions are age appropriate. To support this we use the University of Nottingham SMOG Calculator - which provides a readability level by age group²⁴. We have a good understanding of the limitations of self-reported data and how response bias, acquiescence, social desirability can invalidate responses leading to a proportion of error. To highlight such issues we employ margin of error calculation within our analysis of survey responses for question items.

The LEAP Toolkit will be piloted on a sample of schools within the 2019/20 academic year. The toolkit itself will be evaluated at the end of the 2020 academic year. This will include a 360 review process including:

1. Feedback from NCOP staff in terms of the effectiveness of the toolkit in terms of:
 - a) Identifying learner/school needs and HE progression barriers (e.g. questions and data dashboards)
 - b) Supporting effective interventions that are needs led
 - c) Supporting improved learner outcomes
 - d) Improvements and developments to the toolkit

²⁴ <https://www.learningandwork.org.uk/SMOG-calculator/smogcalc.php>

2. The toolkit will also be reviewed in terms of improving learner outcomes and progression rates to HE by:
 - a) Comparing outcomes of learners in schools that have and have not used the toolkit
 - b) Comparing outcomes of non-NCOP learners with NCOP learners in the same schools (e.g. in some schools both groups will complete the questionnaires but only NCOP learners will receive more intensive and ongoing support, intervention and engagement)

The vast majority of our evaluation work involves tracking learner outcomes in terms of administrative data sets (GCSE outcomes, Progression to Level 3, UCAS Acceptances and HESA entry data). Section 4.1 and parts of section 4.3 have provided more details on this quasi-experiment approach and how valid comparisons will be made between the intervention and comparison group by employing a matched group design and controlling for pupil characteristics, which are associated with differences in educational attainment.

4.3 (k): Data Access, Sharing and Ethics

The data sharing agreements and protocols developed by the partnership support the flow of data between stakeholders (HEIs, local schools and colleges, our own tracking provider, commissioned services and agencies holding administrative data sets) in a lawfully compliant way.

Data Protection and Ethical Approval

The partnership have worked in collaboration to develop a partnership wide Data Sharing Agreement (DSA) and Privacy Notice. These documents have been developed by an external law firm in consultation with legal teams across our six partner HEIs. The Data Sharing Agreement outlines how personal data will be processed lawfully in accordance with data protection principles set out within Data Protection Legislation (2018). The DSA outlines expectations including how partner HEIs will securely process personal sensitive data in a fair and transparent manner, the types of data to be collected and data retention periods etc. The agreement has high level support and has been signed by Pro-Vice Chancellors across partner institutions. Our evaluation approach has been approved by the UoB ethics committee.

Consent, confidentiality and the right to withdraw

A key aspect of our research methodology relies on tracking learners in terms of outcomes and access to school / FE College and national administrative datasets (NPD, ILR, UCAS and HESA). To gain access to these data sets, the partnership employ a lawful basis via explicit parental and learner consent. The consent forms and privacy notice provide a transparent overview of the research, why data is being collected, who it will be shared with across the partnership and other agencies (e.g. linking programme data to national data sets) and how their personal information will be stored, kept confidential, the right to withdraw and when it will be destroyed etc. Learners are made aware that if they do not opt into the research, this will not stop them from participating within the programme in any way. If learners and their parents are happy to take part, they are asked to tick the opt-in box within the consent form.

School / College Collaboration Agreements

To support the processing and sharing of data the partnership also employ collaboration agreements with schools and colleges. These collaboration agreements outline the lawful basis for sharing data and expectations in terms of data to be shared by schools / colleges and other agencies (NPD, ILR, UCAS and HESA) to support effective targeting, monitoring and evaluation of the NCOP. Collaboration agreements are signed by senior members of staff within schools / colleges.

Data storage and security

All sensitive personal data that the partnerships holds is stored securely (locked cabinets, encrypted / password protected). The amount of personal data the partnership collect is minimised, only information that is required to monitor performance and evaluate the impact of the programme is sought. Data is only shared with agencies outlined within consent forms and the privacy notice. Our monitoring and evaluation guidance and partnership data sharing agreement outlines partner expectations in terms of data storage and security. The central co-ordination team are responsible for maintaining a data asset register which provides information on the data held and when data will be securely destroyed. Evaluation staff within our central co-ordination team are accredited ONS safer researchers and have a sound understanding of confidentiality and

ensuring participants are not identified within research outputs (e.g. low numbers, cross-tabulation and dominance effects etc.).

4.3 (I): Evaluation Risk Analysis

This section outlines the key risks and assumptions that have been identified in terms of the successful implementation of the partnerships evaluation plan and strategies for mitigating these risks. In phase two we intend to establish a new Evaluation Working Group that will be responsible for commissioning research across the partnership. Once research projects have been identified a full risk assessment will be completed.

Identifying ‘What Works’ and Access to National Data Sets

Our partners’ legal teams have outlined that the Aimhigher Plus NCOP, has a lawful basis under Data Protection law (see privacy notice) to track learner outcomes without the need for consent, by employing the public task and research conditions. However, we still continue to collect learner and parent consent to access this data, until clarification is provided from the holders of national administrative data sets (NPD and HESA) on whether they will accept our justification for accessing data via public task and research conditions. As this has not been resolved, we continue to deploy significant resources in terms of finance and staff time to gather consent to track. However, to date only 36% of the NCOP cohort have provided consent.

Learner and School/College Engagement

Some schools/colleges may be reluctant to engage within the programme, for example as a result of more pressing financial or inspection-related priorities. This could negatively impact on programme and ward²⁵ level learner engagement targets and subsequent outcomes/impact indicators. To mitigate against this risk we have consulted with schools/colleges to identify barriers to engagement to ensure that activities are needs led and that schools / college are provide with sufficient resources to engage within the programme.

The more successful the programme is in terms of engaging large numbers of learners, the more challenging it will be to obtain a sizeable matched comparison group (e.g. learners not engaged). If the comparison group is too small we intend to compare outcomes by frequency of learner engagement/activity types.

Targeting

Poor targeting of interventions may result in no significant increase in HE participation rates. The initial HEFCE analysis identified that within certain wards there were fewer than expected young people participating to HE relative to their levels of GCSE attainment (‘participation gap’). HEFCE funded consortia in terms of the number of young people living within these NCOP wards. There are a number of limitations to this approach:

1. The GCSE and HE entry data used by HEFCE related to two entirely different cohorts of young people (HE entrants aged 18/19 between 2005 and 2010, and 16 year old GCSE learners in 2014/15)
2. A further issue with ward level targeting is that the population of NCOP learners within wards is not homogenous. Despite relatively strong GCSE outcomes at ward level, the cohort will comprise individuals with high, average and low attainment, including those who will not have the potential to progress to HE and those who are very likely to, irrespective of any NCOP intervention (e.g. those with high attainment and high aspirations to progress to HE). As outlined in section 4.3 (c) we have mitigated against this risk by developing a new targeting approach that focuses on learners with low levels of aspirations and/or knowledge/understanding of HE and the potential to progress to HE.
3. Targeting is based on the assumption that the reason NCOP learners are not progressing to HE is due to a lack of aspirations, knowledge/understanding of HE, rather than academic potential. However, there is no evidence to suggest there is a causal relationship between these factors and progression to HE (Gorard, See and Davies 2012). This is an under-researched area that to date has lacked valid sampling and control/comparison groups. Our local quasi experiment evaluation approach aims to address these gaps.

²⁵Some schools/colleges only have learners on roll from one NCOP ward.

HE progression rates

A risk relates to consortia **not** meeting their HE progression targets at programme and ward level. NCOP cohorts within some wards are very small and data could become skewed. Further, before the NCOP programme commenced there was an underlying UCAS trend of a 1% increase in HE applications. Recently this trend has decreased. To mitigate against this risk we are conducting a programme level evaluation that will compare HE outcomes between the treatment group and non-treatment group (this should control for any national trends across both groups).

The national CFE impact evaluation runs the risk of suppressing any significant impact on learners' as the treatment group (whose dosage of intervention is known) will be compared against a comparison group (whose dosage of intervention is only partially known/not known at all). The national evaluation will source learner engagement data from the three tracking database providers. These databases do not record all learner engagements within NCOP interventions²⁶ and importantly do not record learner engagement for all other types of non-NCOP WP activities (e.g. university/FE, school/college or third party outreach). Our local approach mitigates against this risk by including a question within the CFE survey which asks about learners' engagement within NCOP and non-NCOP WP activities.

NCOP Funding

Consortia have been informed that NCOP funding will continue until July 2021. The short-term nature of funding decisions and reduction of funding for activity delivery (taken up by outreach hubs) could reduce the impact of the scheme due to staff turnover and a reduction in resources.

The most significant impact indicator (HESA entry data) will not be released until 2020²⁷. This will make it difficult to establish the impact until the later stages of programme. To mitigate against this risk and with the support from school / college collaboration agreements we are accessing UCAS data on an annual basis from schools / colleges.

National Policy Drivers

National policy including changes to the school curriculum and the review of post-18 education may have a more significant impact on disadvantage learners' attainment rates. For example, changes to the HE finance regime and GCSE / A Level reforms could lower aspirations²⁸ and the number of learners obtaining the grades to progress to HE. In such a scenario maintaining current levels of participation would be evidence of a positive impact.

4.3 (m): Annual Evaluation and Research Budget

This section provides a breakdown of the budget that has been allocated for evaluation, research and programme monitoring²⁹. The costs by budget line are broken down within the table below. In 2019/20 the Aimhigher Plus partnership will be receiving £2.4 million from the OfS to deliver the NCOP. The NCOP programme is innovative in that the partnership are piloting new programmes and activities where robust evaluation with a formative element is needed to support new learning. By employing standardised evaluation toolkits and streamlining these across our partnerships APP and the NCOP, we have ensured that evaluation resources are deployed in an efficient manner. Further, our evaluation guidance outlines how evaluation resource should be deployed with a greater focus on intensive activities. In line with good practice approximately 5% (£123,000) of the NCOP budget is allocated to evaluation and research. When costs associated with monitoring programme engagement are taken into account approximate costs rise to 9% (£216,700) of the NCOP budget. Additional evaluation and research resource will be secured from the establishment of the NCOP Evaluation Working Group and the support and expertise from academics.

²⁶ NCOP consortia do not record all learner engagement especially within large NCOP events as it is not always possible to obtain learner registers.

²⁷ The first year 13/FE2 cohort will not be tracked as the programme was not fully operational until September 18.

²⁸ Our tracking data (over 15,000 learners) has demonstrated this trend over the years (pre and post Browne Review).

²⁹ Costs associated with programme monitoring have been included as this data supports all aspects of evaluation and research by providing context in terms of programme engagement with learners and schools/colleges and also supports the formation of comparison groups (e.g. intervention group of students that have engaged within the programme and a comparison group of those that have not engaged).

Table 1: Evaluation, Research and Monitoring Budget

Resources	Funding Allocation
Dedicated evaluation and research staffing	£62,000
Commissioning external research	£25,000
Staffing support across the partnership	£67,500
Commissioned services evaluation	£10,000
Database maintenance, hosting and developments	£30,000
National administrative data sets (HESA)	£3,000
Survey Monkey	£400
Travel, training and conferences	£600
All other costs - material and equipment (PCs, stationary and printing)	£4,200
Office overheads (office costs, HR and legal support etc.)	£14,000
Total Evaluation and Research	£123,000
Total Evaluation, Research and Monitoring	£216,700

Section 5: Planning to Learn from the Evaluation

The partnership has a number of formalised mechanisms in place to ensure findings and learning from evaluation are shared and disseminated widely across the programme and stakeholders to inform strategic decision making, practice and improved impact of interventions. Internally these mechanisms include:

Strategic Overview Mechanisms: section two outlined the partnerships strategic structure with six university partners represented within the Strategy and Management group meetings. Within these meetings evaluation is a running agenda item, where findings are regularly discussed and reviewed to inform decision making in terms of improving the impact of programme activities and addressing gaps to improve learner and school/college engagement. These decisions and feedback from the Learner Voice group feed into operational meetings to support planning and the development of interventions.

The partnership disseminate evaluation reports in different formats, to ensure findings are accessible to a variety of audiences. This includes full evaluation reports, briefing and key insights reports, and infographic reports. When interpreting results and disseminating findings, the partnership ensure that reports are objective by outlining the limitations of evidence in terms of methodology, sample sizes and bias. Members of the management group are fully aware of such limitations and take these into account to ensure that recommendations are justified, valid and proportionate to the strength of the evidence provided (e.g. evaluation standards type 1,2 and 3).

Evaluation Working Group: In phase two the partnership will build on these structures by establishing an NCOP Evaluation Working group. This group will support additional capacity and expertise (academics and practitioner from across six partner universities) to increase the scope and depth of evaluation. Learning and evidence will feed into strategic and operational structures to inform programme design in terms of 'what works', in what contexts and for which learners.

Evidence, Learning and Planning Cycles: section one outlined how a continuing cycle of evaluation evidence has enabled the partnership to improve programme design leading to improved models of delivery to support improved engagement of learners, schools and colleges and improved content within activities and social media platforms. Learning and evidence to inform programme design is supported by three primary mechanisms:

- a) Review of monitoring data in terms of engagement/targeting to identify gaps in provision
- b) Event/programme impact evaluations including tracking via administrative data sets
- c) Feedback from staff, learners and practitioner's in terms of improvements to activities and gaps.

This evidence supports the planning cycle in terms of review, planning and implementation of activities and programmes.

Fig. 13: Project Planning Cycle



Section one outlined how new pilot activities had been reviewed leading to the re-commissioning of activities that had a strong evidence base of impact (e.g. MyTutor) and the decommissioning of activities that were found to be less effective (e.g. the Access Platform). Periodic planning cycles are supported by reviewing monitoring data and evaluation findings (impact and gaps in engagement) before the end of each academic year. The data supports the planning process in terms of identifying which types of interventions should be re-commissioned and how the programme should be targeted to increase impact.

Section 4.3 (data collection schedule) outlined the administrative data sets used to identify the year on year progression rates of learners and the evaluation cycles and associated reports which continue to support strategic decision-making. Strategic decision making to inform programme design will be supported further in phase two with the launch of the LEAP Toolkit. Evidence will be reviewed to establish whether employing an innovative learner analytics needs-led approach to widening participation has helped to target resources more effectively to those most in need and improve learner outcomes. The toolkit will be piloted in early January 2020 and results will inform planning for 2020/21.

Findings and learning from evaluation is shared more widely across the partnership with schools and colleges, via the following mechanisms:

- **Activity impact reports** summarising pre and post learner shifts (e.g. aspirations)
- **The Teachers and Advisors Conference** and **School Forum Meetings** attended by CEIAG leads, teaching staff, members for school senior leadership teams and widening participation practitioners. In July 2019 we presented findings from our Impact Case Study evaluation.
- **Staff research briefing meetings:** used to discuss learning from evaluation and improvements to programme design with senior outreach managers and practitioners
- **The NCOP newsletter:** circulated to schools/colleges and WP practitioners
- **Key insight briefings:** circulated to schools/colleges and WP practitioners
- **The Aimhigher website:** hosts the partnership research and impact reports

Sharing Findings across the Wider Sector

Throughout phase one of the NCOP, the partnership has been pro-active in sharing local evaluation evidence widely across the sector and will continue to build on the sharing of best practice in phase two. The following mechanisms are employed to share and disseminate findings across the wider sector:

- Sharing evaluation reports with **CfE and TASO calls for evidence** in terms of WP impact evaluation. In phase one the partnership shared reports from our Case Study evaluation which explored the impact of models of delivery and learner outcomes, UCAS progression impact analysis and MyTutor impact reports and an analysis exploring changes in learner aspirations pre and post Browne review. Our Research and Data Officer has also supported the TASO literature review of WP impact evidence.
- Sharing evaluation findings with CfE to be included on the **NCOP resource bank** website
- In the early stages of phase one the partnership consulted with local schools and colleges to identify the key barriers that they faced in terms of accessing widening participation activities. Findings were used to inform programme design by increasing resources within schools to support co-ordination and engagement (Aimhigher Progression Officer and TLR payments) and funding for transport costs. Findings have informed the development of other NCOP consortia's delivery models including Aspire to HE.
- Sharing reports more widely across the sector via the **Aimhigher website** (Research and Impact pages), **Action on Access** sector wide newsletters and **social media platforms** (Twitter, Youtube and LinkedIn). In phase one these reports have received a good level of engagement from both WP practitioners and schools/colleges. We will continue to disseminate our evaluation findings across these platforms in phase two.
- Our phase one evaluation plan was rated as outstanding by CfE, scoring full marks and with no areas for improvement. This plan has been shared widely across the sector with other HEIs, to support the development of their NCOP and APP evaluation plans. We will continue to share our evaluation approach in phase two.
- Our quasi-experimental approach has supported the development of the CfE national impact evaluation. The partnerships Research and Data Officer is a member of the OfS NCOP tracking and advisory group and will continue to share expertise and best practice within these meetings.
- In phase two of the NCOP, the partnership will be delivering a **conference** to disseminate our impact findings.

Appendix 1: Aimhigher Plus NCOP Target Wards and Progression Milestones / Goals

Note - since these milestone and goals were set in 2016, the OfS have updated the NCOP population statistics. This has reduced the local population from circa 20,000 learners to 18,000 learners. In turn milestones with the table below we need to be refreshed to reflect this drop in NCOP learners. However, the milestones and goals for the proportions progressing to HE will stay the same.

Target wards	Local district (NUTS3)	Observed YPR (POLAR3 Q1)	Expected YPR (POLAR3 Q1)	Engage 20% of target cohort 2017-18 (based on 5 cohorts)	# of learners completing year 13 per annum	Milestones: Increase observed YPR - entry rates of learners engaged (based on 1/5 of overall cohort completing Year 13 per annum)								Goal 2020 Cumulative YPR % point increase for engaged cohort that complete Year 13 over 2 years	
						2017		2018		2019		2020		observed YPR increase on observed YPR	# learners progress to HE
						1.5% point increase on observed YPR	# learners progress to HE	2% point increase on observed YPR	# learners progress to HE	2% point increase on observed YPR	# learners progress to HE	2.5% point increase on observed YPR	# learners progress to HE		
Bartley Green	Bham	21.7%	34.7%	274	55	23.2%	12.7	25.2%	13.8	27.2%	14.9	29.7%	16.3	8.0%	57.7
Kingsbury	Bham	17.0%	23.0%	262	52	18.5%	9.7	20.5%	10.7	22.5%	11.8	25.0%	13.1	8.0%	45.3
King's Norton	Bham	21.5%	27.3%	256	51	23.0%	11.8	25.0%	12.8	27.0%	13.8	29.5%	15.1	8.0%	53.5
Longbridge	Bham	20.7%	26.4%	443	89	22.2%	19.7	24.2%	21.4	26.2%	23.2	28.7%	25.4	8.0%	89.8
Shard End	Bham	14.1%	17.8%	308	62	15.6%	9.6	17.6%	10.8	19.6%	12.1	22.1%	13.6	8.0%	46.1
Kingstanding	Bham	16.3%	19.2%	404	81	17.8%	14.4	19.8%	16.0	21.8%	17.6	24.3%	19.6	8.0%	67.6
Fordbridge	Solihull	13.7%	15.8%	136	27	15.2%	4.1	17.2%	4.7	19.2%	5.2	21.7%	5.9	8.0%	19.9
Kingshurst	Solihull	13.4%	18.9%	144	29	14.9%	4.3	16.9%	4.9	18.9%	5.4	21.4%	6.2	8.0%	20.8
Smith's Wood	Solihull	11.5%	15.6%	180	36	13.0%	4.7	15.0%	5.4	17.0%	6.1	19.5%	7.0	8.0%	23.2
Chelmsley Wood	Solihull	11.2%	14.4%	155	31	12.7%	3.9	14.7%	4.6	16.7%	5.2	19.2%	6.0	8.0%	19.6
Rowley	Sandwell	19.4%	25.2%	167	33	20.9%	7.0	22.9%	7.6	24.9%	8.3	27.4%	9.2	8.0%	32.1
Blackheath	Sandwell	23.4%	27.6%	167	33	24.9%	8.3	26.9%	9.0	28.9%	9.7	31.4%	10.5	8.0%	37.4
Bristnall	Sandwell	20.7%	24.3%	201	40	22.2%	8.9	24.2%	9.7	26.2%	10.5	28.7%	11.5	8.0%	40.7
Tividale	Sandwell	22.6%	23.9%	180	36	24.1%	8.7	26.1%	9.4	28.1%	10.1	30.6%	11.0	8.0%	39.2
Oldington and Foley Park	Worcs	8.5%	11.2%	78	16	10.0%	1.6	12.0%	1.9	14.0%	2.2	16.5%	2.6	8.0%	8.2
Droitwich West	Worcs	16.7%	18.8%	79	16	18.2%	2.9	20.2%	3.2	22.2%	3.5	24.7%	3.9	8.0%	13.5
Areley Kings	Worcs	22.3%	24.0%	67	13	23.8%	3.2	25.8%	3.5	27.8%	3.7	30.3%	4.1	8.0%	14.4
Greenlands	Worcs	17.9%	18.6%	110	22	19.4%	4.3	21.4%	4.7	23.4%	5.1	25.9%	5.7	8.0%	19.7
Rainbow Hill	Worcs	14.1%	14.8%	73	15	15.6%	2.3	17.6%	2.6	19.6%	2.9	22.1%	3.2	8.0%	10.9
Belmont	Here..	16.7%	22.0%	131	26	18.2%	4.8	20.2%	5.3	22.2%	5.8	24.7%	6.5	8.0%	22.3
St Martins & Hinton	Here..	16.0%	20.7%	146	29	17.5%	5.1	19.5%	5.7	21.5%	6.3	24.0%	7.0	8.0%	24.1
Stokesay	Shrop..	17.9%	21.5%	31	6	19.4%	1.0	21.4%	1.1	23.4%	1.5	25.9%	1.6	8.0%	5.2
Burford	Shrop..	21.6%	26.2%	20	4	23.1%	0.8	25.1%	0.8	27.1%	1.1	29.6%	1.2	8.0%	3.9
Ludlow Henley	Shrop..	19.7%	26.4%	30	6	21.2%	1.1	23.2%	1.2	25.2%	1.5	27.7%	1.7	8.0%	5.4