

Evaluation of the impact of Aimhigher and widening participation outreach programmes on learner attainment and progression

Interim Report

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1. The context for the research

In April 2004, the integration of Excellence Challenge, the widening participation programme funded by the (then) Department for Education and Skills, and the Partnerships for Progression initiative, funded by the Higher Education Funding Council for England (HEFCE) and the Learning and Skills Council (LSC) marked the launch of the Aimhigher programme in its current form. The purpose of the programme is to raise the aspirations and develop the abilities of young people from lower socio-economic groups, from under-represented minority ethnic groups and those with disabilities in order to widen higher education (HE) participation among non-traditional entrants.

Aimhigher partnership activities are now funded by HEFCE and the Department for Innovation, Universities and Skills (DIUS). These bodies have a commitment to promote and provide the opportunity for participation in higher education for all who can benefit, but they also have a duty to encourage efficiency in the use of public funds and to provide stability of funding to HEIs from year to year. Assessing the specific impact and contribution of Aimhigher and other widening participation initiatives is, therefore, an essential part of their accountability to the public purse and of programme planning for the future. Data for this assessment is provided both from national statistical surveys, which provide detailed information on trends in HE participation, and from local partnerships, which provide information on the activities and the young people that attend them. In response to the variety of partnership contexts and data collection methods, HEFCE has created a template which is aimed at bringing greater standardisation to the local data collection process.

HEFCE have commissioned the National Foundation for Educational Research (NFER) to assess the contribution that Aimhigher and other widening participation outreach initiatives are making to improvements in attainment and progression. HEFCE are particularly interested in establishing whether there is any evidence that Aimhigher and widening participation activities have led to positive participant outcomes in attainment and progression, identified through a combination of quantitative and qualitative data.

This research has three objectives:

- **1.** to assess the quality and extent of existing data in order to refine and develop future data capture exercises in Aimhigher partnerships
- **2.** to explore, in detail, the evidence of impact that can be inferred from data provided by Aimhigher partnerships where data quality and completeness is perceived to be good
- **3.** to provide a robust evaluation of the Aimhigher programme as a whole.

This internal report presents interim findings on the first research objective. NFER has also begun work towards the second objective and progress on this is recorded here.

2. Research design

The research has been designed in three phases to correspond to the three objectives identified in the previous section. The first phase, which is the focus of this report, involves examining the types of data collected by partnerships and assessing the extent to which the data is able to provide evidence of the impact of the Aimhigher programme on participants' attainment and progression. The second stage consists of a more detailed examination of this quantitative data, and will include structured workshops within each partnership that aim to develop a clearer understanding of the links that are thought to exist between Aimhigher activities and participant outcomes. The final phase expands the methodologies explored in the first two phases to a wider sample in order to deliver an evaluation of the Aimhigher programme as a whole.

2.1 Recruitment of partnerships

The first phase of the study involved selection of a sample of Aimhigher partnerships and then:

- interviews with data managers (or equivalent) and other staff in order to establish the local context and to explore issues relating to data collection and collation
- a review of the partnerships' data, derived from their systems, and the extent and coverage of their data entry fields.

The aim of these activities was to enable NFER to identify areas of good practice in data collection and management, and to highlight any emerging issues and data gaps.

In consultation with HEFCE it was decided that the study should focus on partnerships in which data collection and collation are regarded by HEFCE as effective, limiting the number to six. This sample is small enough to allow an in-depth study of available partnership data but wide enough to test the data coverage and identify different partnerships' concerns and good practice related to data collection, collation and management.

The six partnerships were chosen by HEFCE and invited by NFER to participate in the research, to which they all agreed. Each has been extremely helpful in supporting and contributing to the research process. The partnerships' contexts ranged from densely-populated urban areas to a largely rural setting; they were from four different geographical regions, and the number of Local Authorities (LAs) involved in each partnership ranged from two to ten. This variety of circumstances, with different socio-economic local population profiles, cultures and organisational capacities, is valuable for understanding how individual circumstances may affect the systems of data collection.

2.2 Development of an analytical framework

NFER drew up an analytical framework with which to review the data collection and collation in each of the research partnerships. Issues that were to be examined included:

- data collection: how data (on both participants and activities) is collected, from whom and how often
- data collation: how participant and other data is coded, linked and monitored over a period of years
- data management and security: the methods of storing data, the systems used and the kinds of data security protocols that are in place
- data analysis: the types of analysis undertaken and how these analyses may be used.

2.3 Data collection phase

Fieldwork to date has involved:

- **a.** A semi-structured interview with the data manager and other relevant Aimhigher employees (such as the Area Co-ordinator) in each partnership. Each interview had three purposes:
 - to establish the partnership's local context
 - to explore the partnership's approach to and systems of data collection, collation and management. The analytical framework that was drawn up in the first phase of the research formed the basis for this part of the interview, although it was used flexibly to accommodate the issues and context of each partnership

- to open negotiations for the transfer of data from the partnerships to NFER. This data is the focus for the detailed analysis planned for stage two of the research.
- **b.** The development of a proforma, based on the interview evidence, for partnerships to complete and submit to NFER. Completion of this form shows the type of information collected by partnerships, the number of records and the form in which the data is collated. All six partnerships have completed and returned the proforma.
- **c.** Interrogation of the information collected from the partnerships. Evidence from the interviews was analysed, using the analytical framework, to highlight good practice and to examine issues raised by partnerships related to data collection, collation and management.

In addition to this work, NFER has begun the second phase of the research. The negotiations for the transfer of data from partnerships to NFER have been finalised, a data sharing protocol has been drawn up and secure methods to transfer data have been put in place. Five partnerships have provided their datasets; the sixth is finalising the relevant agreements with the local steering group and the LA, and NFER expects the data from this partnership in early 2009. Evidence gained from an early examination of these submitted datasets has been used to support the interview data presented in this report. NFER is now well-positioned to be able to carry out the indepth analysis of partnership data in the second stage of the research.

The next chapter presents the findings from the first phase of the study.

3. Key findings

This chapter focuses on the key findings from the data gathered. It is divided into three sections; the first is related to the context in which Aimhigher partnerships operate and describes the issues raised by interviewees that they believe impact on the process of data collection. The second is concerned with issues relating to data on participants and activities and its collection. The final part examines issues of data security.

3.1 External challenges for data collection in Aimhigher partnerships

When asked to describe the context for their partnership, interviewees reported a number of external challenges that impact upon their ability to set up, manage and sustain an effective system of data collection. These include the absence of institutional status, changes in funding and changes to the structure of the education system.

The absence of institutional status

Running through each interview was the strong belief that partnerships are dependent on the goodwill of their partners (i.e. schools, Further Education Colleges (FECs), Higher Education Institutions (HEIs) and LAs to deliver the data required to monitor and evaluate the Aimhigher programme. One Area Co-ordinator described this as stemming from the complexities that arise from the absence of institutional status, which places partnership teams in a position of relatively little authority when it comes to requesting data. However, this also had the effect of enabling schools, FECs and HEIs to take ownership of the activities they provide (which helps to strengthen commitment to the Aimhigher programme). The challenge was seen as creating a partnership of sufficient strength that partners were willing to contribute to the process of monitoring and evaluation.

Changes in funding

Overall funding for Aimhigher has not been reduced, although some redistribution has occurred towards rural areas. In relation to this redistribution, interviewees in three urban partnerships commented that perceived reductions in funding to Aimhigher partnerships has had two main effects. On the one hand funding cuts were seen to have had the positive effect of encouraging partnerships to focus more clearly on effective targeting. Partnerships noted, however, that the combination of managing this year's reduced funding at the same time as taking on additional evaluative requirements has often been '*extremely difficult to manage on the ground*'. In addition one partnership expressed concern that schools may see the reduction in funding as a form of down-sizing that suggests the Aimhigher programme lacks strategic importance.

Systemic challenges

Another theme running through the interviews was the challenge provided by different aspects of the education system itself. Four points were reported as having particular relevance:

- The perception that Aimhigher has a single mission of widening participation but is working with institutions that have different aims, cultures and ways of working. The challenge here is to *'effect a culture change'* within partner institutions, particularly schools and colleges, so that they can discover a common purpose that is focused on the Aimhigher vision of encouraging non-traditional groups of young people to participate in higher education.
- Differing, and sometimes overlapping, initiatives concerned with widening participation and boosting achievement in schools. Examples quoted by interviewees, such as the Gifted and Talented programme, the National Challenge and the London Challenge, were seen to create difficulties with identifying potential Aimhigher participants. The London Challenge was presented as duplicating effort as schools are linked with a local HEI, while other initiatives were said to result in schools having '*different pulls and pushes*' on the learners they select for participation in the Aimhigher programme. All are perceived to contribute to unevenness and possible overlap in the targeting process which, in turn, adds complexities to data collection.
- The introduction and promotion of academies. Interviewees in two partnerships reported that, on the one hand, academies could be seen as providing an opportunity for partnerships to embed the Aimhigher programme into a new school as it was entering a formative period. On the other hand, the existence of a number of schools outside the remit of the LA was perceived as adding an extra layer of difficulty to data collection, as all data relevant had to be accessed directly from the academies. This was seen as an added complication when data sharing agreements had already been set up with the LA as part of the strategy for simplifying the data collection process.
- A perceived shift in emphasis in the monitoring and evaluation of the Aimhigher programme. Partnerships reported that they felt there had been a shift in emphasis in the evaluation of the programme from monitoring changes in participants' aspiration and motivation (which was seen as having the indirect effect of raising attainment) towards monitoring participants' attainment. While the intention of

the programme had always been to focus on outcomes for young people, most of the data previously requested from them was related to providing information on numbers of activities, numbers of attendees at activities and the cost of such activities. In partnerships, there is now a greater awareness of the need to monitor specific outcomes for young people and so the challenge lies in shifting the focus of the partnerships' strategic plan towards monitoring attainment and progression.

3.1.1 Strategies adopted to address the challenges

Despite these challenges, which related to creating the conditions for systematic data collection within a fluctuating context, all partnerships interviewed were optimistic about the work they were doing. Strategies that partnerships employed to encourage partners' commitment to data collection and submission included:

- a. Building trust. Developing trust between the Aimhigher team and the partners in different sectors requires time and effort, but was seen by all partnerships as being essential for the creation of a robust system of data collection. Specific ways in which interviewees reported on building relationships included:
 - engaging in dialogue with partners to encourage their understanding of the Aimhigher programme
 - dealing flexibly with problems and anomalies as they arise
 - understanding partners' institutional contexts and the demands that are made upon their staff and how these impact on their participation
 - re-negotiating relationships with new or newly-appointed staff within partner institutions
 - providing high-quality feedback to partners so that they can see the value of their efforts and are encouraged to embed Aimhigher activities further into their working lives.
- **b. Recruiting key personnel**. Although there were variations in the data collection system of each partnership, all partnerships reported that key personnel for this process were the Aimhigher Co-ordinators within partner institutions and, in some cases, Borough Co-ordinators. These people were seen as the link between the Aimhigher core team, partners, participants and parents / carers, and were reported as being critical in mediating any issues that arise related to data collection.
- **c. Introducing change gradually**. While all partnerships emphasised the time it takes to establish a sustainable system of data collection, one Area Co-ordinator focused on the manner in which change was introduced. This interviewee stressed

that rapid, imposed change tends to meet with resistance whereas more incremental change, led as far as possible by the relevant partners, is more likely to be both sustained and sustainable.

d. Marketing Aimhigher. Partnerships reported that marketing of Aimhigher activities was an important part of awareness-raising so that partners, participants and parents / carers were aware of the work being undertaken by the programme and would then be more willing to contribute to its evaluation. Some partnerships, for instance, stated that they sent out explanatory literature to parents / carers with the consent form at the beginning of the year; others reported a strong relationship with the local press which publicised different events during the course of the year.

The next two sections report on the issues surrounding data collection on participants and activities.

3.2 Collection of data on Aimhigher participants

Partnerships are now required to collect standardised data so that a profile of participants can be made and updated as they move through the Aimhigher programme. According to the HEFCE template the information on each participant should include:

- Name, date of birth, gender, ethnicity, disability
- Post code
- Occupational background with code for NS-SEC
- Parent / carer experience of HE
- School / college / training provider
- Proportion of Category 1 and Category 2 activities attended
- Attainment
- Progression.

This section reports on issues that relate to collection of this data and its management once collected. In each case the focus is first on the issues raised by the partnerships, and then on the successful strategies that have been used to overcome – or, in some cases, partially overcome – these difficulties.

3.2.1 Baseline data collection

The collection of baseline data is essential if participants' attainment and progression are to be monitored effectively, and all partnerships have found that the initial challenge lay in deciding when the data should be collected, from whom and in what form. Five of the six research partnerships collect baseline data, and all five use paper forms to collect this information. Particular issues experienced by partnerships related to gathering this baseline data / consent included:

- a. Identifying the participants. Although all partnerships reported moving towards a system of targeting named participants, interviewees reported that not all boroughs had yet established systems where cohorts were accurately identified. One partnership reported school resistance to singling learners out from their peers.
- b. Data sharing consent. Issues in this context related to the age at which participants should give permission to share data, when the relevant forms should be distributed and the number of different organisations that should be included. One partnership reported differences in the list of data-sharing organisations in its boroughs; another reported that a long list of potential data-sharing partners can be off-putting for participants and their parents / carers. This can result in fewer respondents granting permission and can reduce the amount of data available to the partnership. The interviewee believed this is related to the current media climate in which publicity has been given to a number of high-level leaks of personal data.
- **c.** A degree of school resistance to collecting information on parent / carer occupational background. This is regarded as highly personal information by schools and many have objected to its inclusion in the Aimhigher data requirements. One partnership has experienced particular difficulty and, as yet, has been unable to resolve the issue.
- **d.** The accuracy of the information when provided by participants (on their parent / carer experience of HE, for instance).
- e. Collecting the data. Not all schools have established efficient systems for collecting and returning completed forms to the relevant data managers.

3.2.2 Strategies for successful baseline data collection

As the baseline data requirement is relatively new, not all partnerships have developed their systems fully and some are experimenting this year with new methods. Successful strategies for overcoming the difficulties associated with identifying participants and encouraging them to complete the baseline questionnaire include:

- a. Standardising the targeting process throughout the partnership. Some partnerships have entered into data sharing agreements with LAs to facilitate greater accuracy in targeting participants. These agreements enable partnerships to collect standardised baseline data on participants' predicted outcomes which, in turn, allows borough-wide monitoring of participants' attainment and progression.
- **b. Including the relevant data-sharing question** in a standardised baseline questionnaire for participants in compulsory education, ensuring that all relevant organisations are included. One partnership also includes a data-sharing request in the post-activity evaluation forms that are distributed to post-16 participants.
- c. Keeping the request for information on parent / carer occupational background simple. In response to the disquiet expressed in some quarters about the perceived intrusive nature of this question, two partnerships conducted research into gaining information on participants' parent / carer occupational background. After experimenting with different types of question formation, one partnership found the most effective way of gaining this information was to use an open-ended question that asks for the household's main wage-earner's occupation. Both of these partnerships developed an agreed style of questioning that was used by all partners. Some of the controversy that this question created when first introduced seems to have passed as four partnerships reported that the relevant information is collected (although for a limited number of Aimhigher participant families in one). The two remaining partnerships collect no data on parent /carer HE background or occupation.
- **d.** Recognising the importance of the school Aimhigher Co-ordinator. Partnerships regarded the role of these personnel as pivotal in explaining these issues to parents / carers and participants, and encouraging them to complete the forms.
- e. Selecting a core group of participants in targeted schools to receive a priority invitation to activities. Parent / carer consent forms, which include the baseline information required, are distributed to these participants at the start of Year 9. Names of all participants who return completed forms are entered onto a central

secure database which is updated annually as participants move through the programme.

- f. Distributing a baseline questionnaire to targeted Year 10 participants. Devised by the Borough Co-ordinator, this aims to find out baseline data requirements together with participants' aspirations, future plans and interests. The completed forms are returned and entered into a borough-level database, and some of the information is returned to school co-ordinators with the aim of enabling them to tailor the proposed activities to the reported needs / interests of participants.
- **g.** Using the School Census to gain information such as participants' post code and date of birth. This requires an agreement with the relevant LA, but the information gained is regarded as being more accurate than the data collected in the school from participants.
- **h. Including the provision of this data** as part of the conditions under which schools will receive Aimhigher funding.

Some of the issues here relate to a partnership's ability to manage change which, in turn, may be related to the type of relationship that the Aimhigher partnership team has created with its institutional partners. All partnerships are in the process of establishing a system for collecting baseline data that will yield valuable information on participants; all, however, emphasised the long-term nature of this endeavour and reported that it will take time for these new systems to yield results.

3.3 Tracking participants through the Aimhigher programme

Partnerships reported that they encountered problems with collecting data on participants' attainment and progression as they move from compulsory to post-compulsory education. Difficulties reported with tracking participants included:

- a. Tracking students into FE. Partnerships reported difficulty in accessing data that gives information on participants' destinations after compulsory education. Although it is relatively easy to monitor participants who remain within their school sixth form, there are problems associated with learners who move area or into a FEC. Interviewees reported that reasons for this included:
 - difficulties associated with learners' records changing from a Unique Pupil Number (UPN) in compulsory education to an Individual Learner Record (ILR) when entering a FEC, as this results in duplication and missing data

- the need for a data-sharing agreement between FECs and partnerships if information on participants is to be released
- encouraging FECs to report on participants' attainment data; one interviewee reported that, although this was standard practice for schools, FECs were 'more possessive' about their data and accessing it was 'a struggle'.
- b. Tracking students into HE. This is an aspect of data collection that partnerships said they found particularly difficult. Partnerships reported that working with UCAS and HESA data was unsatisfactory, saying that access is expensive, that it is difficult to access individual data and that monitoring progress through these bodies needs to be a continuous process as participants do not necessarily enter HE at the age of eighteen. In this context, one partnership expressed frustration that HESA data was not available to all partnerships as a matter of course; another suggested that HEFCE could approach UCAS to make their data available to all partnerships.
- **c.** The absence of definitive lists of participants. Not all partnerships have a list of targeted learners. While partnerships may wish to preserve school autonomy, it presents a challenge when partnerships are endeavouring to track participants' progression to post-compulsory education.

3.3.1 Successful strategies for tracking participants through the Aimhigher programme

Some partnerships are setting up systems through which they will be able to track students more closely and thus be able to monitor their attainment and progression more accurately. Successful associated strategies include:

- a. Setting up data sharing agreements. These are variously with the LA, Connexions, FECs and the LSC, each of which can provide aspects of the data that are needed. Aimhigher interviewees noted that the LAs are regarded as particularly important in this respect because of the large amount of data they hold on learners. One partnership commented that the *'ideal team'* for Aimhigher data collection would consist of employees from Aimhigher, Connexions and the relevant LAs.
- **b.** Joining data-sharing groups. All partnerships reported data-sharing agreements with different bodies; two have either joined or set up data-sharing groups. These were said to have helped to create greater local understanding of the purposes of data collection and the use to which it is being put. This in turn increased

understanding and helped to ease access to data-sharing agreements with other bodies.

c. Purchasing data from UCAS and HESA. While working with UCAS and HESA is regarded as problematic, partnerships are continuing to develop ways in which they can use the information that they are able to access from these bodies. For instance one partnership purchases data from UCAS for every participant who resides within the area at Super Output Area (SOA) level, and from this can measure participation by IMD and ward.

Partnerships have reported individualised data on numbers of participants ranging from 600 - 16,000. Whilst there may be gaps in areas of data that are required by HEFCE, it nonetheless shows that some partnerships now believe they are able to track Aimhigher participants' progress over a number of years. Stage two of this research will assess the efficacy of this data and provide more detailed information on the gaps.

3.4 Aimhigher activity data

Partnerships spoke of the importance of monitoring participants' Aimhigher experience as part of the process of programme evaluation. The first challenge for partnerships is to decide on how much information to collect, from which activities and in what form, and then to develop a strategy for monitoring and evaluation that collects a wide enough range of data to be meaningful without over-burdening partners or producing unnecessary data. The next section outlines the specific challenges reported by partnerships in this context, and this is followed by their strategies for overcoming these difficulties.

3.4.1 Challenges of collecting activity data

Interviewees reported that the challenges related to collecting activity data included:

- a. Collecting high-quality data. Partnerships pointed out that Aimhigher activities are delivered by practitioners, many of whom have had little training in evaluation, and that often the quality of the data was insufficient to be of value.
- **b.** Monitoring activities. Although partnerships reported that monitoring activities that are run by the Aimhigher team is relatively easy, they spoke of the challenge

that lies in persuading partners to record their own activities. Interviewees suggested that this stems from practitioners' belief that delivering the activity to the participants is their chief concern.

c. Deciding on the sample to evaluate. Partnerships reported that they have to strike a balance between ensuring that a representative sample of activities and participants is achieved and ensuring that the size of the sample is manageable.

3.4.2 Successful strategies for collecting activity data

Successful strategies for collecting a manageable amount of monitoring and evaluation data that is of high quality included:

- a. The central team making the decision on which activities to evaluate, in order to provide an overarching evaluation strategy for the entire partnership area. Two partnerships focused on collecting baseline data for the participants and then evaluating a sample of different types of activity attended by targeted participants to add depth and texture to the quantitative data.
- **b.** A narrow focus on a smaller number of targeted schools which have priority access to activities in return for an agreement to participate in research.
- **c.** A formal agreement with schools in which the provision of evaluative data is part of the condition for Aimhigher funding.
- **d.** Feedback to partners. Interviewees commented that, once partners are able to see the value of their work, they are more willing to understand the need for, and to participate in, activity evaluation.
- e. Fostering dialogue, particularly with the Aimhigher school co-ordinator (or equivalent) to lubricate the process of evaluation. Interviewees also suggested that informal meetings held with all partnership school co-ordinators (for example) can yield important insights to the nature of the activities and the effect they may have had on participants.
- f. Collecting different forms of evaluation data to access as many different views as possible in order to add richness and depth to the quantitative data collected. Methods included:
 - participant focus groups
 - participant web-based surveys
 - informal discussions between participants and mentors

- meetings between school and college co-ordinators
- interviews with participants, ambassadors and providers
- headteacher and teacher questionnaires
- parent / carer questionnaires
- case studies on a particular activity.

3.5 Data security

The Aimhigher research partnerships are highly aware of the sensitive nature of the data that is held on participants, and all believe that data protection and security is of paramount importance. All six believe that they have systems that are both safe and secure. Strategies to ensure this include:

- a. Employing experienced and knowledgeable staff, who are familiar with issues concerned with data protection and data handling. All six partnerships employ specialist staff for this purpose and all regard the contribution of these specialist staff as invaluable to the partnership.
- **b.** Using bespoke systems that address the particular security and data management requirements for the partnership. Three partnerships are either in the process of setting up or have already set up new systems that are kept at the lead HEI.
- **c.** Maintaining all personal data at LA level so that the potential dangers involved in moving data and having large amounts of sensitive data in one place are avoided.
- **d. Removing identifiers from the data** before analysis is conducted to reduce the risk of data leaks. When this is the case, maintenance of the central database, in which participant and activity data can be linked, is essential.
- e. Ensuring that access to data is restricted to named individuals who have been CRB checked and that access is password protected.
- f. Ensuring access to the rooms where computers and paper records are kept is restricted and that doors are locked whenever staff are absent.
- g. Ensuring that paper forms are archived regularly in a secure location.

Once data on participants and activities has been collected, partnerships need to collate and analyse the resulting datasets; the next chapter is focused on this process.

4. Data collation and analysis

Data analysis is conducted for a number of reasons including:

- to provide information on activities that can be used for future planning
- to provide feedback to partners to inform them of their contribution to the programme
- to monitor data trends within the partnership that relate to Aimhigher participants
- to assess the impact that the Aimhigher programme has had on participant outcomes.

The focus in this chapter is on the last of these. As HEFCE notes, evaluating the impact of the Aimhigher programme is a complex and difficult process that involves collating the data on participants and activities and then finding possible links between the two. This chapter examines the problems and solutions that the partnerships have found in the course of this particular type of work.

4.1 Challenges related to data collation and analysis

The difficulties experienced by partnerships in terms of collating, coding and analysing data include:

- a. Data consistency. The combination of partnerships' view that there has been a shift in emphasis towards participant attainment¹, the new types of data required by HEFCE and the establishment of new systems to handle these demands have led to inconsistencies in the data. For instance, some Year 10 participants in one partnership have records of participation and have given permission for research data sharing, some have either a record of participation or have given permission for data sharing, but others have neither. This type of anomaly was reported as limiting the amount of data currently available for analysis.
- **b.** Capacity for data analysis. Although the partnerships have already employed specialist staff to work with data, all felt that more could be done with the data

¹ Although there has not been any shift in policy, there are perceptions that there has been a shift in data requirements. See Chapter 3 under 'Systemic challenges'.

that has been / is being collected but that there was currently insufficient time to do so.

- c. Coding parent / carer occupational background into NS-SEC categories. Partnerships reported two issues over the use of NS-SEC as a means of identifying socio-economic status. The first concerned the accuracy of parents' / carers' and participants' reporting (whether, for instance, the job title reflected the level at which they worked) and the second concerned the (subjective) decisions that had to be made by researchers when coding the data.
- d. Placing activities into HEFCE-designated Category 1 and Category 2. Partnerships reported a problem with definition; 'intensive' activities, for instance, could refer to duration of or numbers involved in the activity. Interviewees also suggested that the categories are too broad, and that more are needed to provide more clarity with categorisation.
- e. Placing participants' experience in Level 1 and Level 2. Interviewees in one partnership reported some confusion over the requirement to place participants' experience of Aimhigher activities into two levels according to the number of Category 1 and 2 activities they have attended. These interviewees suggested that participants who had attended two Category 2 activities were excluded from both levels.

4.2 Examples of good practice in data analysis

Interviewees commented that, as their data collection systems have become more sophisticated and the quality of the data has improved, so their capacity for productive analysis can expand. Partnerships selected the following areas as examples of good practice:

- a. Coding of NS-SEC data. As reported in chapter 3, two partnerships conducted research into collecting and coding NS-SEC data. Both recommended an agreed protocol for interpretation of this data and consistency in coding, preferably with one or two people managing the task. Examination of the data provided by partnerships suggests that only one area appears to have consistently clear parent / carer occupational data, although one other partnership provided data that would possibly benefit from some re-coding.
- **b.** Linked databases. All partnerships are able to link some participants to some activities and all partnerships have undertaken qualitative research. Three

partnerships reported that they have either developed or are in the process of developing new database systems that will enable them to link sets of participant and activity data more easily so they can track students more effectively; this data will be complemented by the qualitative data that collected on activities. Two partnerships provided consistently good linked data, albeit with some missing variable labels and some re-coding needed. Others provided unidentified data referring to activities or partially linked data that would not support any multivariate analysis.

- c. Monitoring the effectiveness of the targeting process. One partnership has done intensive work on targeting and is able to show (for example) the percentage of participants from the most deprived areas (as defined by the Index of Multiple Deprivation). However, data provided by other partnerships suggests gaps and inconsistencies in the collection and collation of participant data that relates to levels of deprivation; some measures used are insufficient to provide robust evidence of deprivation.
- d. Methodologies are being developed by some partnerships to show:
 - The influences on pupils' attitudes and the extent to which Aimhigher has contributed to any changes. Initial examination of the data submitted, however, suggests that the quality of some attitudinal data appears variable. Nonetheless all partnerships have started to do some work in this area.
 - A comparison between participants' baseline attitudes and attainment with their post-intervention attitudes and attainment, with the system now set up to include participants' engagement in activities. Exploratory work was done on this last year in one partnership for a small sample which yielded some promising results.
 - A comparison between targeted and non-targeted schools, together with some inner-cohort analysis of participants within targeted schools.

5. Conclusion

The evidence presented here suggests that partnerships are making progress in their collection of participant and activity data, and in establishing links between these two types of datasets that provide the basis for meaningful evaluation. In addition there is work in progress on evaluating the contribution of Aimhigher on participants' attainment and progression. The evidence also shows that progress is patchy, however; not all partnerships have systems in place to collect all the required data. There is difficulty in tracking participants through to FE and even more difficulty in tracking participants accurately into HE. The challenge for the next stage of the research may be that there are insufficient numbers within the data to enable a meaningful analysis.

In the light of the evidence presented here, NFER would offer some points for reflection:

- Perceived changes in data aims and requirements by HEFCE have led to some confusion over the type of information that is required and the extent to which partnerships are required to analyse the data. It has also contributed to concerns over some apparent duplication of effort. There may need to be greater clarity and scope given to partnerships on the purpose of their data collection task.
- The perceived shift in emphasis towards monitoring attainment has provided both practical and philosophical difficulty for partners. Interviewees suggested that Aimhigher's role is to provide activities that will improve young people's aspiration to participate in HE, and felt that it was the role of schools and colleges to provide the expertise to raise attainment. Some partnerships believe they will be able to monitor and show the impact of Aimhigher activities on participants' attitudes and motivations, drawing inferences from this on the impact Aimhigher may have had. They are less confident that they can demonstrate a relationship between Aimhigher activity and attainment. This is an ongoing challenge and one area where more work may need to be done. The previous longitudinal evaluation of Aimhigher: Excellence Challenge (Morris and Golden, 2005) demonstrated some statistically significant links between activities and outcomes, with:

overall gains in GCSE performance and in performance in mathematics at Key Stage 3 associated with young people being designated as members of the widening participation cohort and/or the gifted and talented cohort (longer membership of either cohort was also associated with better GCSE results) and participation in specific Aimhigher: Excellence Challenge-related activities (particularly summer schools, visits to higher education institutions, discussions with higher education staff and discussions with undergraduates).²

Establishing such links at a local level is more challenging, however, because of the numbers of cases required and the statistical techniques that need to be deployed. Longitudinal analyses of Aimhigher cohort data at a national level may help to explore any significant links between activities and outcomes, particularly attainment outcomes.

NFER is now in the process of analysing further the data that each partnership has submitted, both at individual partnership and cross-partnership levels. Plans for the workshops in each partnership to interrogate the findings drawn from the data are being drawn up. Both of these will contribute further to the guidance for data collection that is due later this year.

² Morris, M. and Golden S. (2005). *Evaluation of Aimhigher: Excellence Challenge; Interim Report 2005.* DfES Research Report 648). London: DfES [online] Available: <u>http://www.dcsf.gov.uk/research/data/uploadfiles/RR648.pdf</u> [12 March 2009].