

# Nurturing Talent

Final report (full report and appendices)

Ben Littlefield (Project Officer) and Dr David Read (Project Lead)

August 2012





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# Abstract

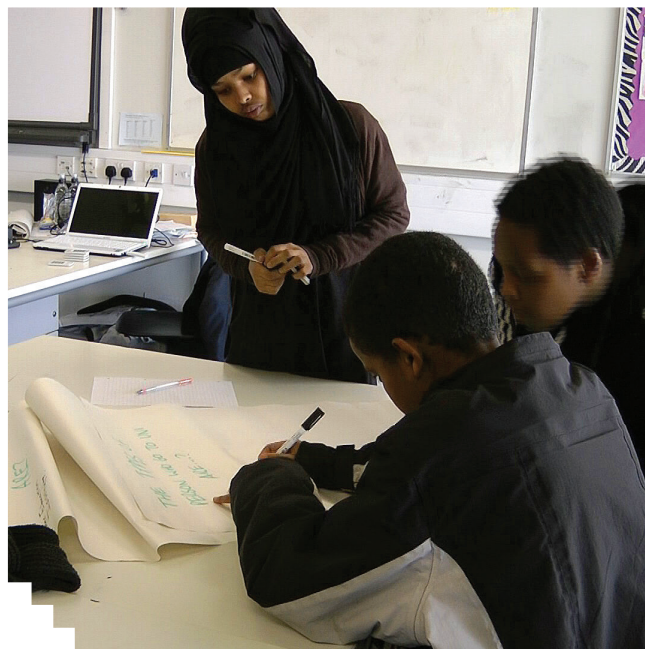
Widening Participation in Higher Education requires effective interaction between higher education institutions and under-represented communities. Such interaction has traditionally taken the form of outreach events/school visits by the university aimed at promoting engagement, or one-off visits by a few selected 'master class' students to the campus for a tour or lecture. However, this approach doesn't take into account cultural barriers that may exist in communities without a tradition of higher education. These barriers often prevent the students from considering university study as relevant or their parents being willing or able to support their children in their aspirations.

This report evaluates a year-long programme of weekend sessions – the Nurturing Talent Programme - delivered by volunteer graduate mentors of Somali origin with the intention of inspiring young students from the Somali community of Brent, as well as furnishing them with the skills and knowledge required to access higher education. Through a series of academic and soft-skill based workshops delivered in the local secondary school (Capital City Academy)<sup>1</sup> and visits to universities and museums, these volunteers have had a huge impact on the students they have been mentoring. Our evidence shows that the students' attitudes towards university and their own potential place in HE have improved significantly, and that there has been a perceptible increase in maturity in the students' attitudes towards their future. Furthermore, teachers have reported that many of the youngsters have demonstrated improved academic performance over the course of a year, which appears to be directly related to the impact of the Nurturing Talent program.

The positive outcomes have been the consequence of three key features of the program:

- i. The involvement of mentors from the Somali community, who are graduates or are engaged in university study, showed the students that they can genuinely aspire to engage in university study.
- ii. Visits to universities had a significant impact on the students by introducing them to potential fellow students from a range of backgrounds and giving familiarity with the environment and they would be going into. Visits which included an element of hands-on activity (rather than talk/tour sessions) clearly had the biggest impact on aspirations.
- iii. The involvement of parents engendered notable enthusiasm during the programme, which is highly significant given the important role played by parents

in encouraging/supporting their children. It was clear that parents' knowledge of the UK education system and the opportunities available to their children was limited at the start of the project, with most of them having moved to the UK during adulthood. At the end of the programme, the positive attitudes of the youngsters had influenced the parents, who were also more confident about the HE process.



## Acknowledgements:

- HE STEM London and South East Spoke for financial support of this project
- Prof. Averil MacDonald, Director of HE STEM London and South East spoke
- Abdi Guusha and the team of mentors

<sup>1</sup>It should be emphasised that these workshop sessions were delivered independently of the school. Mr Hassan, a staff member of the school, was involved in logistical arrangements, but the workshops were not a school activity.

# Background to our involvement with Nurturing Talent:

Widening participation remains a goal for Higher Education Institutions, and such work is essential if we are to harness the full potential of the young people in our society. The excellent work of initiatives such as Generating Genius has shown that it is possible to engage young people from under-represented and hard to reach groups in the process of preparing themselves for higher education and the university application process. This project was conceived to evaluate the impact of an intervention programme based around a series of 'Saturday School' sessions for Somali youngsters in Brent.

Our aim in writing this report is to shed light on the barriers that prevent such youngsters from aspiring to and eventually engaging in higher education, and to identify which aspects of the Nurturing Talent programme have led to genuine changes in the perceptions of the young people involved, with a view to sharing such best practice with the HE community.

## Format of the program

The Nurturing Talent programme ran for the entire school year and was initially devised as a 'Saturday School' involving four hours of contact time with the mentors followed by a small amount of related homework. The first three hours were devoted to traditional lesson-style learning, focusing on science, English and maths. The final hour concentrated on soft skills, with the aim of building the students' confidence through debating, presentations and team-based learning. Our mid-point evaluation session in week 10 identified that this format was not engaging the students as effectively as intended, so the mentors moved the focus away from classroom-style teaching towards more in the way of transferrable skills, visits, guest graduate speakers and greater emphasis on student-led activities.



**Fig 1a. Session format during weeks 1-9**



**Fig 1b. Session format during weeks 11-22**

## Participants

At the start of the programme there were 15 regularly attending students, nine female and six male, equally separated between years 9 and 12. The original format of the programme led to haemorrhaging of students and so at the midpoint there were ten students present on a regular basis, with others appearing only sporadically. At the final evaluation session (carried out at the University of Southampton) only ten students could attend (five female and five male). However, 20 students were regularly attending the sessions at this stage, reflecting the fact that the changes to the format at the midpoint had been well-received by the students. Despite cultural factors, no major differences were encountered in answers from students of different gender or age.



## Evaluation

The evaluation of the programme took place in four main sections. Baseline research was carried out through a combination of videoed qualitative one-on-one interviews and group interviews with all the different stakeholders at the start of the program. Mid-point research was carried out in February, when students' views and changes of perception were probed using audience response systems to carry out a survey. The students also gave group presentations on key themes arising in the baseline research study, providing insight into the impact of the programme up to that point. The final section of the evaluation occurred in two parts i) the students were interviewed individually at the end of a visit to the University of Southampton and ii) the parents and mentors were interviewed in groups the following weekend. All interviews were videoed, transcribed and analysed for changes in perception and attitude, helping to formulate recommendations for future initiatives.

# Baseline research – interviews to gauge perceptions and views at the start of the programme

## Initial viewpoint of the students:

The baseline research shows that the students interviewed were aware that university study was a continuation of education, often linking universities with a vocation or qualification. There was a heavy emphasis on associating emotions with university, with most of the students suggesting that universities are places for people with a dream. All of the students interviewed indicated that they wanted to go to university. However, they could typically only name Oxford and Cambridge when asked to name the top ten universities (some professing that they were the only two universities that they knew of).

**'A university is a place higher than a college'**

While the students had clear aspirations to go to university, they were lacking in knowledge of the technicalities of university i.e. what actually happens there and what a degree is. When asked what they wanted to study at university, students were only able to name broad subject areas rather than specific degree disciplines. Self-confidence seems to be the students' biggest perceived barrier to progressing to university with finances being a secondary concern. Some of the students' comments also indicated a fear of 'not fitting in', which is another barrier preventing students from non-traditional backgrounds from engaging with HE.

**'University is for people with a dream'**

The students recognised that their teachers are all graduates, but noted that their teachers rarely talked about their university experiences or had

any pertinent advice to give. However, on further questioning the students mention that they feel they receive adequate motivation and support to work hard, which they associate with eventually getting to university. None of the students mentioned anything comparing levels of perceived support between their schools and other schools.

**'My teachers rarely talk about university'**

In summary, all of the students interviewed had the ambition to go to university, but lacked knowledge of what is actually involved in attending university, what they might get out of it and how they could get there.

## Initial viewpoint of the parents

One of the major factors which influences a youngster's view of higher education is the degree of exposure their parents have had to university i.e. if the parents have attended university then their children are much more likely to attend, as reported by Kintrea and colleagues<sup>2</sup>. In the case of the Nurturing Talent program, the majority of parents interviewed faced barriers such as civil war, or having older family members to care for, which prevented them from accessing university in their home country. The only parents interviewed who had been to university had done so either in Somalia or countries other than the UK, and they felt that this was not directly analogous to studying at a UK university. Despite all the parents having a strong feeling that their children should aspire to go to university, none of the parents interviewed had even basic knowledge of the application process or what is required to access university education in the United Kingdom.

**'People (in our community) do not understand what it is to go to university so they are less likely to influence their children to do so'**

*A comment from a parent*

When asked about the challenges their children will face in going to university, most of parents suggested that the low exposure to universities in the community was a major challenge which needed to be overcome. All of the parents interviewed expressed the wish that the Nurturing Talent

<sup>2</sup>K. Kintrea, R. St Clair, M. Houston (2011). The influence of parents, places and poverty on educational attitudes and aspirations. Joseph Rowntree Foundation

programme would provide that exposure and inspire their children to want to go on to university study.

### **Initial viewpoint of the mentors:**

The mentors were individuals of Somali descent who were current undergraduates or recent graduates, all of whom expressed a desire to 'give back to the community' and to understand and break down the barriers preventing Somali students from engaging with HE. When asked about the inspiration behind their personal journey to university, all mentioned that it was through interaction with graduates (some of whom were relatives), with some mentioning the influence of work colleagues or others met during chance encounters. All of the mentors expressed a desire to create an environment where 'we can fill the gap that the parents might otherwise have filled', guiding the youngsters through the process of making decisions about university and how to move forward from there.



### **Summary of baseline research:**

The baseline research shows that there is a serious lack of engagement and awareness among members of the Somalia community regarding HE in the UK. This appears to be due mainly to the lack of graduates present in the community, contributing to the poor understanding of university exhibited by the secondary school students interviewed. The community itself is aware of this issue, but due to a lack of knowledge and support, does not have the tools at their disposal to facilitate the development of a self-perpetuating critical mass of university engagement.



# Mid-point research – survey and discussions to gauge perceptions and views at the mid-point

The majority of the students surveyed during the mid-point evaluation session felt that they were more prepared for the challenges that they may face at university, with many citing a greater understanding of the application process. When asked whether the programme was going to help them get to university, the entire group indicated that it would. The general feeling was that the sessions helped with the students' academic progress too. The students benefited from having mentors from their community, as illustrated in the survey (with the vast majority saying that mentors

from their own community were an essential feature of this type of programme) and the mentor-led verbal feedback session, where one student said that "since seeing that the mentors and their teachers have all come from university, it doesn't seem as hard as it once did".

One key observation to come out of the focus groups, were the more considered answers to the questions 'What are universities?' and 'What types of people go to university?'. In the first session, the answers received were vague, mostly being related to money, good A-level grades and dreams, whereas at the mid-point, the students focussed on attitude, dedication, independence and ultimately successful careers.

In terms of the students' knowledge of UK universities, Oxford and Cambridge still featured very heavily, with most students naming those as the only universities they would like to go to during the verbal feedback session.

The biggest issue identified during the mid-point research was the fact that the students saw the programme as a '6th day of school', rather than a constructive, character-building process. This brought with it a host of difficulties, such as behaviour issues, retention problems and sometimes challenging relationships with the volunteer mentors, who lack the training that helps teachers to deal with these matters. It appears that when the students found themselves in a school setting (as

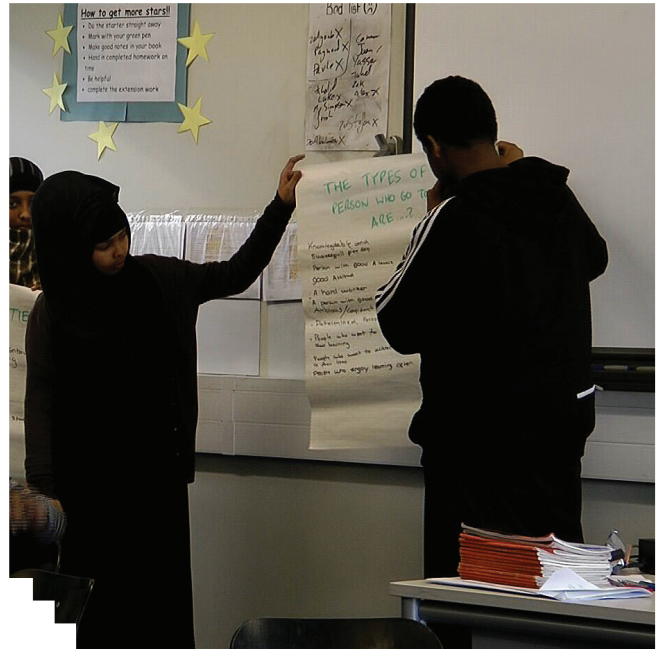
Question	Baseline	Midpoint
What are universities?	'Bigger version of a college' 'Place where people want to boost their learning' 'Place where you try to get a qualification' 'A place where people study what they chose in the past' 'Advanced higher education' 'Higher education institute where you carry on.. subjects'	'A gateway to getting a job' 'Independence' 'Higher education' 'Elite' 'Place where you get your degree' 'an opportunity to have a better life' 'a place to nurture your talents' 'an incredible place' 'Eventually get a dream job' 'For hard workers and people that are willing to achieve their goals'
What types of people go to university?	'People who want to achieve' 'People who have a dream' 'People who study hard' 'People who have a dream and want to pursue their future' 'People who have good (A) levels' 'People who have money'	'People with good grades' 'Determined people' 'Focused people' 'People who want to achieve' 'Smart' 'Hard-working' 'Confident' 'Enthusiastic' 'Independent' 'Competitive' 'Good attitude' 'Ambitious/confident people'

**Table 1:** Table comparing answers to similar questions at the beginning and at the mid-point of Nurturing Talent programme

they were for these workshops), they required a higher degree of management than the mentors were equipped to handle. It was evident that the students were keen for more variety in the sessions, rather than the highly academic routine they had become accustomed to.

### Summary of mid-point research:

Our evaluation at this stage showed that the original approach of the program, with a focus on traditional teaching or 'booster classes' had not been as successful as hoped, which had been accompanied by a fall in attendance. Once these issues became apparent, the mentors modified the programme to focus more on soft-skills and student-led activities during school-based sessions, as well as university visits and a trip to the Science Museum. The impact of these changes is discussed later in this report.



# Final evaluation session

## Final viewpoint of the students:

When they were interviewed during the final session, it was immediately apparent that the programme had galvanized the student's ambitions regarding university, with several students suggesting that taking part in the programme had changed their plans for the future.

'...because I want to go to university now, for sure!'

The key benefits highlighted by the students were the social interaction with the mentors and the visits to universities, both of which have helped to allay any fears they had of 'not fitting in' at university. Several students also highlighted that help with their school work and being able to see their friends were also benefits of the program. As a whole the students felt that as a direct result of being involved in the program they had the skills required to get into a good university, with a realistic attitude towards the work involved.

'...has really inspired me to work harder to get what I want to achieve'

The majority of the students interviewed were adamant that it was important to have graduate mentors from their own community, since they felt they could relate better to these individuals and that they would understand cultural pressures and nuances that an outsider to the community might never fully grasp.

'...having Somali mentors who have been through universities and experienced it all teaching them, builds the foundation for the future.'

Comment from female student (17 yr old)

When questioned again about the low levels of engagement of members of their community with higher education, the students reaffirmed the findings of the earlier stages of evaluation, and one suggested that 'the main reason Somali kids are... hesitant about

going to university is because of the process, if that was explained to them in more detail they wouldn't be so hesitant about it'. Several proposed that the solution lies in adverts on TV, YouTube or Facebook i.e. '... the places that teenagers go to get more information and get more interested'. A common trend in the students' answers was that information was a major limiting factor in engagement, and there was a strong belief that if HEIs wanted to widen participation by incorporating under-represented communities, they would have to advertise within the community.

Although not officially taught during the program, the students interviewed had a much better grasp of the application process, as well as knowledge of the progressive nature of GCSEs, A-levels and the UCAS application for accessing HEIs.

Visiting universities was cited repeatedly as one of the best parts of the programme, with all students interviewed saying that not only has visiting made them want to go to university more, but that they would also recommend it to their friends and family.

'I would definitely recommend it [to my friends] because it shows what universities have to offer and it's not just about your head down behind a text book, you can also socialise with your friends.'

When asked a repeat of one of the baseline questions 'What types of people do you think go to university?' the answers all contained references to determination, goals and working hard, and each student showed an awareness that university was one of the ways to achieve and realise their dreams. The students' awareness of the wider academic community had increased substantially due to their exposure to the university environment, with every student being able to name at least 6 universities as opposed to just Oxford and Cambridge as encountered in as late as the mid-point.

## Final viewpoint of the parents:

The parents were extremely enthusiastic about the positive impact of programme, not only seeing an improvement in their child's academic progress but also an increase in maturity e.g. 'in terms of education [she] seems more attentive and talks a lot about going to university and not just about her but about her younger [siblings] and encourages them to come to the [programme]'

The parents all felt that the most important aspect of the programme has been the role of the graduate

mentors in forging links between their children and universities, building the students' confidence and enabling the students to visit universities. Such visits were highlighted by the parents as a major contributing factor in raising the students' interest in university, with children subsequently involving their parents in discussions about their experiences. The parents attributed a large part of the success of the programme to the excellent example provided by the volunteer mentors, who showed the students that university was for them if they wanted it to be.

'my son needs this kind of program. I didn't know it before but now I can see it, I don't want to lose it. I want to keep it as much as I can, we need to create more'

The parents all agreed that the continuation (and possibly expansion) of the programme is vital for the future; 'my son needs this kind of program. I didn't know it before but now I can see it, I don't want to lose it. I want to keep it as much as I can, we need to create more'. One concern is that since the programme focuses on GCSE students, some students may lose some of their motivation over the course of their A-level studies without it, which could be addressed by holding occasional 'top-up' sessions during Year 12.

The parents all agreed that it would be valuable to have some sort of formal liaison between universities and the community, particularly to provide information to parents that they currently lack, allowing them to provide encouragement and support to their children. However, it was noted that this alone would not be enough to increase participation in HE, and the parents suggested that it is vital that programmes such as Nurturing Talent continue to run so aspiring students can be exposed to good role models from their own community.

### Final viewpoint of the mentors:

The mentors have all found the experience hugely beneficial, not only because of the satisfaction they have gained from helping their community and seeing young people develop their dreams into clearly laid out goals and objectives, but also from meeting other mentors and building up a professional network within the community. One key point made was the huge changes observed in some of the students over the course of the program, for example one individual went from being 'quite troublesome and

under-achieving academically' to someone who received very positive comments from mentors for her improvement academically and behaviourally.

The mentors identified that taking the students out of their comfort zone was possibly the most valuable experience in the programme 'It was making them a bit familiar with what happens outside their environment and making them realise it's not actually so different'. This leads to the conclusion that visiting universities is one of the single most powerful influences on a student's aspirations.

### Summary of final session:

It is immediately apparent that the programme has been extremely successful, the students involved have shown increased engagement with their studies,<sup>3</sup> increased motivation and a new focus on HE related goals. Parents and mentors alike cited a secondary benefit of an increase in maturity, particularly in relation to education, as well as increased enthusiasm and a greater understanding of what university is and how to get there. Parents indicated that this was being passed on to other family members, including younger siblings, representing a further unforeseen benefit. Both students and parents attribute this success to the dedication of the volunteer graduate mentors, who were excellent role models and the visits to universities.

It was extremely valuable for the students to actually experience university life at a young age (i.e Year 9/10) and also to see GCSEs as being part of the process of accessing higher education. For the parents, the link between universities and their communities via the mentors is vital, and allows a level of interaction which cannot be achieved with a 'typical' university outreach officer.

<sup>3</sup>A Somali member of staff from Capital City Academy (Mr Hassan) was involved with the Nurturing Talent program throughout the year, and he verified that the view of increased engagement with studies was held by teachers at the school as well as the graduate mentors.

# Key findings from the Saturday school programme:

## Students and parents perceptions of HEIs

Before the programme the students' understanding of higher education and the application process was poor, exemplified by their lack of knowledge regarding what a degree was or the existence of any university other than Oxford and Cambridge. Students had the vague notion that university is just something that you do after A-levels. This suggests that the students' exposure to universities through school or the community is poor and it can reasonably be argued that without intervention, few of the students would be able to access higher education, not through any direct fault of their own, but instead due to lack of awareness. The parents' understanding was equally poor, which was again no fault of the individuals, but more due to the lack of promotion/guidance within the community.

## Effectiveness of traditionally taught sessions in the Nurturing Talent program

It was found during the programme that Saturday School sessions involving the teaching of STEM subjects using traditional classroom-based methods had little effect on the students' aspirations for higher education, and led to similar behaviour issues to those that might be encountered in schools, and which the mentors were ill-equipped to deal with. Although tutoring and 'booster' classes have their place, the evaluation of this programme suggests they are less effective in promoting higher education than university visits and student-led activities.

## Presence of graduate mentors from the same community as the students

One of the most important goals of the programme was to increase awareness of higher education institutions within the community. This was achieved thanks to the dedication of the volunteers, who imparted their enthusiasm for universities and their subjects to the students they were mentoring. The students in turn felt that, since the mentors were from the same community, they understood the barriers and issues that were faced by the students. This was repeatedly cited by both students and parents as a vital part of the programme and was seen as being fundamental in linking the community to universities.

## Effectiveness of university visits

Visits to universities were highly effective in enthusing younger students about higher education. Every student who visited a university over the course of the programme has described it as inspiring, and there is a clear increase in motivation towards gaining the grades and skills required to access university after such visits. The students who visited relayed their experiences back to their community by discussing their visit with relatives or recommending similar visits to their friends, broadening the impact significantly.



## Conclusions

The Nurturing Talent programme has been extremely effective at engaging higher education institutions with the Somali community in Brent. Through the work of a few graduate mentors, a potential new generation of Somali graduates has been inspired, and the success of the programme has won the support of the secondary institution in which it is based. The poor awareness of students prior to attending the programme is evidence of the need for such a programme, and it will be very important to follow the progress of these students in the future in order to evaluate the legacy. Nurturing Talent has provided a successful framework for future initiatives to follow and build upon, and it is hoped that the lessons learned here will widen participation in a broader range of communities and universities.

# Recommendations:

Universities and government should undertake programmes of events and activities to promote higher education **within** under-represented communities (to both parents and students). These should be through **direct engagement with community groups**, including BME, low socio-economic and traveller communities, in addition to programmes through schools. Government should establish a central monitoring and **brokerage service** to enable and 'spread' engagement and ensure no 'deserts' in provision.

Universities' OFFA Widening Participation programmes should **engage and fund** graduates and community leaders **from within the community** to act as mentor and liaison between the university and the community. The role would be to organise and run programmes of activity, to source opportunities for university and museum visits and summer schools, to accompany students or parents on visits, to support for students directly in their university applications, to act as role models in talking about their own experiences, to translate school or careers information for parents and to reassure parents about the value of their children engaging in activities. These funded individuals could be hosted within schools or religious institutions or be based at the university.

Government and universities, particularly non-Oxbridge as they are less well known, should provide specific and direct guidance and support within communities to students and their parents in **how to apply to and prepare for university** to allow students to develop the confidence and interview skills required.

Universities should support a range of campus visits and community based activities, facilitated by university students from a carefully selected range of backgrounds to act as role models, and involving **a wide range of visiting students** and not just those selected by the school as 'elite' or 'gifted and talented':

- For year 9s a one day visit to a university, with hands on activities, is the most effective and efficient way of promoting early interest and engagement with HE.
- Year 10 and above, a Saturday or After School 'Futures Club' setup is most effective with up to three hours per week on transferrable skills e.g debating, presenting, and team work, with a strong emphasis on practical or outdoor work. The format should resemble that of a youth club or organisation rather than 'extra school'. Visits to university as above.
- For year 11 and 12, a 'Uni Club' with direct support in preparing for HE with guest graduate/undergraduate speakers and as many university visits as possible.

Universities and the government should seek **direct engagement with the parents** within under-represented communities, through a trusted community leader hosting meetings for parents on university life and the degree/career options available. Community Television should also be used as a conduit including adverts for museums and university open days.

Educational Trusts should set themselves **quotas** for students from a range of communities to engage with activities and summer schools rather than relying on parents to respond to a flyer or website.

Teachers should be encouraged to talk about their own experiences at university and provide students with more information about the **different degree options** that are on offer at university (not just school subjects), and the careers are open to those with specific degrees. Raising aspirations is an important part of the process, but ensuring that students and their parents have sufficient information to make the right decisions regarding their future is essential.



# Appendix 1:

## Further influences: The Science Museum trip

At a late stage in the programme 17 students were taken to the Science Museum in central London, which despite the community's proximity to the location, represented the first visit to the museum for the majority of the students. The students were escorted by mentors between exhibits, but given free rein at the exhibits themselves, with mentors on hand to offer further explanation where required. Although these visits were not the focus of our evaluation, it is important to acknowledge the positive impact the visits had on the students and their aspirations. As a whole the students who visited enjoyed their experience immensely and many suggested that they would like to take their friends and parents to the Science Museum in the future.

'Well it's another world really! It's got lots of things, interesting things, things like that I've never seen you know'

'Yeah I would take my parents to the science museum because seeing all the exhibitions would make them more aware of their surroundings...'

When the parents were asked why they have not visited the science museum, the initial responses cited a lack of time. However, when questioned further, it became apparent that the lack of engagement was more down to a lack of awareness as to what the science museum actually is. The mentors suggested that 'if there was the interest (among the parents) then maybe the motivation would follow'. Following the students' visits, several of the parents have since decided to go back with their children, inspired by the stories told following the Nurturing Talent visits. One mentor indicated that the best thing to come out of the students' visit 'was the fact that parents got more interested in the Science Museum'. Those who have already visited have had an extremely positive experience, and recommend that it is advertised more within the community to raise awareness and inspire others to take their children there. In a future version of Nurturing

Talent, the organisers intend to organise a 'parent only' trip to increase awareness and start constructing an atmosphere of enthusiasm for learning at home.

'... the first time he went to <the science museum>, he actually found it exciting learning about the progression of aircraft from smaller engines to jet engines, so he himself found it something interesting.'

The students' and parents' enthusiasm after visiting the Science Museum emphasises the importance of utilising such resources to help promote a culture of discovery and curiosity within any community. Involving both parents and students, as with the Saturday School programme, is vital to catalyse a deeper interest, and ultimately to provide a support network for the students as they develop their ideas about what they want to do with their future.

## Recommendations related to the Science Museum

The key recommendation relating to the Science Museum (and other similar attractions) with respect to widening participation amongst hard to reach groups is increasing awareness about what is on offer and how a visit is beneficial to adults and youngsters alike. Work needs to be done to identify community leaders (such as Mr. Hassan in the Somali community of Brent) who have a network of contacts and access to the channels of communication utilised within in the community to advertise the existence of these excellent facilities. In our discussions with mentors, we discovered that there is a Somali TV station which is widely viewed by members of the community, and such outlets may represent an excellent opportunity to communicate key messages. Separate advertisements are recommended to target both children and parents, since parents can dismiss activities they view 'purely for children'. Schemes similar to Nurturing Talent could be used to engage youngsters in schools (as well as parents), but would benefit from support, both in terms of motivation and finance, from the Science Museum and the government. It should be noted that very few of the parents who contributed to our evaluation were aware of just how easy it is to get to the Science Museum from their location in north-east London, and information regarding transport and its cost should be included in publicity materials.



# Appendix 2:

## The influence of residential courses

It was felt that attendance at a residential course based on a university campus would provide the Nurturing Talent student with an opportunity to sample what university life is really like. Prof Averil Macdonald helped to facilitate the initial contact with Smallpeice, leading to the developments outlined below.

## The rationale for involvement with activities provided by the Smallpeice Trust

The Smallpeice Trust is an independent educational charity that runs hands-on Science, Technology, Engineering and Maths (STEM) activities and courses for pupils in Years 6-12. The activities purport to develop essential skills such as problem solving, communication and team-working, as well as promoting awareness of what engineering is and the career options open to those with engineering degrees. It was felt that the involvement of some of the Nurturing Talent cohort in one of the residential courses provided by Smallpeice at York University would give the students a real experience of a higher education institution and would allow us to explore some of the cultural barriers facing youngsters from such communities, perhaps preventing them from engaging.

## The experience of students attending the Smallpeice Railway Engineering course in York

A group of 5 students (3 female and 2 male, all aged 16-17) met at their school at 6:30 AM on a Monday morning and made the journey to York where they stayed for three days. A mentor accompanied them on both journeys, as discussed in the next section of this report. According to Abdinuur Guusha (Nurturing Talent lead tutor), the students benefitted immensely from their experience. They had done well in train and bridge building activities, and were proud of their achievements. They thoroughly enjoyed the engineering lectures, sports activities, movie nights and discos which took place during the course. Furthermore they made a lot of friends while they were in York and they developed a new sense of similarity with people who they had perceived to be very different from them. Evidence that students were returning with positive messages came from a phone call received by Abdinuur Guusha in which a parent asked if his younger son could be included in a future residential course.

The Education Officer at Smallpeice reported that the students seemed to get a lot out of the course in terms of gaining independence, learning independence and discovering the potential of engineering as a subject and

career path. Feedback from Smallpeice indicated that there were some behaviour issues with these students, particularly when they were with their own community members (as discussed below). However, the students were reported to have been very engaged when working with their project groups, which were made up of students from a range of schools. During these sessions, the Nurturing Talent students showed good levels of enthusiasm and understanding, and demonstrated pride in their work. In their dealings with staff, the students were inquisitive about university life and they gave the impression that they were now more aware of the different options that were open to them. In conclusion, the staff at Smallpeice said that they would welcome the opportunity to work with students from similar backgrounds, and it was clear that they also learned a great deal about the challenges involved in working with students (and parents) from hard-to-reach communities.



## Difficulties encountered prior to and during the course

It was unsurprising that the parents were very reluctant for their children to go away on a residential course so far from home. A particular issue was the fact that boys and girls would be going away together, and would be joining a balanced gender mix when they arrived in York. The parents were keen for one of the mentors from the Nurturing Talent programme to accompany them, but Smallpeice did not permit such an arrangement. Abdinuur Guusha and the community leader, Mr. Hassan (who has been mentioned elsewhere in this report), held one-to-one meetings with the parents, and were able to suggest compromises which were acceptable both to Smallpeice and most of the parents. Although some parents withdrew their children from the application process (two girls and two boys were withdrawn), the fact that 5 students went on the

residential visit represents something of a breakthrough. The importance of Somali mentors in achieving this should not be underestimated here. To quote Abdi Guusha, "If I (were) a white British (person), or from any other background, I wouldn't even entertain the idea of convincing a bunch of Somali girls to go to a Smallpeice Engineering residential course in York for a week."

The accepted compromises included the following:

- Halal food and a facility for prayer would be provided;
- The accommodation would be arranged into single sex blocks;
- Students would not be permitted to walk around the campus unaccompanied;
- One of the mentors would take the students to York, help them settle, and bring them home at the end of the course.

Another key factor in convincing the parents was Abdinuur Guusha's persuasive information session, in which he described the range of activities the students would be involved in and what the benefits to them would be. This was particularly important in view of the fact that many of the parents had a limited command of the English language. The Smallpeice team were very accommodating in meeting these requirements, which did not present them with any great challenges, even though the request came rather late in the process (about a week before the course).

The difficulties from the perspective of Smallpeice didn't end with the arrival of the students, however. Staff reported that the students exhibited some poor behaviour when they were with their friends from school. In particular, they had problems listening to instructions and a lot of time was spent chasing students up and ensuring that they were in the right place at the right time. It was reported that, on one occasion, some students had left a session to go to prayers, but were then found 'messaging about'. Punctuality was a problem at the activity sessions and meals, and a number of students had to be warned about mobile phone usage.

Our interpretation (based on our prior experience of teaching in state schools) is that the students were only exhibiting low-level misbehaviour which an experienced teacher would intercept at an early stage, solving the problem by encouraging and rewarding positive behaviours. Where staff and demonstrators do not have the training or experience to handle such problems, it is likely that poor behaviour will become entrenched, necessitating constant intervention to ensure focus and engagement. This can be very frustrating for the individuals involved, who may interpret the behaviour as being indicative of ambivalence. In the case where students were reported to be 'messaging about' during a prayer break, we believe that this betrays a lack of understanding about the needs of such students, who

should perhaps not be expected to police themselves in such circumstances. These experiences also shed light on the reasons for the behaviour issues encountered in the first phase of Nurturing Talent Saturday School sessions, where the nature of the activities meant that many students were not fully engaged, leading to similar problems to those described here.

## Conclusions

It should be emphasised that the negative aspects of the visit described above were greatly outweighed by the positive reports from students, parents and the Smallpeice team. It is clear that this has been a highly valuable learning experience for all involved, including Smallpeice who now have greater insight into the challenges associated with engaging hard-to-reach communities. In view of the reluctance of parents to let their children go on the residential course, it is clear that simply advertising such events to members of such communities will be ineffective; direct approaches mediated by significant people in the community are essential. A particular triumph was the fact that this was the first time that a group of youngsters from the Somali community in Brent had been permitted to take part in such a residential activity. The positive outcomes for all stakeholders fully justified the hard work and extensive time that went into planning the visit and ensuring that it went smoothly. This was a unique experience in the lives of these youngsters, who are now equipped with the knowledge and understanding to make better decisions about what they want to do with their futures and how to achieve their long-term goals.



## The National HE STEM Programme

The National Higher Education Science, Technology, Engineering and Mathematics (HE STEM) Programme was a three-year initiative funded by the Higher Education Funding Councils for England and Wales through an activity grant to the University of Birmingham in August 2009. The Programme co-ordinated its activities through six geographical regions represented by the Universities of Bath, Birmingham, Bradford, Manchester Metropolitan, Southampton and Swansea, and by working in collaboration with four Professional Body Partners: The Institute of Mathematics and its Applications, The Institute of Physics, The Royal Academy of Engineering, and the Royal Society of Chemistry.

Working across the higher education sector in England and Wales, with a particular focus upon the disciplines of Chemistry, Engineering, Mathematics and Physics, the Programme supported higher education institutions in encouraging the exploration of new approaches to recruiting students and delivering programmes of study. It enabled the transfer of best practice across the higher education STEM sector, facilitated its wider adoption, and encouraged innovation. Through collaboration and shared working, the Programme focused upon sustainable activities to achieve longer-term impact within the higher education sector.

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