Opportunities and Challenges of Working with Gifted and Talented Students in an Urban Context: A University based intervention programme

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The widespread suppression of talent within areas of relative deprivation, by a variety of social and economic factors, casts a long-term shadow over a nation’s development. Our intervention programme, operating within a government educational initiative of the United Kingdom, has enabled us to embark on an expedition of discovery of suppressed talent.

During an interview two years after attending a four year-multi-faceted intervention programme, at our University, 18-year old Joseph talked of how he felt about being selected for the programme:

‘People go on about our school being in a slum area, going nowhere, but to be chosen for a University programme at the age of 12 was inspirational’.

When he was asked to reflect back on how the programme had influenced him, Joseph had this to say:

‘I still remember I used to see stuff in school as negative, but attending the programme gave me positive feelings. If something negative happened at school I didn’t feel attached to it, I said to myself, I came from a better place and should feel above it.’

In its 7th year, 300 students have so far completed the programme. After having celebrated its success at a national conference attended by Mrs Sarah Brown (the UK Prime Minister’s wife) and the Schools Minister Lord Andrew Adonis, the programme team shares their experiences in this paper.
Background and context

There have been three major strands of the UK Labour Government’s policy in the past decade. First was the introduction of a gifted and talented education (Department of Education and Employment, 1999) with a special focus on the identification of and provision for inner-city students whose gifts and talents lie submerged in most cases due to their environment of social and economic deprivation. The second was the Widening Participation Policy which was designed to encourage students from poorer families to join Universities (Blunkett, 2000) and finally, the government’s efforts to enhance social mobility (Cabinet Office, 2009). These three policy initiatives provide the backcloth to the intervention programme. The salient features of the intervention programme are presented and, using evidence gathered during the four years of the programme and follow-up interviews after the conclusion of the project, we highlight both the opportunities provided for the students as well as the challenges which faced the programme team which have implications for both practitioners and policy makers worldwide.

Perspectives and theoretical framework

The nucleus of our perspective involves concern for the waste of talent in inner-city students who are denied the possibility of optimal development. Then, there is the complexity of identifying gifts and talents of students from urban areas. Studies (Casey and Koshy 2002; 2005) have shown the difficulties associated with identifying the gifts and talents that exist in urban areas. Attitudes, poor quality of learning due to teacher shortages, lack of role models and peer group pressures often lead to underachievement and low scores in academic tests.

From a policy perspective, the selection of and provision for the gifted and talented from the inner-city schools is at the heart of Tony Blair’s (then Labour Prime Minister) vision of a meritocratic society (Radnor et al, 2007) which concentrates on the investment in cognitive ability. Many studies in the past decade have highlighted that although there has been an increase in the number of University places in the UK, this increase is mainly due to an increase in the middle classes often ‘colonizing’ the entry routes (Archer, 2000; Davies,
Gorard (1997) pointed out that it is possible to predict with alarming accuracy the qualifications of individuals at the age of 16 and their chances of staying in education simply from what is known about them at birth, and the need to direct resources more towards such families and the wider society is stressed. Many teenagers, with potential at birth, do not hold higher education in their subjective opportunity structures in their teenage years, nor do they achieve the necessary qualifications for entry into universities (Gorard and Rees, 2002). These data highlight a need for intervention programmes, which can create more opportunities and address potentially significant factors such as attitudes, quality of learning, role models, mentors, peer group pressures and parents’ lack of experience and knowledge of higher education.

In designing an intervention programme, the research team did not underestimate the challenge of influencing young people’s identities as learners. Many of the students in disadvantaged areas hold strong views about higher education being ‘not their place’ (Ball and Vincent, 1998) and have developed negative images of studying (Archer, 2000) and consequently were not achieving their potential.

It seems that the challenge of making provision for gifted and talented students is not specific to the UK. Van Tassel- Baska (1998) stated that one of the most neglected groups amongst gifted students in the United States is the bright student from a disadvantaged background and that the under representation of students from minority ethnic groups and lower social classes in enrichment programmes needs to be addressed. A research-based need exists for considering practices designed to improve academic opportunities of promising learners from lower income families (Robinson et al, 2007).

The authors list two possible barriers preventing these students from realizing their potential: identification practices may not work in their favour and assumptions by educators, parents and policy makers about their potential for academic progress may be negative. The authors emphasize the need for programmes and services that are of sufficient intensity and duration and which take into account family circumstances in order to increase achievement and ultimately leverage these learners into a successful learning trajectory. The reassuring message from Robinson et al is, that although these students confront grave challenges, they also have the resilience and the ability to be successful.
Decades of teaching experience by the authors in urban areas had nurtured the conviction that in many cases high ability had been hibernating in social situations, giving neither recognition nor encouragement to latent talents. The intervention programme has been designed to terminate that hibernation and to mould a clear vision of realistic possibilities as the latent talent emerges, making it possible for the students to pursue a life course with enhanced self-confidence and skills. Based on our literature search and personal experiences, we became aware that students in the intervention programme had to be supported to navigate their paths towards self-knowledge and personally constructed goals and that this would be a complex task.

Whilst being engaged in the programme, the authors noted with interest the publication of the monograph ‘Overlooked gems: A National Perspective on Low-Income Promising Learners’ (VanTassel-Baska and Stambaugh, 2007) published in the USA. It is interesting to note that the papers within this publication highlight many of the concerns, such as under representation of gifted students from low-income families in gifted programmes, low achievement of these students in Mathematics and English and low expectations from teachers, that our study has also shown. We hope our study will make a modest contribution towards the gap in literature for longitudinal studies identified by Worrell (2007). Our study also provides us with the same kind of optimism Worrell has expressed in that whilst students from low-income families face many negative influences in their lives, they also tend to show great resilience which offers hope for the future. We too believe that Callahan’s (2007) call for more interventions that emphasize strategy instructions for teachers and the formation of a master adult triad of teacher, parent and mentor to support gifted students from low-income families must be the way ahead.

**Selection of students for the programme**

The selection process for identifying the pupils for the programme was complex. The following guidance was provided to the schools. In addition to possible high achievement in tests, teachers were asked to select:

- Pupils who had an entitlement to free school meals, or students who have recently been removed from this category, which is an indicator of low income.
- Students experiencing a level of disadvantage, which may have impacted on their performance in academic tests; teachers’ own professional judgment of their
ability was accepted.

- Pupils for whom it was felt that schoolwork may not have been sufficiently challenging or providing opportunities for enrichment. This may, for some pupils, lead to some disenchantment with school.

- Pupils who demonstrate a flair for one or more of the dispositions; analytical thinking, creative and imaginative responses and/or evidence of an ability to problem-solving. A street-wise maturity, which may not necessarily manifest in academic performance, but may be strengthened by being supported by the programme was also taken into account.

- Students whose parents had no opportunities for higher education.

We also asked teachers to provide us with a few sentences for each student selected explaining why s/he has been selected.

**Aims of the programme.**

The specific and inter-related aims of the programme were:

- To raise academic achievement
- To raise aspirations and create higher expectations for the future
- To encourage orientation into higher education
- To support students to engage with their learning.

**The design of the intervention programme**

As a result of a needs analysis and literature reviews, we constructed a multi-faceted programme. We examined research evidence, although research findings based on interventions sustained over a period of time were sparse in the UK. Students’ individual needs were analyzed and addressed. Two sources of expertise, Reis et al’s (1995) case studies of talented students who achieve and underachieve in an urban high school and Van Tassel-Baska’s (1998) list of features of successful intervention for gifted students from deprived areas, were incorporated into the programme planning. The students were 12 years old when they started the 4-year programme and attended 9 to 10 Saturdays per
year. The sessions were taught by University staff, except when specific expertise was needed. In those situations, external instructors were brought in. Teaching sessions followed a specific set of guidelines that included students’ learning advanced content, carrying out in-depth explorations, being engaged in higher-order thinking skills and being given opportunities for developing creativity and meta-cognition skills. Although it is not possible to provide detailed descriptions of all the components of the intervention programme within this paper, the various strands included the following:

- **Teaching of specific skills** – sessions addressed basic subject knowledge and skills, critical thinking skills, problem-solving skills, presentation skills, study skills and time management.
- **Adult interactions and support** – sessions included parent days, involvement of undergraduate mentors, career education and outside speakers
- **Academically challenging activities** – sessions focused on project work and peer group tasks.

Each of the strands and components of the programme were subject to continuous evaluations.

**Data sources and analysis**

For this paper we draw from data on 80 students who completed the programme in 2006 after attending for 4 years. Both qualitative and quantitative data were gathered, but mostly qualitative. We used several data sources. Yearly questionnaires were collected from students and their parents. Quantitative data relating to students’ progress in criterion-referenced national tests at the age of 11, 14 and 16 were obtained from their schools. An attendance register was also kept throughout the 4 years. All the students on the programme and a sample of parents were interviewed, once a year, using a short semi-structured format in order to find out what they felt about the University sessions, tasks, both positive and negative experiences and if their attendance at the University had changed anything in their school experiences. All the interviews were tape-recorded and
transcribed. The researchers and tutors who were involved in the project also kept field diaries and records of significant incidents throughout the 4 years.

Data analysis consisted of conducting a content analysis of the questionnaires, interviews, field notes, correspondence from parents, schools and student evaluations, noting emerging patterns and themes (Miles and Huberman, 1994). Although the sample size was relatively small and the selection of students was based on an opportunity sample, provided by the schools, the data we gathered was felt to be rich and informative for the purpose of the project. We are able to highlight some useful findings with reference to both the aims of the project as well as the students’ responses to the different components of the programme.

In the following section we discuss just some of the themes extracted from the data in terms of the opportunities provided for the students, as well as some of the challenges we faced.

**Opportunities and Challenges**

**Critical Thinking**

Students were provided with a course in Critical Thinking which was written by the tutors and was designed to encourage them to think critically, analyze, reason and derive informed conclusions and decisions. It was included in the programme because of its role in contributing to a democratic society (Ennis, 1995). As they progressed through the course, there was evidence of students’ developing self-confidence, greater analytical skills and an enhanced ability in putting forward arguments. The Critical Thinking sessions were listed as one of the *most useful* and *enjoyable* components of the programme by the students and their school tutors. Interviews with the students and their parents also suggested that the Critical Thinking sessions injected an element of realism into their aspirations and a move away from the influence of the celebrity culture, whilst still keeping their teenage dreams alive.

**Problem-solving skills**
In the past few years many British Universities – such as Oxford and Cambridge – have been using problem-solving tasks for selecting bright students, acknowledging that it is an effective way of selecting gifted students for University education. It is described as particularly useful in the context of selecting students from disadvantaged backgrounds who do not always perform well in national tests. We offered problem-solving situations in mathematics lessons which introduced them to processes useful in all areas of the curriculum. The aim was to encourage students to produce conjectures, seek relationships between elements within a situation and generate the production of valid solutions. Session observations and students’ work showed that these sessions proved useful in convincing students that there are many pathways through a problem and towards the need for seeking or generating new knowledge. A strong message that came through was the importance of team work in solving problems and the role of cooperation for success.

**Influence of outside speakers**

We invited outside speakers from a wide-ranging background – professionals, athletes and entrepreneurs - to share their experiences with the students. Some indicators of people’s achievements after overcoming difficulties of financial status, language and class and race problems were highlighted by some of the speakers. Listening to a singing doctor, as the students named her because she had to rely on singing in public houses to complete a medical course after losing both her parents in a car crash, and a lawyer who came to England without fluent knowledge of the English language were amongst those who made an impact on the students. Such visitors encouraged them to follow their example and, in some cases, helped to sustain their interest after three years through personal contacts. An example of this was 12-year old Sara who stayed focused on her ambition to become a doctor since attending the doctor’s session. In the final year of the programme, she spent 3 weeks working in a medical practice and attended some lectures at a local medical school. As she failed to obtain the grades necessary to qualify for a place to study medicine, she enrolled to study for a biomedical course with the intention of studying for medicine after her first degree. Students’ envisaging re-direction of their lives towards Higher Education and following careers they may not have considered prior to their attendance, were evident through many comments and written evaluations.
Personal projects

Based on the feedback from students, their parents and teachers in their schools, carrying out personal projects was hugely beneficial for the students. We had noticed that the students were not used to carrying out focused, in-depth work over a period of time. This shortcoming was addressed through their being asked to select a topic of personal interest, work on that topic for an extended period and then to present it to an audience which sometimes included an expert from that particular field. We adopted Renzulli’s Enrichment Triad (1994) as a model for organizing the personal projects. Students were given training in methodologies and were brought into contact with experts in the field to acquire a taste of the authentic experiences of a professional. Each student carried out an extended research project, which provided him or her with research and presentation skills. The ultimate challenge for the students was to make a presentation of their project to their parents and a wider audience. The nature of their choice of topics also changed over time in that their initial interests were limited to sports and the lives of celebrities yet in subsequent years, more innovative topics were selected.

Career education

Two aspects which emerged from questionnaires and interviews at the start of the programme were: students' lack of awareness of their own abilities and a lack of aspirations to select careers which require University education. We included discussions and workshops, led by employees of successful firms, on career choices and University education in the programme to address these aspects. During the four years of our programme, we organised lectures and workshops on career choices, the preparation of Curriculum Vitae and an early look at University entrance form statements. Workshops for parents about career choices and Higher Education revealed that many had not thought about these issues previously. These sessions were highly valued by both students and their parents.

The challenge of identification of gifted students
The selection of students for the intervention programme posed a real challenge to school co-ordinators. Academic results in many schools within inner-city areas are lower than those of schools in more affluent areas. Only a small number of the selected students (the gifted and talented cohorts within their schools) had performed well in their national and school tests which are criterion referenced. The schools where the students came from are among the lowest performing schools in the UK. In many cases, teachers found it difficult to select pupils for a gifted programme knowing that their test performances had been either average or even below average based on national test results. Identification of gifted students from relatively deprived backgrounds still remains the biggest challenge in the UK. Teachers were supported by the University team to employ non-traditional methods of assessing students’ abilities and to also use qualitative data for identification processes. One student who was identified through his teacher’s observation and ‘gut feeling’ was Shaun, a very capable 12-year old student was described by his teacher as ‘having a policy of not participating in any form of tests (which later transpired to be the result of his reluctance to be engaged in extra work being given to clever children). His entrepreneurial intelligence was only brought to the attention of his teacher by his peers (with no malice intended, the student told us) who pointed out that he was in fact a very capable student and had set up a homework club and charged pupils £5 each time for the correct solutions he sold them. This enabled Shaun’s teacher to take note of his potential rather than any test results. He could have been easily missed.

The need to rectify the lack of basic skills

Another major challenge was a serious lack of basic skills for the majority of students – especially in Mathematics and English – which needed to be addressed through a catch up programme. Only 40% of the students on the programme had achieved a level in their tests which indicated they were of above average ability. It was interesting to note, however, that the other students did catch up very quickly. Interviews with the students and observation of their responses provided some interesting insights. Lloyd told the mathematics tutor at the University one Saturday:

But we haven’t been taught how to do long multiplication. That means we can’t do a lot of the work you give us. You see, our teacher left at Christmas and since then we have had seven different teachers. You see they don’t want to teach in our
school because of problems. The last one left because someone threw a chair at her.

Alison, who attends a different school, blamed her classmates for not being able to cope with some mathematics ideas. She explained:

You just can’t work properly in the classroom because of the noise and the fights. I teach myself some bits. My brother explains the hard bits of maths to me. Will I pass my exams, who knows?

Tutors who taught the students English at the University reported a lack of writing skills – even in the use of basic punctuation and spelling. Both the Mathematics and English teachers identified another challenge they faced. As the students were reluctant to receive teaching in a school style, which may have turned them off to learning in the first place, most of the catch-up lessons had to be set in the context of real life situations. It is reasonable to assume that a serious lack of basic skills, whatever the causes may be, could affect the students’ grades in public examinations and reduce the possibility of being accepted at a University as well as affecting their career prospects. Catching up and supplementary programmes may be necessary to prepare higher ability students from socially deprived areas, so that they do not fall behind and miss opportunities for Higher Education. Teachers need to be made aware of this phenomenon of underachievement being a serious factor for some potentially gifted students.

The problem of early drop-outs

We found that drop-out rates in the Saturday program were higher (15 dropped out (total N=80) within the first 6 months and were replaced), and attendance was poorer in the first year of the programme. After the first six months, however, only 4 students dropped out in the remaining period, two of whom had moved away from the area. Initially, students were reluctant to give up even one Saturday a month to attend the University programme. In many cases, as the interviews showed, the purpose of the programme had made no impact in the initial stages and was judged to have no relevance to their lives. It was only after the first 6 months of the programme that the attendance improved and was maintained at 90-92%. It is interesting to note that most of the other programmes
provided within both gifted and talented education and the Widening Participation initiative in the UK consist of short interventions such as summer schools and one-day visits to Universities. Teachers from the schools who worked with us on the programme felt these may not be as effective as sustained longer programmes in facilitating a change in aspirations and attitudes in students from disadvantaged backgrounds.

The need to change the perception that ‘University is not for us’!

In response to the question in the pre-programme questionnaire ‘Where do you see yourself in 10 years time?’ University education did not figure in 56 out of 80 students’ responses; only 24 (30%) had mentioned further studies after leaving school. Subsequent questionnaires in the following years showed a substantial upward trend of intention to enroll for University education and for following professional careers. In the last data collection, 46 students (54%) expressed their intention to go to University. Our follow-up interviews have given some indicators of changes in outlook which suggests that the students’ attendance in the programme has increased the number of students wanting to attend university. Four students out of the 10 who were interviewed have joined very prestigious Universities in London.

Making parents partners

One of the major components of the programme was working closely with parents. Out of the 94% parent response to our questionnaire, 85% of them had no University education. During parent meetings, many articulated, strongly, how they were pleased to have their children attend the programme so that their children may have ‘what was denied to them’. There was strong evidence to suggest that the parents had recognised the galvanising influence of the programme on their children. However, there was also a challenge with respect to parental engagement. Lack of confidence and discomfort in the presence of University academic staff made them reticent to reveal much of their own thinking. These feelings were combatted by establishing trust and giving friendly reassurances.

Enhanced confidence and attitudes
Interviews with the students showed that attendance on the University campus and being taught by University tutors had a very positive influence on their attitudes. They acknowledged that they felt quite *grown up* and important. A large 82% of the students described enhanced *confidence* since joining the programme, as one of its benefits. Students cited their personal projects and the eventual presentation to an audience as a major contributor to the promotion of their self-confidence. Their teachers agreed. Barbara, a school gifted and talented co-ordinator, made the following comment during an interview:

*I have been making careful notes about all my gifted and talented groups in the school. The students in your programme really stand out when it comes to making presentations in class and in school assemblies. They are more focused and willing to have a go. Their parents also agree with this. The experience of being in the programme, they say, has been life-changing for their children.*

**Enhanced examination results**

As we had not set up comparison groups, we cannot claim that a reported enhancement in students’ tests and examination results was a direct result of the intervention programme. A serious problem that we encountered was the difficulty of obtaining test results from the schools. Data on performance, in many cases, was incomplete and we had to rely on the small number of cases where we did manage to collect information. However, we can report that in the third year of the programme, the gifted and talented co-ordinator of the school with the gun culture provided us with a list of results for the gifted and talented group from her school who had been attending the programme and shared the following information with the authors:

*Based on the results of the national tests at the age of 11 and 14, it was found that 90% of the students who participated and completed the intervention programme, for at least two years, had either met or exceeded the targets set by the school, whilst only 22% of the rest of the gifted and talented group met or exceeded their targets. I had not really selected the most able of my gifted and talented for the programme; I chose either those who were lacking in motivation or the ones who had particular challenges in their lives. In the national examinations, at 16, a third*
of the students who had attended the intervention programme, achieved grades which were higher than those predicted by the schools.

Being on a University campus

The aura of the University campus and communications with undergraduates – many from similar social and ethnic backgrounds to themselves - was a major contributor to the growth of self-belief and enhanced aspirations, with associated long term objectives. However, parents and students resented a suggestion by the University team that some sessions could be organized in an independent fee paying school which has many facilities not usually available in state-funded schools.

Conclusion

The sample involved in the study was relatively small; but the programme principles which have been modified and revised constantly with practitioners’ input, have provided us with useful information and the beginnings of a replicable strategy.

The primary goal of designing the intervention was to compensate for the adverse influences of the students’ environment, and it had some success in steering students towards greater ambition and an awareness of the rewards of Higher Education. Self-confidence and realism, in many cases, replaced disengagement.

Our programme may not have yet produced a blueprint for decisive action, based on irrefutable, enlightened principles. Nevertheless, ‘gems’ of talent have been unearthed, skills have been polished and some personal futures have been brightened. We are confident that the nation’s path of development will be illuminated by the outputs of our programme.

References


