



Aiming Higher: The Plymouth and Peninsula Tri-Level Model (PPM) for School/HE Links

Putting the University into School and Community

March 2010

David Reynolds¹
and
Jon Nichol²
and
Linda la Velle¹
Judith Gunraj¹
James Goulbourn¹
Nicola Iji¹
Gemma Parkinson¹
Carole Sutton³
Iain MacLeod³
with
Valsa Koshy⁴



Email: dreynolds1@plymouth.ac.uk

Published by the University of Plymouth, Faculty of Education

ISBN 978-1-84102-237-6

¹ Faculty of Education, University of Plymouth

² Exeter Consultancy

³ SERIO, Research and Enterprise, University of Plymouth

⁴ Brunel University, Middlesex

Contents

	Page
Acknowledgements	ii
Executive Summary	iii
Chapter One: The Policy Background to HEI/School Links	1
Chapter Two: The Existing Research and Practice Concerning School/HE Links	9
Chapter Three: The Plymouth and Peninsula Tri-Level Model (PPM)	26
Chapter Four: The PPM Research and Intervention Programmes	42
Chapter Five: The Results of the PPM Intervention from Multiple Data Sources	58
Chapter Six: Testing the PPM: Conclusions and Implications for Future Research, Practice and Policy	99
Appendix 1: Glossary of Terms and Abbreviations	108
Appendix 2: Samples of Classroom Observation Instruments (Completed by Research Assistants) and Log Books (Completed by Students) from which Student Ratings were Constructed	111
Appendix 3: Supplementary Information Given to Student Volunteers	122
Appendix 4: Scale Points for Student Characteristics	125
Appendix 5: Research Instruments	127
Appendix 6: Materials Issued to All Student Volunteers	137
Appendix 7: Materials Issued to All Participating Schools	138
Appendix 8: Tables from the Text	140
References	165

Acknowledgements

Thanks are due to Michael Totterdell (University of Plymouth) and Tanya Hathaway (Liverpool Hope University, formerly of the University of Plymouth) for kindly reading through and commenting on a draft of the entire report.

We would like to thank the following who played a seminal role in the thinking behind, and the creation of, the Plymouth and Peninsula Tri-Level Model:

David Burghes, Jacqui Dean, Cherry Dodwell, Sean Fielding, Sue Jennings, Jonathan Barry, Janice Kay and Mark Overton of the University of Exeter;
Colm O'Reilly, Dublin City University;
Cathie McIlroy of St Gregory's School, Smethwick,
Laura Austin, Bolham Primary School;
Katherine Clark and Lee Hennessy of the University of Bath;
Pat McGovern and Cliff Harris, University College St Mark & St John (Marjon) Plymouth;
Tim Schmidt of Swindon Local Authority;
Geoff Rees, Ivybridge School;
Mark Perry and Alison Sykes, St Peter's High School, Exeter;
Phil Creek and Christine Mitchell of Devon Local Authority and the SW GATE;
Bill May and Wendy Roderick of Plymouth Local Authority;
John Berry, Ted Graham, Peter Kelly and Michael Mitchell of the University of Plymouth;
Rosie Turner Bisset, late of the University of Newcastle;
Sarah Codrington, Andrew Hunt and Anthony Tomei of the Nuffield Foundation;
Barbara Vann and Dave Bennett of Penair School;
Jim Campbell, Jonathan Needlands and Ken Sloane of the University of Warwick;
Graeme Baker, Caroline Ennis and Peter John of Thames Valley University.

We would also like to thank all colleagues involved in the Exeter & Plymouth Student Associates Scheme, The Exeter University secondary PGCE programme 1993-2004, the Bath, Exeter and Plymouth University and SW Local Authorities involved in the SW Higher Education HUB for Gifted & Talented Education and the DCSF national Citizenship Professional Development contract. These diverse programmes provided the research & development 'test beds' that enabled us to create the PPM.

We also acknowledge with gratitude the participation of the head teachers, teaching staff and pupils of Years 6 and 8 in our participating Plymouth schools, whose interest and commitment made this project possible. We also gratefully acknowledge the contribution of the valuable advice of our Steering Group, which met on three occasions to review progress and consider strategy.

Glossary

A full glossary of terms and abbreviations is situated in Appendix 1.

Executive Summary

Introduction

This report outlines an innovative, effective model of school/higher education (HE) liaison, the *Plymouth & Peninsula Model* (PPM). The PPM is of major national and international importance.

The defining quality of PPM is that it is a genuine partnership, with parity of esteem between HEIs, schools and local authorities (LAs), supported by other major stakeholders.

The PPM is based upon firm research evidence, is highly cost effective and could be rolled out nationally to cover geographically all primary and secondary schools and college grouped in consortia.

Background

- Despite over a decade of reform in the area of widening participation (WP), social class inequalities in entry to HE still result in a low uptake of places among some lower socio-economic groups, and entry to some professions retains an 'elite' image. There is clear evidence that a lack of anticipated rewards and concern about debt, particularly among women, discourage lower-socio economic groups from entering HE. However, recent evidence would suggest that the gap is narrowing between social groups' participation in HE.
- There is a growing body of evidence that some widening participation/Aimhigher strategies – e.g. higher education institution (HEI) visits, summer schools and road shows – are successful, particularly where HE students are directly involved. These elements are built into the PPM of HEI-School liaison
- The clear need is evident for a more sophisticated and effective model to boost Widening Participation (WP). We suggest here the PPM of HE-School liaison with its focus on professional development and involvement of the whole school workforce. The model is characterised by a rejection of conventional, behavioural, checklist types of approaches to professional education. Instead, it embraces methods more concerned with maximising professional capacity to learn. In this way, the PPM engenders institutionalisation of change and creates a research-orientated and based view of professional development that aims at 'deep transformation' through means that bind together practitioners in communities of practice.

The PPM

- **The key features of the PPM are:**
 1. A genuine partnership of consortia of Schools, HEIs and Local Authorities, including full parental/carers involvement. Consortia can consist of from c. 10-20 secondary

schools and their feeder primaries and larger consortia of secondary schools of up to c. 50 secondary schools to address specific elements of the WP and Fair Access agendas..

2. The development of the whole teaching workforce to support the WP and Fair Access cohorts.
3. Parity of esteem between the HE, School and LA sectors.
4. An extended HEI based school curriculum to meet WP pupils' needs grounded in HEI disciplines and domains. The HEI programme complements and extends, deepens and enriches existing curricular provision.
5. Universal geographical provision: HEI support for WP pupils extending to all primary and secondary schools in a region through their membership of consortia.
6. HE accreditation of Professional and Applied knowledge as equivalent to Academic and abstract, theoretical knowledge mapped on to all workforce members individual needs, career paths and institutional goals.
7. Full involvement of business, commerce, industry, the professions and social services in mutually beneficial involvement with HE and schools.
8. Active participation of subject associations, agencies and other bodies in the Professional Development of the educational workforce and resourcing of schools.

The pooling of expertise involves:

1 Expert Learning Fellows (ELFs)

School and Local Authority staff appointed as HEI Expert Learning Fellows] [ELFs] with appropriate HE status as visiting Professors, Readers, Senior Lecturers or Lecturers. The ELFs are a medium for interfacing schools with cutting edge academia through having full access to HE courses, lecturers, academics, libraries, resources and facilities.

2 Local Authorities: School Improvement & Advanced Skills Teachers

They provide full curricular and pedagogic support as School Improvement Partners and through their Advanced Skills Teachers (ASTs), pedagogic experts supporting all schools in a consortium.

3 HE Pedagogic Experts In Residence (PEIRs)

HE pedagogic specialist experts in residence attached to specialist primary and secondary schools to provide the consortium with cutting edge pedagogic knowledge and expertise

4 HE Academics In Residence (HAIRs)

Academics, both HE staff and their students, bring into schools the latest academic subject knowledge through both working with school staff, other HEI students, ELFs, PEIRs and ASTs.

5 HE Students attached to Consortium Schools

The large numbers of HE students working in schools with WP pupils are the crucial, essential, medium for interfacing the HE and School sectors. They provide the essential, critical mass for the transmission of the HEI academic and pedagogic knowledge and expertise needed to enable all WP and Fair Access pupils to realise their potential. HE

students timely academic and pedagogic knowledge is manifest to such pupils, for whom the students act as long-term role models, coaches, mentors and 'buddies' in educational, cultural, sporting and social contexts throughout the educational career of WP and Fair Access pupils.

The HEFCE- funded research programme

- To test the effectiveness of the PPM in raising pupils' aspirations to progress to HE, we employed a series of intervention activities in three secondary and two primary schools in the Plymouth LA area. All the schools had a relatively high proportion of pupils from low socio-economic groups, but each had effective systems and processes and a positive ethos to support Widening Participation and Fair Access. All were supportive of the project.
- The intervention activities, designed for whole classes, small groups and individual 'buddy' pupils, were run by HE student volunteers working in Year 8 and Year 6 classes. We co-ordinated a rigorous training programme, using Student Associates Scheme students who had already received training, and other students who had not. Both groups received additional training, centrally as the project began and also site-specifically from our research assistants based in schools. Before and after the interventions we gathered and analysed data from pupils in focus groups, teacher interviews and pupil and student questionnaires. The HE students also kept a daily reflective log of their experiences working in the schools.
- Results of the analyses of the data sets suggest that:
 - Prior to PPM, teachers thought that certain interventions from the University of Plymouth were useful, but that they had certain shortcomings. Pupils at the beginning of the intervention showed relatively high aspirations to go to HE (71.5% wanting to), but reported low (58.3%) levels of students being present in their school. Significantly only 40% of them thought that their teachers wanted them to go to HE.
 - At the end of the intervention, the teachers painted a highly positive picture of the PPM intervention, viewing it as positive in its effects and well organised. In the focus groups, a very high proportion of pupils (85.2%) reported that they were now more likely to go to HE as a result of the intervention.
 - The debriefing questionnaire from the HE students was similarly positive about their experiences and about the relationship between them and their 'buddy' pupils.
 - The final data set – derived from the questionnaire given to all Year 6 and Year 8 pupils – shows little change in the 'deep drivers' of pupils' views of school, of their own achievements and of themselves. However, it does show a marked change in their aspirations for going to HE, and a reported marked change in what pupils thought their classmates would do about HE and their favourite teacher would expect of them. This is suggestive, both in terms of peer group pressure and the role and influence of the teaching body.
 - The pupil and teacher data suggests that the problem of aspiration and motivation for progression to HE may lie not with the pupils' parents or carers but with their teachers, a highly significant finding

- We conclude by describing the benefits of our PPM to the HE and school sectors and outlining the implications of our findings from the tests of its effectiveness for educational research, policy and practice.

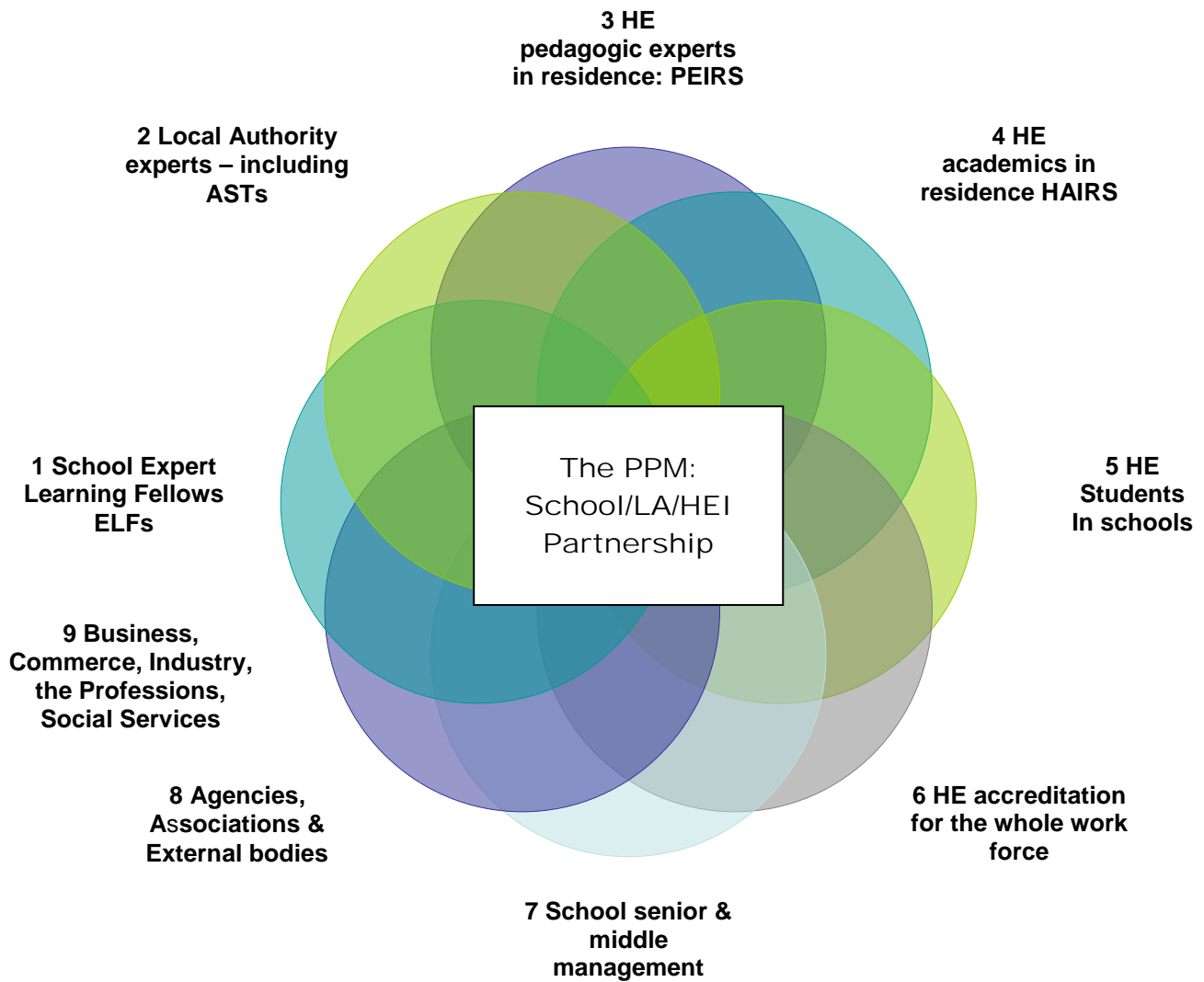
Conclusion

The PPM was the logical outcome of over a decade of curriculum research and development involving three SW HEIs and the eight Local Authorities of the South West Initiative for Training. As such, many of its elements have already been extensively trialled and tested.

The HEFCE-funded research project enabled us to research the PPM within the context of the Widening Participation and Fair Access agendas. The results were extremely positive, bearing in mind the severe constraints the research programme operated under. In a wider context we are confident that the PPM has much to offer the whole country through providing full geographical coverage and providing the school sector with an effective and mutually beneficial relationship with Higher Education and Local Authorities.

•

*THE PLYMOUTH & PENINSULA TRI-LEVEL MODEL
[PPM] OF HEI/LA/SCHOOL PARTNERSHIP*



Chapter One

The Policy Background to Higher Education Institution/School Links

Jon Nichol, Linda la Velle and Valsa Koshy

1.1 Introduction: Shadi's Case

The National Academy for Gifted and Talented Youth (NAGTY) Developing Expertise Award holder, Caroline, was an experienced teacher at a Birmingham inner city primary school. The focus of Caroline's award was 'fair access': the recognition and development of the abilities and talents of the most able children from disadvantaged backgrounds to ensure that they progressed to a higher education institution (HEI) that would meet their educational entitlement.

With her university mentor, Caroline was analysing the Cognitive Abilities Test (CAT) scores for her class of 9/10 year olds. CAT measures a pupil's ability for quantitative/numerical, verbal and spatial reasoning. The teacher and her higher education (HE) mentor had chosen to administer the CAT because of its proven record of identifying abilities in these three main cognitive domains and the mentor's serious concern over the accuracy of teacher identification, with its built-in socio-economic and ethnic bias. CAT's spatial, quantitative/numeric and verbal batteries of tests purport to be almost totally free of social and ethnic bias.

Caroline was highly experienced in the field of Gifted and Talented (G&T) education. She had already followed recommended teacher recognition procedures for G&T and listed the pupils in the class who had shown, within different areas, outstanding aptitudes, gifts and talents. The school had placed these pupils on the national G&T register. One pupil, Shadi, was not on the G&T register. Shadi's verbal reasoning and spatial reasoning scores, 104 and 114 respectively, were unremarkable. However, her score for the quantitative CAT battery that indicates mathematical ability was a considerable cause of excitement. Shadi scored a maximum mark of 141, placing her in the top 1% of the national cohort. In school she had shown a marked aptitude for mathematics, being a member of the top group in the class. But Caroline had felt that her overall performance did not merit her inclusion on the G&T register. When Shadi was interviewed as a result of her remarkable CAT quantitative/numerical score, she merely remarked 'I do mathematics at home with my father'. Shadi's low income family was from the Indian sub-continent.

Shadi's score alerted the mentor, who was on the NAGTY expert advisory group on G&T recognition, to what could be major national issues. These were, firstly, the failure to recognise discrete, individual, particular gifts and talents and, secondly, the problem that use of an averaging system could omit the exceptional pupil in a particular subject or knowledge domain from G&T recognition and support. So the mentor analysed the CAT results of three other schools and compared those with the teacher identifications.

A huge problem emerged: on average, the teachers had failed to recognise over 50% of the pupils whose scores on individual batteries of tests indicated that they were within the national top 10% of the range for that area of cognitive ability. Should these results be the same nationally, then there would be hundreds of thousands of Shadis whom the educational system had failed.

Our report to the Higher Education Funding Council for England (HEFCE) presents a model, the Plymouth and Peninsular Tri-Level Model (PPM), to address the problem of widening participation (WP)/Fair Access that the case of Shadi highlights.

1.2 The Policy Chronology, 2001-2007

In 2001, the then Department for Education and Skills (DfES) launched the major policy of Excellence Challenge, which was designed to increase the number of young people from disadvantaged backgrounds who had the qualifications and aspirations necessary to enter HE. Early evaluation of this programme (National Foundation for Educational Research (NFER), 2002) found encouraging progress on a number of fronts: staff in post to co-ordinate the programme in cities and Education Action Zones (EAZs); targeted activities in schools and colleges for young people in the WP and G&T cohorts; and HEIs in the Excellence in Cities programme involved in outreach programmes, including the start of the student mentoring scheme, which had produced considerable approval from parents.

Following the publication of the 2003 White Paper *The future of higher education* (DfES, 2003b), Excellence Challenge became Aimhigher: Excellence Challenge, a national programme aiming to widen participation in HE by raising the aspirations and developing the abilities of young people from under-represented communities, principally those from lower socio-economic groups. Aimhigher: Excellence Challenge had four main strands: the first was to encourage the formation of cross-sector partnerships, such as school/HE links, which could break down some of the perceived barriers that HEI systems could unwittingly create for some groups. A second strand was to increase funding to HE for facilitation of outreach to disadvantaged young people, while the third strand aimed to improve advice and guidance. The fourth strand was a pilot to provide financial support to targeted groups via Opportunity Bursaries of £2,000 to each eligible young person for three years.

Simultaneously, the Aimhigher: Partnerships for Progression (P4P) programme was launched as a joint initiative between HEFCE and the Learning and Skills Council (LSC), which aimed to address the government's stated aspiration that by 2010, 50% of young people between the ages of 18 and 30 should have the opportunity to benefit from HE. P4P, which clarified HEFCE's commitment to WP, was a double-stranded initiative involving: firstly, support for and extension of partnerships between HE and schools/colleges, with dedicated staff and a programme of regionally co-ordinated activities including summer schools, mentoring and shadowing; and, secondly, a national programme of research, evaluation and dissemination of good practice.

Two further strands were added to Aimhigher: a programme of research and evaluation, and the funding of the Student Associates Scheme (SAS), in which undergraduates were paid to work in schools as role models for young people and to help them to understand more about HE and their potential place in it.

Two significant changes in the WP outlook occurred as part of the *Higher Education Act 2004*: the introduction of top-up fees and the establishment of the Office for Fair Access (OFFA), with the remit to ensure that the top-up fees did not have a detrimental effect on WP and also to ensure the commitment of HE actively to increase participation rates of under-represented groups.

The interim report of the evaluation of Aimhigher (Morris and Golden, 2005) found that while participation in HE was increasing, there were still a number of under-represented groups, notably the socio-economically disadvantaged, but also including some ethnic groups and those with disabilities. Retention rates in HE of students in receipt of the Opportunity Bursary were slightly higher than those without. There was also some evidence that Aimhigher activities such as university visits and summer schools had a positive impact on students' attitudes towards HE, particularly in those groups whose families had no history of HE participation.

At this time, the Economic and Social Research Council (ESRC) launched the Teaching and Learning Research Programme (TLRP), and seven widely varied three-year projects in the area of WP were commissioned in 2005. These projects, which reported in 2008, combined to produce findings about student access to HE, success in participation schemes, educational and other outcomes from participation, institutional practices, inclusive pedagogies in and among different universities, and participation of different age cohorts at different types of university and across the life course (David et al, 2008). One of the projects, jointly undertaken by the Institute of Education, Institute for Fiscal Studies and Centre for Economic Performance, was a qualitative analysis of WP in HE. The key findings were that state school children from poor backgrounds remain far less likely to enter HE than more advantaged children; that poorer and richer students who achieve similarly in secondary school have similar HE participation rates; and that minority ethnic students are generally more likely to go to HE than white British students. One major implication of this research was that the gap in HE participation between advantaged and less advantaged students was largely explained by the weak academic achievement of poorer children in secondary school; WP activities therefore needed to be provided early in secondary school, so that the attainment and aspirations of this group were improved.

However, two years before these outcomes were known, HEFCE had put WP and Fair Access as one of five key elements of its strategic plan for the years 2006-2011. This was set out in the paper *Widening participation in HE: creating opportunity, releasing potential and achieving excellence* (DfES, 2006), with the stated objective of increasing participation and the proportion of students from under-represented groups. Non-refundable grants were reintroduced, with a requirement on HEIs to provide minimum-level bursaries to the lowest income students to make up the difference between the maximum state grant and the tuition fee levied. The announcement was made in 2007 that Aimhigher was to be funded until 2011 and the document *HE outreach: targeting disadvantaged learners* (HEFCE, 2007) was published, providing information and guidance on ways to target outreach activities at people from communities under-represented in HE. The definition of the target groups for Aimhigher was refined and a methodology provided for targeting, as well as a process for measuring its cost effectiveness.

1.3 The Effects of Current Intervention Policies

It is clear that interventions which solely focus upon particular educational aspects of the WP/Fair Access agenda may be shallow, unrooted and have minimal or no lasting impact – factors that Gorard et al's (2006) major review of research on WP/Fair Access provision highlighted. They reported that the solution to educational inequality may not be found in education at all: that it is a highly complex and deeper social, cultural, socio-economic and familial problem. The research evidence Gorard and his colleagues comprehensively reviewed showed that no single intervention could be identified as making a substantive difference to patterns of participation in HE.

A significant recommendation from Gorard et al was that to widen participation for socio-economic classes III-V, selection by qualification and the need for fixed prior qualifications would have to be abolished, because these were more a measure of an individual's socio-economic status than their academic ability. Subsequent developments have confirmed this insight.

It is clear that the government's WP/Fair Access programme has only enabled limited WP progression to HE (Panel on Fair Access to the Professions, 2009, p40). To paraphrase: never in the history of education was so much money spent by so many on so few, to such little effect. To support their recommendations, Gorard et al argued that there was a clear need for a wide range of initiatives:

- a. A range of school-based interventions that are explicitly and effectively targeted, interesting, relevant, interactive and engaging, which do not take place in isolation, and which are reinforced by the schools and engage parents;
- b. Summer schools, preferably residential;
- c. Undergraduate role models and mentors.

The historic evidence too is that over times of increase in the number of university places, the number of students from middle-class families dramatically increased, often 'colonising' the entry routes designed to encourage the working classes, making the inequality between classes constant and extremely resistant to change (Wakeford, 1993; David et al 2005). So despite the overall increase in the number of students in universities – to over a third of all 18 year olds in England and Wales – 80% of the extra numbers came from affluent families and only 3% from disadvantaged backgrounds (Woodrow, 1999).

Participation of students from lower income families still remains extremely low in British universities, and has remained close to constant as a percentage of the whole for two decades (Archer and Hutchings, 2000; Gorard et al, 2006; Sutton Trust, 2008; Panel on Fair Access to the Professions, 2009). Possible reasons for the low participation of these students in higher education are that their local secondary schools are likely to have poor GCSE results, their parents' lack of experience of HE, and the fact that no-one in their community is likely to have a degree. Our research suggests an additional, perhaps very significant factor: a low level of expectation of the teaching body that inadvertently 'blocks' pathways both to Higher Education in general and Fair Access in particular.

A related problem is acceptance of HE students from disadvantaged backgrounds in HE. Even when teenagers from lower income families join a university, their drop-out rate is much higher than for those with middle-class backgrounds (Joseph Rowntree Foundation, 2005).

From 2007 the WP policy climate intensified as the British government recognised the need for a radical approach to the deep-seated, intractable problems that the post-2001 WP solutions had failed to address, including – significantly – its own dedicated Fair Access programme for the education of G&T pupils in the WP cohort: the Young Gifted and Talented (YGT) programme. This has just been terminated largely because of its failure adequately to address the needs of the Fair Access pupil cohort.

In June 2007, the then Prime Minister established the National Council for Educational Excellence (NCEE) to try to develop a world-class educational system in England through provision of advice and guidance from the government. NCEE would empower schools, parents, industry, HE and the voluntary sector to work together. The HE work strand of NCEE produced two reports, one from the Sutton Trust into why disadvantaged young people do not progress to HE (Sutton Trust, 2008) and a report (NCEE, 2008) which provided an overview of current practice in HE and school sector liaison and engagement.

The Sutton Trust's (2008) investigation identified three key elements:

- a. The HE sector is involved in numerous initiatives and partnership working with schools and colleges, raising aspiration and attainment, talent spotting and nurturing potential, giving truly national coverage.
- b. The HE/school liaison projects work best when relationships are developed over time, are strategic and support the missions of universities, colleges and schools involved in a targeted way.
- c. There are challenges to be faced, particularly around building sustainable long-term relationships, not just short-term funded projects. The work must meet the needs of HEIs and schools, recognising the infrastructural issues that affect their capacity to engage, which must be overcome if the best results are to be achieved and good practice shared across universities and schools.

2008 recommendations for the higher education sector were that:

- a. Improvements were required in HE-related information, advice and guidance provision in schools and colleges so that learners are aware of, and could apply to, the full range of HE provision on offer. HE admissions policies should be published and accessible to applicants.
- b. Schools and HEIs should provide every learner with an opportunity to visit an HE campus during the primary or early secondary school phases.
- c. HE links with schools and colleges should support the development of science, technology, engineering, mathematics and modern foreign languages (MFL).
- d. HE should support schools in their general improvement strategies as well as providing support for academies.

- e. HE should produce comprehensive strategies for its widening participation work showing the balance between the investments in fair access and widening participation.

1.4 The Five As – Aspiration, Achievement/Attainment, Application, Access and Acceptance

It is now clear in 2009 that progression to HE is the outcome of a deeper level of pupil engagement, and aspiration, that largely determines both attainment and application for and access to appropriate HEIs: these are the 5 As – Aspiration: Achievement/Attainment: Application: Access: Acceptance. The fifth A, Acceptance, is determined by the quality of HEI provision and support to ensure that WP/Fair Access students are not discriminated against and do not become victims of social bullying at university.

The July 2009 'Milburn' Report of the Panel on Fair Access to the Professions to the Prime Minister summarises both the problem and the challenge of WP in general and Fair Access in particular: 'This weight of evidence suggests there is a chasm between where we are and where we need to be if Britain is to realise the social benefits of a huge potential growth in professional employment in future decades. This is more than an issue for those at the very bottom of society. It is an issue for the majority, not the minority, in our country. It matters to what President Clinton famously called the 'forgotten' middle class,' (Panel on Fair Access to the Professions, 2009, p6).

We echo and endorse the issues and sentiments that the Panel on Fair Access report raised and which mirror the concerns at the centre of the British government's *Every child matters* (DfES, 2003a) policies and programmes for England. Putting the university into school and community is the central feature of our recommendations and recommended PPM. As such, our report maps on to all government educational policies, initiatives and programmes that, since 2001, have focused upon widening participation and fair access, and with the wider context and agenda that the Panel on Fair Access report raises.

At the centre of our concerns, and those of the Panel on Fair Access (2009) report, are the Shadis of this world: children who without the appropriate, targeted support to raise aspiration, attainment, application, access and acceptance for appropriate HE will be disempowered and unable to fulfil their potential as individuals, citizens and contributors to the welfare and prosperity of the nation. They need to be able to develop systematically their opportunity structures to ensure that justice is done to them.

That is our collective hope. But where, with the failure of the educational system to recognise their abilities and talents, is the 'Opportunity for Equality' for the Shadis of 21st century Britain? What chance do the Shadis have of matched, appropriate higher education and related career opportunities on a par with their peers from privileged socio-economic backgrounds? How can the Shadis' achievements match their abilities without appropriate provision and support? Who would then ensure that Shadi applies for HE and, if so, that she goes to an appropriate HEI? Once having been accepted, the evidence is that Shadi will out-perform her peers from more advantaged backgrounds with similar levels of achievement (Panel on Fair Access to the Professions, 2009). The issue is to get her there.

1.5 Conclusions: A more Hopeful Agenda?

We have noted above the continuance of evidence concerning social class inequalities on access to HE. There are hints in recent studies that some training areas are more problematic than others, such as medicine, where Mathers and Parry (2009) suggest the existence of an 'elite' image.

There are also issues about the extent to which the HE sector can become engaged and proactive in the WP agenda, given the pressures to conduct high quality research (Baker et al, 2006). The historic relative autonomy of the HE sector from government may have generated a degree of HE insulation from the WP agenda, although one suspects that is rapidly changing.

It is also possible (Adnett and Davies, 2002) that there are still market forces that discourage certain groups from applying for HE – there may not be sufficient *anticipated* rewards from HE entrance, in particular. Rates of return from HE may be harder to access for students from lower socio-economic groups, and they may receive smaller earnings premiums after graduation.

Not surprisingly, there are new financial concerns that may be making access problematic. From the Ireland et al (2006) study, the financial considerations involved in undertaking an HE course emerged as one of the major areas of concern for respondents in all cohorts and as an area on which they would like further information. Similarly, West et al (2003) found in their study that over 80% of students reported that they agreed with the statement, 'I was worried about getting into debt'. Further analyses revealed that more females than males were worried about debt. This research also suggested that the bursaries may help to make students view their higher education experience more positively than would otherwise be the case. Other grants/bursaries should in theory have a positive effect in relation to those from disadvantaged groups who are currently under-represented in HE.

But there are hopeful signs too. Awareness of HE and associated aspirations of educational progression are all increasing (Hatt et al, 2007), and there is evidence that lower social class children may be catching up with others in their levels of achievement (Panel on Fair Access to the Professions, 2009).

Also, as Crozier et al (2008) acknowledged, 'One of the great achievements of the WP policy is that it has helped working class students to overcome that sense of place that leads to self-exclusion from places that they do not feel are rightly theirs (Bourdieu and Wacquant, 1992); what Bourdieu calls agoraphobia: excluding the self from a range of public activities from which they are publicly excluded' (p168).

Additionally, there have been recent research projects into the Aimhigher programme that have begun to expand our knowledge of 'what works' in this area. Ireland et al (2006) evaluated the effectiveness of Aimhigher through surveys of three cohorts of young people in Year 11, in a research consortium led by NFER. These found indications that there were gains in GCSE outcomes where young people had participated in activities provided by

Aimhigher: Excellence Challenge partnerships, particularly visits to universities and meeting staff and students in HE. DfES commissioned NFER to undertake follow-up surveys of the sample of young people to explore the extent to which they had made a successful transition at age 16 and intended, or had intended, to continue into HE. Long-term effects could be measured as the young people had completed the original surveys between one and three years earlier.

Again, there were hints that particular Aimhigher-related activities were associated with positive attitudes towards HE and a positive intention or decision to enter HE. Of the range of activities, visits to HEIs, discussions with staff and current undergraduates in HE and participation in an Aimhigher roadshow and week-long summer school may be the most effective activities, as they were associated most strongly with young people's intentions and attitudes.

Similarly, EKOS Consulting (2007) found that particularly positive experiences were reported by young people who had attended residential visits to HEIs, particularly those that were some distance away from their home. For many young people, this was their first trip away from home without their parents.

An evaluation carried out by Hatt et al (2007) also found that activities were most effective if they involved current HE students working as ambassadors, mentors or tutors. HE students were ideally placed to deliver key messages, as they could discuss with school students the implications of studying in HE, the demands of the course, sources of finance, the social life and the opportunities that HE can offer. Above all, the ambassadors sent out the powerful message that 'people like us can go to university'.

It has also been observed that the use of 'real places, real people' in activities is seen as the best way of ensuring increased impact. Young people tend to respond well to people they can relate to, and this can be maximised by using people close to the age of the beneficiaries with similar backgrounds, for example those who attended the same school or college as the beneficiaries and have gone on to HE study. Other successful activities seem to be those with a hands-on nature, as well as efforts to make activities more fun in order to provide a positive experience of HE that can engage young people. This was true of both aspiration-raising and attainment-focused projects (EKOS Consulting, 2007).

But the scale of the problem of getting more disadvantaged children into HE, and the limited success of initiatives to date, suggest that we need new initiatives, more developed and refined than those which have been tried so far. We go on in the next chapter to outline the bodies of knowledge – of practice and research – that helped us in trying to create our more sophisticated model of intervention, the PPM.

Chapter Two

The Existing Research and Practice Concerning School/HE Links

Jon Nichol and Linda la Velle

2.1 Introduction

Chapter One detailed the policy context within which present concerns about school/HE links have arisen. This chapter reviews our attempts to survey the existing literature and practical experiences of the educational system in this area, both research and practice.

It should be said openly that this area of educational practice is not one where there is a great volume of research material. We used various clearing houses of research findings (such as the Education Resources Information Center (ERIC)), but were unable to come up with more than a handful of papers on the topic. There are some reviews of literature that we outlined in Chapter One. There are a handful of papers on Aimhigher. But that is all.

What there was available to us, though, was an extensive practice and experiential, rather than academic research-based, collection of professional knowledge that could provide the building blocks to help in the construction of our own model. Accordingly, we went into the websites of all the existing trust and academy schools, in the case of these two types of school because there is now a high volume of HE participation resulting from its encouragement by government over the last two years. We also possessed a considerable volume of personal knowledge about those HEIs in the Peninsula and more broadly that have developed innovatory, or for that matter any, approaches in this area.

2.2 Existing Models of HEI/School Links

While each HEI has developed its own 'model' of HEI/school liaison, our review suggests that across the spectrum of provision these models fall into four main groupings:

1. School led with HEI and local authorities (LAs) as junior partners;
2. HEI led with schools and LAs as junior partners;
3. LA led with HEIs and schools as junior partners;
4. Dual arrangements of equal partners – school/HEI, school/LA, LA/HEIs.

School led with HEI and local authorities as junior partners

In this model, school-led consortia operate autonomously, but have close HEI links for Quality Assurance Agency for Higher Education (QAA) accreditation and related quality assurance at HE Certificate, Foundation Degree, Honours Degree and Masters levels (QAA Levels 4-7). Each school consortium is responsible for all aspects of provision and

governance, i.e. planning, strategy, administration, financing, financial management, taught programmes, teaching, monitoring-recording-reporting, accountability and quality assurance (internal). The consortium draws upon LA support as and when necessary, but because of delegated finance and the pooling of consortium expertise the LA has a subsidiary role.

The most common school-led HEI/school liaison programmes are School Centred Initial Teacher Training Partnerships (SCITTs). Significantly, SCITTs are extending their remit to cover the pre-initial teacher training (ITT) phase (i.e. the Student Associates Scheme) and post-ITT (i.e. Masters level and continuing professional development (CPD) provision).

As an example, the Cornish SCITT is highly successful and supplies its own provision for all phases and levels of professional development, from pre-ITT to senior management training at Masters level.

HEI led with schools and local authorities as junior partners

In this, HEI-led provision sees the dominant, lead organisation being a higher education institution. As such, HEI-led programmes have predominantly been supply and not demand driven through offering an academic programme that is HEI produced, managed and controlled.

An example is Warwick University's NAGTY residential summer school programme for G&T pupils at seven contracted universities. A second example is the Training and Development Agency for Schools (TDA) accredited CPD programmes that are run via the means of HEIs which offer TDA-approved courses to schools. While the programmes are developed via consultation with the school sector, the reality is that their creation, implementation, teaching and accreditation are almost totally under HE control.

The HEFCE-funded WP programme is the most comprehensive national example of an HEI-led programme. However, there is little evidence of genuine partnership between WP providers and other stakeholders, including HEIs' own faculties of education. Widening participation is one of HEFCE's core strategic aims and an influential component of policy development. WP policy includes:

- Widening participation strategic assessments;
- Better links between HEIs, schools, colleges and academies;
- New forms of partnership between institutions and communities.

WP supports disadvantaged pupils' progression to HE in four areas: attainment, aspiration, application and admissions. One exemplary '94 Group' university's WP provision for schools consists of:

- In partnership with Aimhigher, offering a wide range of activities through which the university can raise the aspirations of young learners in targeted regional communities;
- Ensuring that young learners are fully aware of the diverse range of programmes on offer at the university and in HE more generally;

- Delivering summer schools to support progression routes to vocational provision.

This university is dedicated to the WP agenda. There is an extensive commitment of senior staff time and resources to the identification of barriers to progression in schools and further education (FE) colleges in the university's hinterland, and the creation of a policy to overcome these barriers to progression.

Local authority led with HEIs and schools as junior partners

In this, the LA takes the lead in working with schools in liaison with an HEI or HEIs, with the HE sector having a major role in accreditation and related quality assurance. Provision is predominantly demand led, i.e. the LA programmes usually build needs analysis and consultation with the school sector fully into their pattern of provision. However, courses are supply driven and compliance orientated when delivering nationally prescribed, government funded in-service training such as for the training of leading G&T teachers.

A fully developed model of LA-led HEI/school liaison is the South West Initiative for Teaching (SWIFT), which was developed in the late 1990s at the University College of St Mark and St John (Marjon), Plymouth. For over a decade SWIFT has managed government-funded accredited continuing professional development for teachers in the South West. SWIFT's members are six local authorities (Cornwall, Plymouth, Devon, Torbay, Somerset and Dorset) and two HEIs (University College, Marjon and the University of Plymouth (UoP)).

The SWIFT programme is school based: schools work either individually or in consortia. The local authority plays a co-ordinating role in managing the school programme. SWIFT also operates on a one-to-one basis to support individual teachers.

The distinguishing feature of the SWIFT 'model' is its operation through accredited, licensed and trained tutors who deliver the taught programme. Accordingly, it relies on about 180 'university-approved tutors' recruited from schools, LAs and HEIs that operate locally. This enables it to support all schools and teachers within the local authority's geographical area. To ensure quality of provision, SWIFT provides an intensive and ongoing tutor induction and development programme.

SWIFT offers HEI-accredited programmes for teachers for PGCert, PGDip and Masters. Schools enter into formal agreements for negotiated programmes of taught courses based on needs analysis and full consultation. For individual teachers, programmes of study can be individually arranged. Accordingly, the SWIFT model combines flexibility and opportunities within an accredited programme, including support for a piece of developmental work (supported independent study).

Dual arrangements of equal partners: school/HEI, school/local authority, local authority/HEIs

The partners work as genuine equals in this model. The Plymouth SAS was the prime example of this model and is detailed in Section 2.4.

2.3 The PPM: Developmental Background

A variety of developments in education policies and practices over the last decade or so (see Chapter One) have also had an influence upon our thinking, in showing us that collaborative programmes involving schools, HEIs and LAs could work effectively in the area of curriculum development generally. The historical research and development (R&D) originally had a predominantly school/HE focus, but since the early years of this century there has been increasingly more LA involvement in this. HE staff work alongside school staff as curriculum development partners. The HE input is to provide scholarship, research and external inputs, while the school provides the related deep, dense and experiential professional insight and understanding of the school and teaching context that is essential for curriculum research and development to succeed. LA involvement is normally through the subject advisory staff and/or the LA improvement specialists.

The main strands of the research and development programmes' historic goals were to improve the quality of pupil learning experiences, to develop and disseminate models of expert pedagogy and to improve curriculum range, depth and take-up. Simply, they merged the more academic subject knowledge and pedagogic content knowledge into a collaborative mix.

Examples of this kind of curriculum research and development include, from the early 1980s onwards, the following.

Developments in computer education involving schools, educationalists and computer and cognitive scientists

These cutting-edge projects applied an advanced computer language, PROgramming in LOGic (PROLOG), to children's education. PROLOG is a computer language that uses the structure of predicate logic to replicate logical thinking – a powerful tool for developing pupil cognition. The PROLOG project led to the development of knowledge-based and expert systems which widened pupil access to the power of PROLOG through their being able to programme in their native tongue. The projects were Nuffield Foundation funded (Nichol et al, 1988).

16-19 and Primary History education curriculum development projects

These projects involved schools/teachers, awarding bodies, government agencies (e.g. Qualifications and Curriculum Authority (QCA)), subject associations and HE history departments and some Best Practice Research Scholarship (BPRS) projects. Again, the projects were mainly funded by the Nuffield Foundation (Fines and Nichol, 1994 and 1997).

Enquiry into teaching history to over 16s

This Advanced level (A level) project relied upon the project team working as action researchers with teachers and their schools and upon close liaison with awarding bodies and academic historians. The Nuffield Primary History project worked in the same mode, with the team creating a primary history curriculum for schools through working alongside teachers in the project's pilot schools. The Nuffield Primary History project's dissemination phase

involved national TDA continuing professional development funding in five local authorities and government-funded Best Practice Research Scholarships.

In addition to the curriculum R&D experience which shows that a multiple-level approach can be effective, there have been a number of education policy developments we have participated in, and responded to, that have also influenced our thinking, as follows.

The reform of ITT

The changes to ITT post-1992 forced HEIs to develop a closer professional relationship with schools (Department for Education, 1992).

HEI programme development.

Over time, it is clear that the definition of what is 'valid knowledge' for the purpose of accreditation has changed fundamentally. The professional knowledge of those who work in schools should increasingly be seen as valid in its own right and equivalent to academic subject knowledge in status.

The Centres for Excellence in Teaching and Learning (CETLs) have pioneered new approaches to the transfer and generation of knowledge in HEIs, through a variety of novel methods (Ramsden, 2003). Additionally, HE students have increasingly become the main medium for the interfacing of school/community and HE. HEIs themselves have also developed programmes focused upon employability in commerce, business, industry and the professions, which have involved extensive participation from outside HE organisations.

2.4 The Plymouth and Peninsula Experience 2005-2009

We have outlined so far our understandings of the complex world of school/HEI links based largely on our experience of the HE sector, the limited literature that exists and the developments in education policies over time that have helped us to develop our thinking. It is clear that all the policy 'traction' is in the direction of closer links between HE, schools and LAs, together of course with the communities with which they are linked.

But there are a whole series of direct policy and practice involvements that we have had at the University of Plymouth since 2005 that have also helped us to formulate the PPM. The University's extensive activities in the area of G&T education, the SAS, work on citizenship and the embryonic Plymouth Express (a full partnership of schools, HEIs and LAs) were the testing grounds for elements of the model we are now attempting to implement. It should be noted that the great majority of these activities are not merely from the UoP, but comprise the contributions of other universities in the Peninsula, and also of a number of peninsular LAs. We now explain these activities in further detail.

Gifted and talented education

G&T pupils from disadvantaged backgrounds are a key sub-set of the WP cohort. As such, they are a central, if not the central, element for the Fair Access agenda, although of course, we acknowledge that the sheer size of the WP cohort dwarfs that of Fair Access.

The Universities of Exeter, Bath and Plymouth co-operated in 2005/06 to establish a government-funded South West Higher Education Institution Excellence Hub (SWHub) for university support of G&T pupils. Its mission statement was 'Opportunity for Equality'. The SWHub was one of nine nationally: one for each educational region.

The G&T hub's focus was upon provision and support for disadvantaged pupils, and we also planned a pilot programme that would enable us to extend provision to all schools in the region through the establishment of a series of Junior Universities Learning Institutes (JULIs) for up to age 15 years, and a South West Juniors University (SWJU) for 16-19 year olds. Each JULI would consist of consortia of about 10-12 secondary schools and their partner primary schools.

The SWJU aimed to provide a university-led curriculum for the academically outstanding, (i.e. those who had or were projected to obtain a grade A in a particular subject). HE staff taught the programme with HE student support; the programme was to be sustained with on-line tutoring, coaching, mentoring and support and would extend over two years with twilight, weekend and summer schools' activities.

The JULIs and SWJU were stillborn as no funding was provided for them, although we piloted a maths programme for gifted but disadvantaged maths students in the summer of 2008. However, the JULIs and the SWJU concepts were based upon extensive consultation and planning with schools and HEIs, and attracted widespread interest.

The Department for Children, Schools and Families (DCSF), via its managing agency Centre for British Teachers (CfBT), strongly supported the creation of working partnerships between SWHub and the LA organisation for promoting G&T education regionally (the LA body was South West Gifted and Talented Education (SW GATE)). In the autumn of 2008, we created an extensive co-operative programme that pooled our resources.

The Student Associates Scheme: University of Exeter SAS and Plymouth SAS

The SAS is a TDA programme to introduce non-initial teacher training HE students (e.g. mathematicians, physicists, computer scientists) to teaching as a career. There is a 30-hour taught programme linked to 15 days of school-based experience.

The creation of the SAS programmes at the University of Exeter from 2003/04 was based upon using teachers as tutors and on close liaison with schools. The University of Exeter SAS combined in 2006 with the Plymouth LA SAS to produce the Plymouth SAS. The Plymouth model involved large cohorts of HE students working in Plymouth schools and a close working partnership between the UoP and the Plymouth LA. Co-operation extended to all aspects of creating, managing and developing the SAS: strategic and policy development, programme creation, implementation, quality assurance and review, action planning, staffing, finance and accreditation.

Again, support for disadvantaged pupils was a central feature. In 2006/07 the DCSF incorporated Aimhigher/WP as 50% of the SAS (within this context it was also an integral element of the SW HUB's G&T programme), and the DCSF national policy on G&T

education related to the SAS programme because the Plymouth SAS team also managed the SWHub for G&T education.

To enhance support for disadvantaged pupils, the Plymouth SAS and Exeter University SAS jointly created a pilot project for focusing on entry to HE (WP) and Fair Access, matching the disadvantaged pupil to the appropriate elite HE and course/programme.

The DCSF Citizenship Project

In the summer of 2008, the UoP won the contract for delivering nationally the CPD for citizenship education. The contract was based on working via LAs with consortia of schools, with the HEI providing accreditation. The main deliverer of the citizenship CPD is the Association of Citizenship Teachers (ACT).

The key contribution of the citizenship contract to our thinking was its operation as a programme of equal partners of an HEI, LA and the citizenship subject association. The LAs recruit staff to teach the programme – Expert Learning Fellows (ELFs); ACT trains the ELFs and provides the taught curriculum, while the HEI is responsible for accreditation, architecture and quality assurance.

The Plymouth Express partnership of schools, local authorities and HEIs

The research and development programmes above all involved close liaison and co-operative working between HEIs and schools, their staff and pupils. Schools were also the central feature of the citizenship curriculum research and development sites, and the projects were school and not HEI-based.

In 2007/08 the disparate elements involved in the various R&D programmes were combined and rationalised into a model of HEI/LA/school co-operation: the Plymouth Express, which was specifically aimed to ‘put the University into school and community’. The Plymouth Express is the intellectual basis for the creation and development of the PPM.

2.5 The PPM: Theoretical Underpinnings

So far we have outlined the policy-related and the practical projects that form the context for the PPM. Policy in education has been moving HEIs, schools and LAs together. We in Plymouth have also been piloting and delivering a number of programmes that have generated innovative multi-level interventions for targeted populations concerning G&T education, the SAS and work on citizenship. These have been the generators of the Plymouth and Peninsula Tri-Level Model, which we were beginning to work on as the present work reported here began in April 2009.

However, at the same time as our practical activities have moved towards what we call a ‘tri-level’ approach, we are also aware that theoretical knowledge about how to intervene in educational situations, how to generate knowledge and how to enhance professional development has also advanced to the stage where we know ‘what works’ in these areas. We outline this material briefly as it has also influenced the development of the PPM. There

are seven broad areas of knowledge that tell us what kind of HE/school links might work, as follows.

Maximising capacity

We know that educational change only occurs where those introducing it have the intellectual and practical resources to provide it. In the case of the existing Plymouth programmes this clearly means high quality 'capacity' in the following areas:

- HE academic and student availability;
- Orientation – the willingness to support, promote and engage by HEIs;
- Administrative and technical expertise and support;
- Facilities – buildings, laboratories, support facilities;
- Resources – materials for use;
- Transport;
- IT support.

But capacity is more than human and physical resources – it is the 'knowledge' about what to do in particular situations, so intensive training is also needed. For the PPM we have given considerable thought to the need for intensive capacity-building and training/retraining of all those involved in it, as we will show later. Indeed, we have anticipated the practice-based professional learning of the new Masters in Teaching and Learning (MTL) Degree by providing opportunities that not only develop teachers' repertoires but also foster the development of learning communities.

From implementation to institutionalisation

Studies of educational change (e.g. Fullan, 1991; Hopkins and Reynolds, 2001) tell us that the provision of knowledge to institutions will not necessarily lead to any change in what they do and how they do it unless the knowledge penetrates very deeply from 'surface' to 'depth'. Even if the knowledge is taken up, getting the multiple layers of educational institutions to change through the *implementation* of that knowledge is a difficult process. Even if implementation exists, the evidence suggests that it is the *institutionalisation* of the knowledge to become the 'way we do things around here' that generates the greatest improvement in outcomes. However, institutionalising change requires a number of pre-requisites in the culture of schools:

- Trust between those within educational organisations and those outside;
- Mutual adaptation of 'outside' and 'inside' organisations;
- Empowerment of personnel within the educational organisation, to promote self-confidence among them;
- Ownership by educational professionals of the content and process of change;
- Acknowledgement of the difficulties inherent in change, and the instability;
- Attention to the culture of educational institutions, which needs to be re-made to permit change;
- Research and enquiry by practitioners to embed knowledge.

In the development of PPM, we have tried to maximise the conditions for institutionalisation to take place, as we outline later in Chapter Three.

Promoting research/evidence-based practice

Since the 1970s a common feature of successful professional development has been the systematic, intensive and analytical review of data to test questions and hypotheses in order to bring about improvement of teaching, learning and related aspects of professional engagement with schooling. Practitioner research is now a fully accepted and integrated element in the planning and provision of CPD, from the earliest phase of a career in teaching.

Practitioner research takes two forms: formal and informal. Formal research is predominantly an element in Masters-level provision and, as such, occurs on a relatively small scale in relation to the whole workforce because of the heavy demands it makes upon teachers already working to the limit of their 'capacity'. As such, it is problematic as a medium for sustainable, school-centred professional development. Its usual form is action, or case study, research that produces 'cases'. The case data underpins action planning and an action plan to implement recommendations based upon the research findings.

Informal research, however, is more universally practised and should be recognised as both valid and of crucial importance. Currently, school staff are continuously engaged in research acts, defined as the rigorous and systematic collection, recording and analysis of data generated in the workplace. The outcomes of this research process are the creation, implementation, review and improvement of policy and practices. In terms of teachers' career paths and related professional development, practitioner research is now a seminal, central element in performance management.

We have tried to ensure that the PPM recognises the value of both formal and informal research as a 'driver' for sustaining and improving the quality of education – and the pleasure and professional development of the classroom teacher for that matter. All staff involved in our PPM need to be evidence-based practitioners and we have grounded the PPM in evidence-based practice that is needs based, research led and which recognises all educational practitioners as practitioner researchers.

The importance of situated learning

In our thinking we acknowledge the validity and uniqueness of professional, applied knowledge generated and constructed within particular contexts or situations. Lave and colleagues have adopted and presented a way of looking at the social construction of knowledge – 'situated cognition' – which is locally generated (Lave and Wenger, 1991).

Emerging from anthropology, sociology and cognitive science, situated cognition theory represents a major shift in learning theory from traditional psychological views of learning as mechanistic and individualistic, and moves toward perspectives of learning as emergent (Lave and Wenger, 1991). Brown, Collins and Duguid (1989) are often credited with developing situated cognition or situated learning theory, and Collins (1988) defined situated learning as the notion of learning knowledge and skills in contexts that reflect the way they

will be used in real life. Thus, situated cognition theory encourages educators to immerse learners in an environment that approximates as closely as possible to the context in which their new ideas and behaviours will be applied.

Regarded as leaders in the situated cognition movement, Lave and Wenger (1991) described learning as an integral part of generative social practice in the lived-in world. Their definition bears analysis: 'generative' implies that learning is an act of creation or co-creation; 'social' suggests that at least a portion of learning time occurs in partnership with others; and the 'lived-in world' connotes real-world practices and settings that make learning more relevant, useful and transferable (Brill, 2001).

Situated cognition provides a theoretical basis for the empowerment of diverse educational research communities and their academic credibility. Situated cognition and learning also have direct relevance for educational and professional development, and mean that we should:

- a. 'Recognise the critical role of the social and historical circumstances in which actions are situated, when interpreting those actions;
- b. Encompass thinking as a part of culturally organised activity which is carried out within a community of practitioners. In this view, learning is a process of enculturation or individual participation in socially organised practices, through which specialised local knowledge, rituals, practices, and vocabulary are developed. The foundation of actions in local interactions with the environment is no longer an extraneous problem but the essential resource that makes knowledge possible and actions meaningful.' (Schon, 1983)

Knowledge takes the form of instances, examples and more formal cases. In sufficient numbers these cases can serve as the basis for generalisation. Such knowledge makes sense in terms of 'the relational character of knowledge and learning, the negotiated character of meaning, and the concerned (engaged, dilemma-driven) nature of learning activity for the people involved' (Lave and Wenger, 1991).

In no sense, then, is useful professional knowledge about 'one right way' across contexts or behavioural 'tips for teachers' that are picked up from outside schools and tried within them. Professional knowledge is context dependent, needs understanding in that context, and arises from the social and cultural interaction of the agents involved. We have tried to reflect this tradition in the development of our model.

Drawing on recent research in the field, Desimone (2009) similarly identifies a consensus about at least some of the characteristics of professional development that are critical to increasing teachers' knowledge and skills and improving their practice in a way which holds promise for increasing student achievement: (i) content focus; (ii) active learning/teacher reflection; (iii) coherence/interactive paths; (iv) duration; and (v) collective participation/critical collegueship.

Crucially, contemporary thinking also accepts two premises:

1. The professional knowledge base that is most needed to improve the quality of teaching and teacher education is knowledge about the ways in which classroom activities, including teaching, affect the changes taking place in the minds of students;
2. Schooling systems are ultimately in the business of educating students, not teachers.

This means that outcomes of student learning are the criteria for the effectiveness of various interventions and improvement efforts.

Evolving communities of practice

Recent years have seen the emergence of views suggesting the need to establish more than lone, unconnected individuals who may research and generate knowledge, but rather networks of individuals who may mutually support the process of knowledge creation and interpretation (Lave and Wenger, 1991; Plaskoff, 2006). A community of practice is seen as an essential condition for the existence and advancement of knowledge, because it provides the support that is necessary to interpret knowledge into changed practice. We have tried to encapsulate this approach in the PPM.

Cognitive apprenticeship and professional development

It is now clear that within all processes of professional education is the transfer of knowledge, understanding and professional expertise from the 'expert' to the 'novice', from the trainer to the trainee, and from the tutor to the tutee.

Cognitive apprenticeship (Collins et al, 1989; Brown and Duguid, 1991) involves a close, intensive relationship between 'the teacher' and 'the student' which is similar in orientation to the concerns of the 'situated learning' and 'communities of practice' paradigms. The Collins, Brown and Duguid paper underpinned the development of the Exeter University Secondary PGCE programme from the mid 1990s. Subsequently it shaped and informed the Continuing Professional Development programme for teachers of history that the Nuffield Primary History Project ran from 1998-2003. Details of the cognitive apprenticeship paradigm as applied to continuing professional development and a related research programme that evaluated its impact and effectiveness were fully reported in the Journal of In-Service Education in 2006. (Nichol and Turner-Bisset, 2006) The cognitive apprenticeship model as applied to teacher professional development involves a process consisting of the following stages (see also Figures 2.1 and 2.2):

- Demonstration of practices;
- Observation of participant;
- Reconstruction of the activities;
- Reflection;
- Modelling of the activities;
- Enacting the activities;
- Creating and planning to adopt the model in a particular setting;
- Implementation;
- Reflection on the implementation;

- Replay of what happened, between student and teacher;
- Action planning for further improvement;
- Fading of the tutor, and the generation of independent practice.

The movement from dependency, as in the novice situation, to one of independence is one we wish to facilitate through the processes of our PPM.

High quality professional development opportunities

Harland and Kinder (1997) were one of the earliest research teams to attempt to chart what made professional development activities effective. Their typology – developed from analysis of the 20-day subject-based professional development courses of the 1990s – suggested a hierarchy of factors affecting course quality (see Figure 2.3).

Their typology has three levels. At the first level, tutors need to share and assimilate the values, beliefs and attitudes of programme leaders, together with the knowledge and skills of subject areas. The second level is more complex: the motivational and affective component. Third-level outcomes concerning resources for teaching, knowing what is required of you and knowledge of recent practical developments, are also important. But all three levels are required for effective professional development to take place, especially the ‘deeper’ levels one and two.

Duncombe and Armour (2004) and Hustler et al (2003) corroborated Harland and Kinder in acknowledging that professional development opportunities should take account of the teacher’s existing knowledge and requirements. Robson (2006) questioned whether clearer distinctions should be drawn between thinking and learning. Professional development opportunities must be provided that are relevant to practitioners, meet their perceived needs and equip them with worthwhile new skills.

Practically, as well as conceptually, we now have far more evidence than a decade ago about what the most valid educative experiences are in schools. Reviews of this literature (Hopkins and Reynolds, 2001) suggest that training needs to:

- Combine practical knowledge with its theoretical underpinnings;
- Focus upon reliability of implementation;
- Be inclusive in terms of all groups of staff in schools;
- Focus upon the action/review/improvement cycle;
- Be contextually valid in the precise location of individual schools and practitioners;
- Be behaviourally orientated, as pupils respond to behaviours.

In our PPM, we hope to have created high quality professional development opportunities of this kind.

2.6 Conclusions

A whole series of influences can be seen, then, behind the generation of our PPM. There are national policy developments in education, the influence of the wide range of innovations

in the areas of HE/school links that have been co-ordinated by the UoP across the Peninsula, and the general intellectual directions of thinking within educational research. These represent a rejection of conventional, behavioural, checklist types of approaches to professional education, and the embracing of approaches more concerned with maximising professional capacity to learn. Through this, institutionalisation of change is engendered and a research-orientated view of professional development is created that aims at 'deep transformation' by means of methods that bind together practitioners in communities of practice.

These have all been influences on the development of the PPM, the full details of which we outline in Chapter Three.

Figure 2.1: The cognitive apprenticeship process (*Nichol & Turner-Bisset, 2006*)

- 1 *Demonstration*
The expert, or experts, demonstrates varied professional practices to the participant in the context of the progressive programme goals and targets. Demonstration is done in the training site, in the school or colleges, or through the medium of instructional materials. These materials incorporate case studies that are exemplars of a full range of professional practice.
- 2 *Observation – participant*
The participant observes, monitors and records expert performance in relation to a targeted facet of the expertise, for example a classroom management skill or a teaching and learning strategy or instructional technique.
- 3 *Abstracted replay – mental reconstruction*
Abstracted replay attempts to focus the participant's observations and comparison directly on the determining features of the expert's performance by highlighting those features in a skilful verbal descriptor. Discussion and comparison are central features of *abstracted replay*.

Abstracted replay focuses upon the tutor and participant's performance through a critical, reflective and constructive dialogue that is formative in nature. Abstracted replay can involve both formal, planned tutorials and informal dialogue.
- 4 *Reflection*
The participant reflects upon the expert's performance, drawing upon both observation and abstracted replay.
- 5 *Mental modelling*
Observation data; expert, tutor and participant interaction; and participant reflection result in the participant's creation of a 'conceptual mental model' of the targeted skill, teaching and learning strategy or instructional technique.
- 6 *Enactment*
The participant enacts, carrying out the teaching and learning strategy. Participants physically 'do' it, taking on the role of the pupils.
- 7 *Planning*
The participant plans and resources the implementation of the mental model. *Creativity* – the participant uses his or her own creativity and imagination to adapt the model to the particular teaching situation.
- 8 *Implementation – semi-independent practice*
The participant implements the mental model in his or her own semi-independent practice. This involves:
 - *Scaffolding* – tutor provides structure, a scaffold, to support tutee implementation of the 'conceptual model' in terms of planning, resourcing, implementation and evaluation;
 - *Coaching* – participant implementation of 'conceptual model' in own semi-independent practice and its review involves tutor coaching of the participant;
 - *Observation (tutor)* – tutor observes, monitors and records participant's performance, using this as the basis for the abstracted replay;
 - *Data collection* – participant collects as much data as possible to inform reflection upon what has happened in relation to the goals set during planning.
- 9 *Reflection*
The participant reflects upon the data, thinking carefully about what has been learned from the experience and how professionalism can be improved accordingly.
- 10 *Abstracted replay (2) – critical dialogue*
Tutor and participant jointly review implementation.
- 11 *Action planning*
Together they agree upon an action plan for improvement on the basis of their critical dialogue.

12 *Fading*

As the participant masters a sequence of 'conceptual models', the tutor fades into the background.

13 *Autonomy – independent practice*

The participant operates as an autonomous professional at the end of the process, practising independently while still subject to review and interventions of the tutor(s) as appropriate.

Figure 2.2: The professional development model – the cognitive apprenticeship cycle (Nichol & Turner-Bisset, 2006)

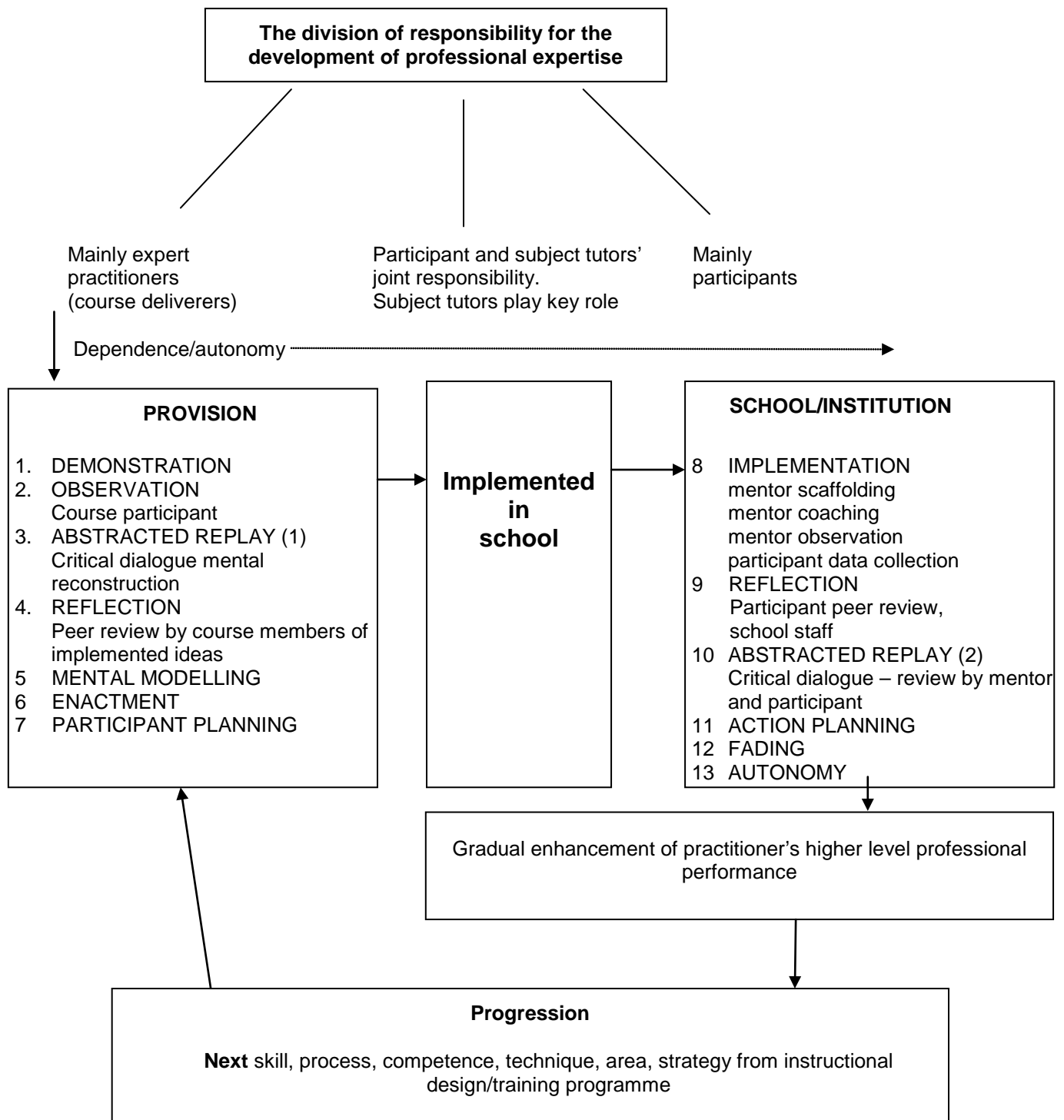


Figure 2.3: An ordering of training outcomes (Harland and Kinder, 1997)

1 st order ↓	values congruence i.e. sharing the values and beliefs of the course team	↔	knowledge and skills i.e. understanding of subject knowledge domain, syntactic and substantive		
2 nd order ↓	motivation i.e. willingness to work	↔	affective i.e. emotionally satisfied in the workplace	↔	institutional knowledge i.e. knowledge of what is expected of you in the institutional setting, and of the institution
3 rd order	provisionary i.e. materials, resources, ideas for teaching	↔	information i.e. knowing about what is required of you	↔	new awareness i.e. knowledge of recent developments

Chapter Three

The Plymouth and Peninsula Tri-Level Model (PPM)

Jon Nichol and David Reynolds

3.1 Introduction

Chapter One argued that there is evidence that pupils from impoverished socio-economic and cultural backgrounds have little or no concept of what HE has to offer them, of the potential that it has to contribute to their personal and social development and to their career paths. The PPM directly addresses the challenge of such pupils by creating enriched HE ‘opportunity structures’ that give them the aspiration, opportunities and attainment to progress to HE. The model enables consortia of schools/HEIs and LAs to develop effective intervention programmes that focus upon the socio-economic and cultural circumstances of the WP target population of impoverished pupils.

3.2 The Characteristics of the PPM

It is axiomatic that the PPM needs to reflect the interests, needs and priorities of its schools and other community members in the WP context. This entails close HE liaison with governors, senior management, staff, parents, pupils and representatives of local and community interest groups: social, cultural, religious & economic: commerce/business/the professions and industry. Needs analyses to see what are the priorities of these groups are essential.

The PPM consortium also needs to share congruent values, beliefs and attitudes of the partners to ensure full engagement with and commitment to the partnership.

Beyond this are certain ‘design principles’ that are also axiomatic:

- The PPM must be viable financially, and be efficiently and effectively managed;
- The PPM must be capable of development and improvement, and be responsive to changing circumstances and opportunities.

There are also key design features that we have built into our organisational processes, which we describe in turn below. The PPM:

- Is a genuine partnership;
- Has parity of esteem between partners;
- Utilises an extended HE-based curriculum;
- Covers universally within a defined geographical context;
- Utilises ELF;
- Utilises LA expertise;
- Utilises HE Pedagogic Experts-in-Residence (PEIRs);

- Utilises HE Academic Experts-in-Residence (HAIRs);
- Utilises HE students;
- Accredits the whole school workforce;
- Involves senior and middle managers in schools;
- Interacts with subject associations and other agencies, institutions and bodies, the world of business, commerce and industry and other key stakeholders.

In detail, the PPM incorporates and combines nine separate elements (see Sections 3.7-3.14 below):

1. Expert Learning Fellows, see Section 3.7

HEIs appoint school staff as HE Expert Learning Fellows with appropriate status as visiting professors, readers, senior lecturers or lecturers. The ELF's are a medium for interfacing schools with cutting-edge academia. As HE visiting academics, ELF's have full access to their HEI's resources, facilities and technical and administrative support. Short and long-term secondments support ELF's, updating their academic and pedagogic knowledge, both abstract/applied and academic/professional. ELF's can deliver professional development programmes and fully engage and support their schools' action and case study research.

2. Local authorities, see Section 3.8

The LA sector provides full curricular support through the LA's role as a school improvement partners and through their Advanced Skills Teachers (ASTs) – pedagogic experts supporting all schools in a consortium. The ASTs and other qualified staff will also be appointed as ELFS, with HE status and access to HE facilities and resources as visiting academics. The LA sector also provides schools with information upon national and regional educational developments, requirements, related DCSF professional development support and related professional development programmes and initiatives.

3. HE Pedagogic Experts-in-Residence, see Section 3.9

The consortium attaches HE pedagogic specialist experts-in-residence to specialist secondary schools to provide the consortium with pedagogic expertise, cutting-edge knowledge/information, access to local and regional networks and related HEI support, courses, facilities, services and resources. Crucially, PEIRs advise and support/supervise needs-based practitioner research, HE students working in the schools, ELF's and ASTs. HE students in their final stage of initial teacher education (ITE)/professional development could have junior fellow PEIR status, ensuring full provision and support, particularly in the primary sector.

4. HE Academic Experts-in-Residence, see Section 3.10

Academics, both HE students and staff, provide cutting-edge academic subject knowledge to schools through liaison with school staff, other HE students, ELF's, PEIRs and ASTs. HE students with the appropriate expertise (i.e. postgraduates and final year undergraduates) could be junior fellow HAIRs for both the primary and the secondary sectors.

5. **HE students attached to consortium schools, see Section 3.11**

HE students working in schools with WP pupils are the crucial, essential medium for interfacing the HE and school sectors. A critical mass of students enables the transmission of the HE academic and pedagogic knowledge and expertise needed to support WP pupils. To ensure this, trained HE students living in the consortium's catchment area or studying at an HEI involved in partnership with the consortium are attached to partnership schools. As coaches, mentors and tutors, HE students support WP pupils in educational, cultural, sporting and social contexts. HE students are also role models for WP pupils.

6. **HE accreditation: progressive professional development, see Section 3.12**

School staff have a clear, progressive career path. This should involve HE accreditation for all phases of professional development, from support staff to head teachers. The PPM incorporates full accreditation for the professional knowledge involved, i.e. from QAA Levels 4-8 plus matched professional development support that is school based and needs driven. ELFs (see above) deliver professional development for the consortium.

7. **School senior and middle management, see Section 3.13**

The PPM must be integrated into the school's management system with the commitment and support of senior and middle management. Ownership by the head teacher and the school's senior management team is axiomatic for success. Also crucial is the engagement at head of department/team leader level, as they are the means through which provision and support for WP pupils occur.

8. **Subject associations, other bodies and agencies, see Section 3.14**

Subject associations and other bodies and agencies such as museums, local and national cultural, charitable and sporting organisations, through their academic and pedagogic provision, are a significant factor in bridging the gap between HE and schools. Subject and cultural, charitable and sporting bodies, organisations and agencies play a major role through their local membership; courses, publications, books, pamphlets and professional/academic journals; their websites, on-line provision, learning and, at the DCSF/TDA/QCA level, involvement in policy formulation and related professional development provision.

9. **Business, Commerce, the Professions and Industry** The world of business and commerce plays an essential part in the partnership between HE and schools. The world of commerce and industry provides the work-place experience for pupils through placement and engagement – the HE sector, through its academic departments and their interfacing with the world of business and commerce are natural partners in equipping pupils with the orientation, values, attitudes, knowledge and skills for the 21st century economy.

These nine elements are illustrated in Figure 3.1.

3.3 The PPM as *Genuine Partnership*

Full partnership is based upon the school, HE and LA sectors being jointly responsible for the strategic direction, policy implementation, management and administration of each consortium. As such, genuine partnership requires a flat management structure with equal representation of the three sectors on a strategic group in charge of strategy and policy, and on a management group. Partnerships between schools, HEIs and LAs are based upon the needs analysis of the partners/stakeholders and interest and pressure groups involved. Crucial are the needs of the pupils and, related to this, the full involvement of parents and carers.

Being based upon needs analysis, the PPM is demand and not supply driven. The strength of its partnership arises from the combination of the unique elements that each brings to the consortium. Schools provide situated professional knowledge and understanding; HEIs scholarship, staffing, research, accreditation, facilities and resources; and LAs professional involvement in all aspects of schooling involving support services, quality assurance, inspection and professional development.

Benefits from the PPM

The PPM meets the WP and Fair Access agendas through targeting individually and collectively disadvantaged WP cohort pupils in the schools, specifically through providing them with HE student coaching, mentoring and tutorial support and through HE academic and pedagogic provision, professional development and support, facilities, resources, liaison, accreditation and access. The PPM dovetails with the existing WP strategic plans of major HEIs and the government's City Challenge programme, sharing a number of their features.

Accordingly, in terms of WP and Fair Access, the PPM as an 'opportunity structure' should ensure a marked improvement in WP pupils' aspirations, attainment, applications and aptitude, as WP pupils will have become integrally involved with HE through close working relationships with HE students and experience of HE campuses and student life. Additionally, the PPM heightens school staff awareness and involvement with the HEIs.

3.4 The PPM as Parity of Esteem and Status

A central feature of the PPM is parity of esteem between the partners, grounded in recognising the equal status and validity of professional & applied knowledge & academic & abstract knowledge. The academic/professional dichotomy has been a major problem in securing effective HE/school-sector liaison, where the HEI focus on higher status academic and abstract knowledge has not mapped on to the professional and applied knowledge that is the priority of the school sector. Professional knowledge underpins pedagogy and praxis that are at the heart of schools and schooling. Bridging this gulf between academic theory and professional practice is essential to ensure that HEIs, schools and LAs have the mutual respect to facilitate liaison and active co-operation.

Sustainable and effective HE/school liaison is vitiated if the HE sector cannot provide demand-driven professional, applied knowledge courses that contribute significantly to the

school sector. The government policy of delegating all funding, as far as possible, to individual schools has seriously exacerbated the issue, since each school decides on the allocation of its centrally allocated budget. Frankly, the HE sector needs to provide schools with significant 'value added' in the market economy of autonomous schools, otherwise the HEI role will be minimal. This it can do through accrediting professional knowledge, based upon its having equal status with academic knowledge, and providing related professional development and support through the medium of partnership with schools and local authorities.

The initiatives below are also predicated upon LAs having parity of esteem and status with the HE and school sectors.

3.5 The PPM as an Extended HEI-based Curriculum

Specialist secondary schools and specialist HEI-based provision

Each consortium will axiomatically cover the full range of secondary subject specialisms through its specialist schools provision operating under the remit of the Specialist Schools and Academies Trust (SSAT) (SSAT, 2009). Specialist school coverage guarantees that all WP pupils in the consortium have access to specialist curricular provision. This requires co-ordination of consortium provision not only for pupils but also for the CPD in its specialist area for all consortium schools, and enhancement programmes for pupils (e.g. master classes, summer school, Saturday school, workshops, HE-based courses). Such co-operative structures are already widely in place and can be readily built upon. Within the South West region the specialist school movement is capable of fully supporting the PPM consortia.

Continuing Professional Development at all levels is delivered through the medium of ELFs in co-operation with HE staff. The HE sector will operate as the awarding body with responsibility for accreditation at Quality Assurance Agency levels 3-7, i.e. Certificate of Further Education to Masters.

The extended HEI-based curriculum

To meet WP pupils' entitlement, consortia – both separately and co-operatively – can offer an extended curriculum with courses based on HE disciplines and domains. The HE extended curriculum will complement the national curriculum, vocational education, the 14-19 agenda and related cultural, sporting and social areas.

The extended HE curriculum requires consortia to benefit from the opportunity that HE-based curriculum development presents. HE-based courses reflect the knowledge, interests and enthusiasms of both the academic and domain expertise of HE staff attached to the partnership and that school staff have developed at university and subsequently. It brings into the schools cutting edge academic knowledge grounded in scholarship and research. It enables the creation of a 21st century curriculum as opposed to one historically grounded in the late 19th and early 20th centuries.

The curriculum: cutting-edge developments

The consortia can also offer schools effective professional development support for dealing with the most recent national curriculum changes, related developments and initiatives.

Here, consortia can also draw directly for support (face to face and on-line) upon subject associations, professional bodies, HE education departments and the LAs. Initiatives in vocational education at Thames Valley University, the subject of its HEFCE-funded HEI-school liaison project in HE provision for the 14-16 age range, indicated the value of pupils working in an HE environment, liaison with employers and the active involvement of parents.

Support for the PPM comes from the implementation of radical changes for the 14-19 curriculum, with their emphasis upon the parity of vocational and academic qualifications and the entrepreneurial, enterprising and creative engagement of 14-19 year olds with business, commerce, industry and the professions.

The cultural, sporting and aesthetic dimensions should not be underestimated. The government's Creative Partnerships programme and current policy emphasises the importance of creativity within the arts, humanities and literacy dimensions of the curriculum.

3.6 The PPM as Universality of Provision: Geographical Coverage

Not only does the HEI role need definition in terms of what it can offer the school sector, it also needs to take account of a second factor: the HEI offering/provision must be equally available to *all* schools.

The current extent and nature of HE involvement with schools is random, disparate, inchoate and, as a system, incoherent. Even in the South West Peninsula area where the Aimhigher/WP programme targets schools defined as having WP status, the WP programme only covers 52 out of about 100 state secondary schools. The remaining 50 schools' WP cohort receives little or no support.

The PPM provides full geographical coverage for the HE sector through four factors:

- First, it has as its building blocks the consortia of 10-20 secondary schools and their feeder primary schools working closely with the LA. This ensures a network of *all* schools in an educational region – about 7-12 consortia for the 100 secondary schools of the Peninsula educational sub-region. The Cornish SCITT has already provided a working exemplar of a 16-strong secondary school consortium that now scores very highly on government, OFSTED criteria for initial teacher education and which covers the full range of professional development for its staff from pre initial teacher education to masters level. The proposed Junior Universities Learning Institutes (for ages 8-15) were for the 16 secondary schools of the Cornish SCITT and for Swindon secondary schools. The JULI initiative was based upon the PPM with the aim of regional roll-out after a pilot phase.

- Second, the HEIs involved should offer each consortium full access to HE academic and pedagogic programmes, resourcing, facilities, staff and, crucially, their undergraduate and postgraduate students. This can occur through outreach provision, digital technology and direct HE student involvement. Here the Expert Learning Fellows, see 3.7, provide a medium through which knowledge transfer can occur.
- Third, the PPM can offer a consolidated programme to two or more consortia. In the fair access context of targeting able disadvantaged pupils, this can be done through the medium of JULI for 8-15 year olds and the SWJU for the 16-19 age range. Consortia that offer joint courses and programmes for their pupils can benefit both from economy of scale and from the opportunity that such courses allow for specialist provision from within the expertise a consortium can mobilise/draw upon.
- Finally, the PPM can be rolled out on a national scale. This would involve about 200-250 consortia of schools, LAs and HEIs. Roll-out would involve both local and national HE support through, for example, the Open University and other distance providers, in particular the subject associations.

3.7 Expert Learning Fellows

A key feature of the PPM is joint partnership selection and HE training, approval and appointment of excellent school and Local Authority staff as ELFs with HE status as adjunct/visiting professors, readers, senior lecturers or lecturers. The ELFs are a medium for interfacing schools with cutting-edge academia. As HE visiting academics, ELFs have full access to HE face-to-face, on-line and blended courses, to HE resources, facilities and to technical and administrative support. Short and long-term secondments support ELFs updating their academic and pedagogic knowledge, both abstract/applied and academic/professional.

ELFs have a major role in the enculturation of the WP cohort members in terms of HE and consequent progression to appropriate HEIs and courses, particularly for the ablest. Through their own continuing involvement with the HE sector, they ensure that the WP cohort and those who support them have full opportunity to develop a positive, informed orientation towards progression to HE.

In fine detail, the planning of WP pupils' individual learning plans should ensure that they take appropriate courses in their 14-19 educational phase. In supporting WP pupils, the ELFs should liaise closely with the team of HEI students and their managers, as the HE students have a key role as WP coaches, mentors and tutors.

Additionally, ELFs enhance their own and their colleagues' professional development through involvement with leading-edge government policy and practice. The ELF in a pilot PPM secondary school noted his involvement with:

- The TDA's SAS team;
- The support of SAS and ITT students that his ELF role facilitated;
- His experience of visiting and working with other schools and their staff;

- The development of, and engagement in, curriculum R&D involving the National Marine Aquarium and the Faculty of Education, the Mathematics Department and the School of Architecture at Plymouth;
- Working with business, commerce and industry and interfacing between the UoP and Plymouth primary and secondary schools' science groups.

ELFs are also fully involved in this school's CPD programme, involving both HAIRs and PEIRs, and the framework for HE accreditation of all staff from QAA Levels 4-8. They also significantly contribute towards HE programmes: a PPM pilot school's staff member tutors on the Plymouth SAS programme and lectures on film courses at University College, Marjon. At another SW HE involved in the creation of the PPM an LA member of staff is already working as a de facto ELF as being a member of the academic team for a masters in Drama Education.

Another HEI has an embryonic system of ELFs in place. One example is the HEI's involvement with literacy schools and leading maths schools, where specialists come into the university from the schools. They design materials to support their training of ITT students in their schools in these subjects – so they have developed, for example, observation checklists, videos of successful lessons and guidance on support. This has fed into the university ITT programmes. Teachers have trialled these materials in their own and other schools, while observing the students on teaching practice. This also helps the HEI to feel secure that ITT students have real specialist support in maths and English both in school and at the university.

The PPM ELF concept is built on extensive existing good practice such as the highly successful and influential Oxford Internship programme. By rationalising the selection, training and support for ELFs and making it a substantial, standard element in the PPM we hope it will markedly enhance the quality of learning and teaching and support for the WP/Aimhigher cohort.

3.8 Local Authorities: School Improvement and Advanced Skills Teachers

The LA sector provides full curricular and pedagogic support through their role as school improvement partners and through their ASTs, who are pedagogic experts supporting all schools in a consortium. The LA sector also provides schools with information upon national and regional educational developments and requirements, and related professional development support. In creating the PPM significant was the role of the SW LAs in developing an active, integrated partnership between the LA and HE sector for Gifted & Talent provision.

The LAs are already heavily engaged with school consortia, helping to create, develop and implement their school-based staff and curriculum development programmes. The strength, extent and effectiveness of these LA/school links should not be underestimated. For example, one primary school worked extensively on professional development with its local support network of schools via the LA, specifically on the Targeted Intervention and Support Programme (TISP) to bring about sustained improvement in school performance. The school remarked upon the almost total absence of an HEI presence in curriculum development,

although it responded enthusiastically to the proposal of an HE accreditation framework for QAA Levels 4-8 based upon accrediting professional and applied knowledge.

The PPM's partnership arrangement with LAs is based upon the 2008 models that the Plymouth SAS and the SWHub/SW GATE provided. The Plymouth SAS formalised in October 2008 its fully integrated HE/LA programme management. The Plymouth SAS has two co-directors, one from the HEI, the other from the LA; the chairing of the Steering Group rotates between them.

3.9 HE Pedagogic Experts-in-Residence: PEIRs

Evidence-based policy and practice through the medium of practitioner research is axiomatic to the development of teaching as a profession. Such research is central to the PPM and is mediated through PEIRs working closely with staff, HE students and others. The concept of PEIRs, related to HAIRs below, closely mirrors the criteria and precepts that underpinned the UK government's Creative Partnerships initiative.

The PEIRS concept builds upon developments and practices of the past 20 years. HEIs can attach to each consortium a member of staff with appropriate expertise, for example in science, history or creative arts education. The pioneering work of Murphy and Begg in Belfast illuminate the power of this concept. Their *Innovative Model of Professional Development: Co-teaching between Teachers and Student Teachers* was a case study of active cooperation between class teachers, students and HEI staff to enrich the curriculum, the teaching and the learning of the pupils (Murphy and Begg, 2008)

A major PEIR role is curriculum R&D, usually through case study and action research. The involvement of HE staff in action research and case study projects is a well-established paradigm that applies across the professions. At Bath University, there is a national centre of excellence for practitioner research that works extensively with local schools. NAGTY, the SW GATE and the SWHub awarded and supported teacher/practitioner research grants, while the developers of the PPM also had extensive involvement in the government's Best Practice Research Scholarship programme.

School-based research can be aimed at both national and local school audiences. Since 2004, the BPRS has offered one thousand scholarships a year - unfortunately the BPRS programme is no longer extant. For teachers working with mentors, mainly from HE. At Exeter University, the Exeter Extending Literacy (EXEL) and Learning to Teach projects were both based upon action research through structured, interactive group work in Devon schools (Wray and Lewis, 1997; Bennett and Carré, 1993). Both projects have had major lasting national impact.

PEIRs work with senior and middle management, classroom teachers, other workforce members and HE students. Case study research and action research produce 'cases' to illuminate consortia/school issues and concerns and to support professional development of the staff. The PEIRs concept meets a number of seminal concerns that evaluation of the Creative Partnerships programme raised:

Nearly all interviewees reported that they found the most effective form of Continuing Professional Development to be when teachers and creative practitioners engaged in reflective practice, action research and classroom enquiry. Most were building research projects into their plans. A good example of this is the Creative Action Research Awards (CARA), small grants to enable teachers to conduct action research into an aspect of a creative project. CARA is a substantial Creative Partnership CPD initiative. In the first round there were 120 awards involving 104 projects, 145 schools, 52 mentors, approximately 300 adults and around 4500 children... However, a majority of interviewees made reference to teachers feeling ill equipped to undertake research and therefore needing to develop confidence through mentoring from experienced researchers. This suggests that support from Higher Education, research training and mentoring will add value to this form of CPD. (Wood and Lowe, 2005)

Such support is built into the PPM and has been a feature of the SWHub and SW GATE provision for the past five years.

The work of the Brunel Able Children's Centre (BACE) illuminates the role of HE in supporting the educational attainment of WP pupils. BACE has been running a major longitudinal programme for WP pupil progression to HE in the most socially deprived London boroughs. BACE provision involves Saturday classes at Brunel University and HEI student support (Koshy et al, 2007; Koshy and Pinheiro-Torres, 2009). The intervention programme involves about 80 teenagers (12-16 years of age), drawn from inner London state schools operating within areas of relative deprivation and from LAs with significantly high levels of teenage crime. BACE exemplifies the PPM's dimension in terms of parental involvement, long-term taught programme provision and support for WP pupils, involvement of HE students as role models and tutors, and the value of the HE contribution when integrated with the school sector.

3.10 HE Academics-in-Residence: HAIRs

Academics, both HE staff and students, can provide cutting-edge academic subject knowledge to schools through liaising with school staff, other HE students, ELFs, PEIRs and ASTs. HE students with the appropriate expertise (postgraduates and final year undergraduates) can be HAIRs for both the primary and secondary sectors. Direct involvement can take the form of dedicated, funded enhancement courses; provision of academic updates for school staff as part of accredited professional development; and via the HE student body providing subject-focused support for pupils and, where appropriate, staff.

Academic subject knowledge plays a major part in government-supported professional development courses. The need for upgrading, updating and conversion of under-qualified/educated graduates in the shortage subjects of maths, physics, chemistry, French and German has resulted in a dedicated government programme of pre-initial teacher training enhancement and extension courses. These are intensive programmes for graduates who need to develop a greater depth of subject understanding prior to training for Qualified Teacher Status (QTS).

The logical extension of the HAIRs concept is for each academic faculty or school to have an education centre that deals with the educational outreach of the academic department in terms of both academic subject and related pedagogic knowledge. At the UoP there is

already one such centre, nationally unique in the mathematics context: the Centre for Mathematics Education (CME). This Centre has had a major influence on the creation of the PPM's HAIRs dimension because of the extensive range of its direct involvement with schools, including running the pilot one week summer school for the SWJU in July 2008.

All academic faculties or departments in HEIs should establish dedicated education centres to interface the academic with the professional communities, using the Plymouth CME as a model. These centres would be in charge of their subject provision as part of a distributed education department for all phases and levels of teaching workforce professional development. The potential is huge for HEIs in terms of enrolment for initial professional development and training, Masters and doctoral programmes, recruitment and the continuing involvement of ITT students professionally during their subsequent careers. We examine the related issue of HE QAA Levels 4-8 accreditation of professional and academic knowledge in Section 3.12.

3.11 HE Students

HE students working in schools with WP pupils are the essential, crucial medium for providing the school sector with a critical mass of HE academic and pedagogic knowledge and expertise that makes viable the concept of putting the university into all schools. HE students are the engine that drives the PPM. They are crucial in the WP cohort for pupils' development and assimilation of an 'opportunity structure' schema that can give them a positive orientation towards and enthusiasm for HE. The potential for HE student support for WP pupils, their families and schools is extensive.

The involvement of HE students with schools via volunteering schemes and programmes provides a solid foundation for the PPM. ITT students should join them and be a major, if not the major, element. Nationally, a cohort of about 15,000 ITT students per year spending up to 100 days a year on school-based work experience (teaching practice) is a logical spearhead of the WP and Fair Access agendas. Sadly, because of the statutory constraints ITT students operate under, their involvement in WP and Fair Access is currently minimal – something that needs urgent rethinking, involving revisiting the TDA standards for achieving QTS.

Overall, the Bath and Exeter Universities' programmes for HE student involvement with schools provide an exemplary foundation for the PPM, while the York University volunteering scheme and the Exeter Sport Programme (2009) provide further exemplars that dovetail perfectly into the PPM.

The PPM centres on the attachment to partnership schools of trained HE students who live in the consortium's catchment area or study at a local HEI. Here we mirror the *Unleashing aspiration* report's recommendation for mobilising alumni to support WP/Fair Access and other pupils (Panel on Fair Access to the Professions, 2009, p27). The HE students provide the critical mass of HE knowledge and expertise to support WP/Fair Access individuals and groups. As such, they operate as coaches, mentors and academic tutors, and support the school in cultural, sporting and social contexts. HE student attachments can last for up to four years, i.e. the period of the HE student's courses. Research has strongly suggested that

large groups of students, of up to 20 in a school, produce a dynamic or 'balance effect' which increases the effectiveness of their impact.

HE students working in partnership schools were the focus of the intervention strategies at the centre of the UoP HEFCE-funded project. The intervention strategies were elements in the attachment of SAS students to the schools for their 15 days of school-based work; 50% of the SAS programme is dedicated to WP. The SAS programme has two linked elements: the range of activities that the students engage in, and providing dedicated support for individual WP students as mentors, coaches and academic tutors, with a specific focus upon information and understanding of HE and academic achievement.

HE students are precisely the role models that the government's *Unleashing aspiration* report strongly recommends (Panel on Fair Access to the Professions, 2009, p27) and, providing they have the 'capacity', to support WP/Fair Access pupils creating their Records of Achievement (ibid, p33). The outstanding NAGTY Developing Expertise Award of Ben Rule (Rule, 2006) on the benefits of peer mentoring has profoundly influenced this aspect of the PPM.

Specifically, the HE student body should be mobilised to support the WP cohort to gain the qualifications that ensure entry to HE, and the Fair Access sub-cohort the good qualifications that give them an entrée to elite HEIs and courses. This idea reflects the recommendations of the *Unleashing aspiration* report (Panel on Fair Access to the Professions, 2009, p40)

The Exeter SAS piloted an HE student/WP pupil mentoring programme. Evaluation was totally positive from the perspective of the pupils, staff involved and the schools in general. The pilot contained provision for long-term support, via both on-line e-tutoring and face-to-face involvement, using the protocols and procedures that the WP programme had developed.

At Bath and Exeter Universities the pattern of HE student involvement in schools is already extensively developed through their outreach provision (Bath University, 2009; Exeter University, 2009). At both Bath and Exeter Universities, the SW GATE and the Exeter/Plymouth SAS worked closely with their WP and Aimhigher programmes. Indeed, this was logical in that the SW GATE and SAS at Exeter and the SW GATE and the Bath SAS cohort were integrated with their WP programmes. At Plymouth, the Plymouth SAS also piloted a WP/SAS programme involving 50 students of Plymouth University's WP cohort.

Bath University suggested an approach for rationalising the HE student role in schools through its being part of a wider educational entitlement of *all* HE students. This entitlement would involve about 75 hours per year for each undergraduate, i.e. 225 hours for a three-year course. The entitlement would have three equal elements: employability – business, commerce and the professional; social service; and related cultural and sporting activities.

In terms of employability, the university faculties would develop programmes for their students similar to both that of the highly successful SAS (York Consulting, 2005), involving a 10-session taught course and 15 days of school-based work experience, and the government's recently developed Aimhigher Associates programme. The Aimhigher

Associates programme highlights its benefits for the employability of HE students from WP backgrounds.

Social service could involve *every* WP/Fair Access pupil in having an individual HE student mentor or buddy who would provide academic coaching/mentoring and information and support on careers opportunities and HE entry. This is entirely feasible – the numbers of HE students and WP/Aimhigher cohort members enable this to occur.

In relation to social service and related social and cultural activities, HE students have the potential to influence and shape the education, aspiration, achievement, application for/access to and acceptance at university of all disadvantaged pupils.

3.12 HE Accreditation: Progressive Professional Development

For England's 21st century school workforce there is a clear, progressive career path from teaching assistant to senior management. This should involve HE accreditation for all phases and levels of professional development from QAA Levels 4-7, i.e. Certificate of Further Education to Masters and even at QAA Level 8 – doctoral.

The PPM incorporates full HE accreditation for both professional and academic knowledge, i.e. QAA Levels 4-8 for the whole workforce, based upon personal and institutional needs analysis plus matched professional development support. A 'shell' module for accrediting professional and applied knowledge provides a framework for the accreditation that should meet the needs of all partner schools, other bodies and organisations. This model is based upon the parity of professional knowledge with academic knowledge. As such, it breaks the historic 'log jam' of HE involvement with schools because of the inappropriate nature of academic HE accreditation for the teaching profession. Staff can exit from the accreditation process as appropriate, i.e. at QAA level 7 with either a PGCert [60 credits], PGDip [120 credits] or a full Masters [180 credits]. The organisation and management of the accredited professional development is vested in the schools and the consortium. It is needs driven, mapped on to the wishes, desires and career path of individuals, groups and the schools. Central to accreditation are the consortium's ELFs, who are empowered to teach the professional development programme. The ELFs work closely with the HAIRs and PEIRs, outlined in Sections 3.9 and 3.10.

3.13 Senior and Middle Management in Schools

The PPM must be integrated into the school's management system, with the commitment and support of senior and middle management. Ownership at the highest school level, head/deputy head and governors, is axiomatic for success. But also crucial is the engagement at the head of department/team leader level, as they are the means through which provision and support for WP pupils and staff development occurs.

3.14 Subject Associations, Interest Groups, Institutions, Community Organisations and Related Bodies

Subject associations, through their academic and pedagogic provision, are a significant factor in bridging between HEIs and schools. The subject associations play a major role

through their local members; publications, books, pamphlets and professional and academic journals; and websites and on-line learning.

Thus in history education, the Historical Association's (HA) professional journals for teachers keep them abreast of recent developments, and the HA also provides a full set of on-line professional development courses that are in the process of receiving QAA accreditation. Similarly, the Citizenship Foundation and the Association of Citizenship Teachers (ACT) are the prime agents for delivering national CPD via the medium of LAs, again with HE QAA accreditation. The Association for Science Education (ASE) is equally proactive in supporting science education. One of its journals, *Primary Science*, has reported on how HEIs, schools and the Norman Lockyer Observatory co-operated to support school visits (Strange and Fullam, 2009). Interestingly, the Norman Lockyer Observatory is based in Sidmouth in the catchment area of the PPM.

3.15 Business, Commerce, Industry and the Professions

Schools, Universities and Local Authorities already have close working links with the commercial sector. It potentially has a major role to play in the PPM through providing the world of work context for pupils and HE students to experience. Pupil work experience placements are an already well established feature: similarly we are arguing that HE students can benefit from similar attachments, linked to their involvement in schools.

The professions can, and do, play a major, significant role in schools. The links between the HE student employability agenda and the induction of WP/Fair Access and other pupils into the worlds of business and commerce are a powerful synergy. HE students supporting the professions during Mathematics and Employment, and Science and the World of Business and Commerce days, and their follow-up, is an exciting concept. The *Unleashing aspirations* report's recommendation for a radical overhaul of work experience programmes in schools, linked to reforms in information and careers guidance and the G&T programme, is a perfect stage for 'putting the university into school and community' to have real, substantial and sustained meaning (Panel on Fair Access to the Professions, 2009, p27).

3.16 Conclusions

In this chapter we have outlined the detailed model we have developed about how to improve school/HE links, with the aim of addressing the WP agenda. Our model derives from participation in probably the most extensive set of university/school links in any UK university in the UoP, and from participation in a range of HE/school activities with other universities and colleges in the Peninsula. We have also first-hand knowledge of a wide range of school/HE links in other parts of the UK, and indeed worldwide.

Therefore, this material on our PPM is firmly based upon the research and practice about what *might* work that we reviewed in Chapter Two, and the exemplification and case study material of what *does* work referred to in this chapter.

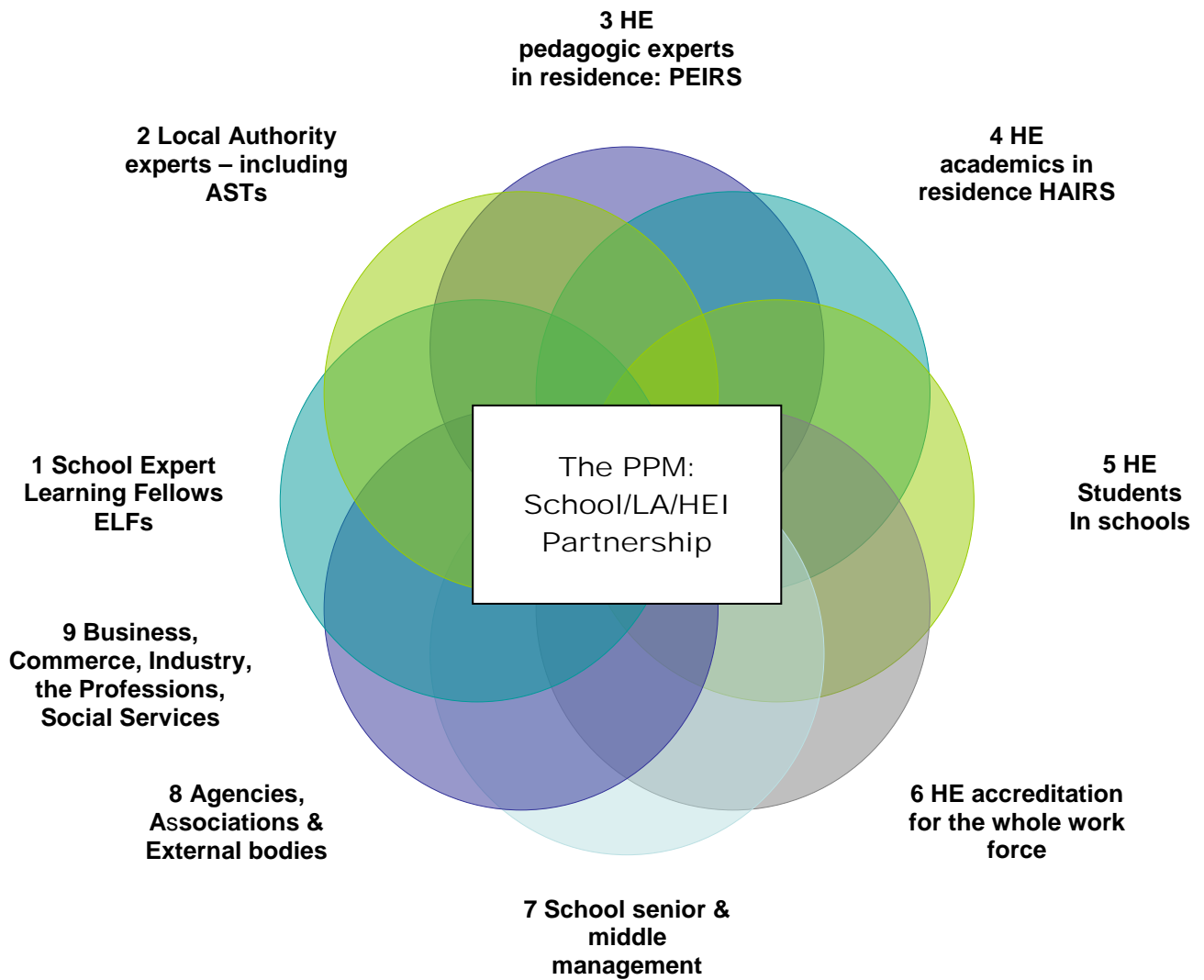
The key issue is – are the aspects of the PPM outlined here effective in generating the outcomes that school/HE links are meant to generate, namely widened participation from

disadvantaged groups in HE? There is a certain ‘face validity’ to the PPM obviously – since it has been made up from programmes and interventions that appear, in practice, to ‘work’. But the key question remains: is the particular mix of policies and programmes in the PPM effective in the aggregate?

We noted earlier that we were unable to pilot all the aspects of the PPM in the summer term 2009 because they are multiple, complex, require planning and have a considerable lead-in time. Aspects of the model are currently being planned for implementation in the academy and trust schools with which the UoP is associated, from autumn term 2009.

However, it was logistically feasible to implement a very short, intensive version of one key part of the PPM that we outlined in Section 3.11: the training and involvement in schools of a large cohort of dedicated HE student volunteers. The planning, training and results of this form the subject of our next two chapters.

Figure 3.1: The Plymouth & Peninsula Tri-level Model



Chapter Four

The PPM Research and Intervention Programmes

David Reynolds, Linda la Velle, Judith Gunraj, James Goulbourn, Nicola Iji,
Gemma Parkinson, Carole Sutton and Iain MacLeod

4.1 Introduction: Negotiating Access

As we have noted, and as is clear in Chapter Three, the PPM that we have developed is very comprehensive in its scope and 'reach', involving as it does radical redefinition of the role of HE with its community of schools. Unfortunately, the award of the grant from HEFCE came late in the spring term of 2009, making it impossible to put in place any activities related to the grant in schools in that term and indeed the first six weeks of the summer term 2009, since schools did not reopen until mid-April and it is virtually impossible to approach schools in the first week of a new term without alienating them from potential participation in any project. Also, some specific aspects of the model, for example PEIRs or HAIRs, would not be introduced until the academic year 2009/10 since they required considerable planning, detailed concern with implementation and long consultation/lead-in time.

The actual parts of the PPM that we *could* implement and evaluate were all concerning the effect that a specially trained group of HE students might have on the schools and the pupils that they were allocated to, which of course is an integral part of the model. The aim here was to choose a group of schools with relatively disadvantaged pupils in a relatively disadvantaged LA, to maximise the relevance of our work for research and policy in the WP area. Then, we would intervene with the pupils in those schools in a novel way, informed by the principles of the PPM, and assess whether this aspect of the model was effective in practice before subsequent implementation of the other elements of the model.

We chose three secondary and three primary schools, all from Plymouth LA, as our research sample. All six schools were in heavily disadvantaged areas. According to the LA, the free school meals (FSM) rate in the secondary schools was approximately 27% across the sample of 3,600 pupils attending the three schools. The six schools were also chosen because of the high level of involvement with the UoP that had existed historically, enabling us to maximise our chances of getting the schools to agree to trial our PPM, and also because there would have been an array of already existing partnership schemes that we could relate to and build upon.

We approached the six schools with a formal letter offering our desired intervention and requesting a visit to meet the head teacher, tour the school, meet relevant staff and collect pertinent documentation such as the school's prospectus etc. We visited all six schools, and five agreed to come into the project, with one primary school subsequently refusing because of a concern that our added demands might prove difficult to meet given its situation (an acting head teacher and a forthcoming Office for Standards in Education (Ofsted))

inspection). There was no time to approach a further, replacement school so we simply worked with the remaining sample of five: three secondaries and two primaries.

4.2 The Research Programme

It was clear from our review of existing research and practice, set out in Chapter Two, that the whole area of school/HE links and of WP generally was not marked by high quality research. Very often the research was unsystematic, with little data being collected to judge impact and with assertion and emotional arguments being made to justify the 'success' of whichever programme was being 'evaluated'.

In this research we were anxious to do better and to design an ongoing study that would scientifically measure 'impact', utilising mixed and multiple methods to establish 'what worked' in this area and, if so, 'why'. We used a classic 'before/after' model, in which a group of respondents is surveyed before an intervention, then intervened with and then assessed again after the intervention to see if there is any change. We were unable to use an experimental or quasi-experimental design, since we did not have the resources to compare our PPM schools with others that did not get the PPM. We did not therefore have a 'control' group that was 'clean' of the PPM. What we did have was a design where the same sample of schools, pupils and teachers was surveyed before and after an intervention. While it is possible with this research design to have an effect of temporal change on the research setting that might make it difficult to interpret any positive results as being due to the programme intervention itself, in our case the fact that the initial 'pre' intervention survey was done only weeks before the 'post' intervention survey means that change due to time effects is unlikely to have had any major impact upon our results. Positive or negative results we believe do not reflect 'time'.

We chose Year 8 in the secondaries and Year 6 in the primary schools to be the focus of our efforts. Year 8 suggested itself since the pupils were beginning to consider their future courses related to Key Stage 4 option choices, and since they would, in our experience, be already thinking about the possibility of university and/or college for themselves in a few years' time. Year 6 suggested itself for the primaries because the older the children were, the more likely they would be to have some sense of what 'higher education' was, and the more likely they would be to respond to any initiative that was aimed at improving their chances of getting to that HEI. Our sample of pupils, then, was all the Year 8 pupils and the Year 6 pupils in our group of schools.

Our other sample was of the education personnel across the five schools: the head teachers, the senior manager/teacher with responsibility for WP and the form/class teachers of the forms/classes in Years 8 and 6.

The last sample that furnished us with data was the HE students that we used/employed to carry the PPM into the schools, who would be clearly particularly well informed about the intervention 'process' at school, class and pupil level.

The pupil questionnaire was specifically designed, based on instruments of known reliability, to capture data about a number of aspects of pupils' views: upon their self-conceptions, their views of their schools, their self-esteem and their views as to whether they would want to go

to university. Our reasoning was that we should go for this 'broad band' of areas of pupil development, ranging from the 'deep drivers' of their views of themselves, to more 'surface' (and more likely more changeable) concepts such as their views of their schools. Their anticipated behaviour about HE was clearly that most close to the content of our intervention programme.

This 'broad band' of measures was to see if we were able to influence the varying locations of pupils' views, since our existing reviews of the subject (Muijs and Reynolds, 2005) suggested that there were distinctions between pupils' behaviours that were more easily modified and the deeper characteristics of their 'affect'. Whether there was any 'transfer' from any possible effects on anticipated behaviour to effects upon 'deep structure' is the issue that we wished to evaluate.

The questionnaire was administered by their form teachers to all the classes in the sample at the beginning of the second half of the summer term 2009 and in the last week of the term, this latter time being chosen to give the maximum possible time for the intervention in school itself to 'root'. Additionally, the views of the pupils were charted by using another technique of the 'focus group', where a group of pupils selected to be representative of each form in terms of gender, level of disadvantage, ethnicity and level of achievement were asked about their possible historical experiences of relating to HE (the 'pre') and about their views of the intervention and its process and quality (the 'post'). The discussions of the focus groups were recorded, and coding categories were produced *post hoc* to enable us to report on the patterns of this data, generated from one of our researchers listening subsequently to the discussions of all focus groups across all classes to ensure reliability of judgement.

The recorded interview was also chosen as the best method to obtain data relevant to the PPM from the educational professionals in schools, with the 'pre' used to establish their views on the nature of the WP problem for their school and the usefulness of existing interventions in improving the take-up to university. The 'post' interview – again conducted in the last week of term – was used to access interviewees' views about the quality/efficiency/reliability of the PPM and any desired possible future interventions. Coding of responses and analysis was done by our researchers using the same method as with the other data.

The last set of data came from the HE students who were part of the intervention itself. The entire group completed a written questionnaire that garnered their views on their own experiences of PPM, the possible effects on their 'buddy' pupil and possible ways in which the intervention could have been more powerful. Additionally, the students routinely collected data upon their time in their schools each day using the powerful mechanism of a log book, in which they reflected on a wide variety of aspects of their time in schools, covering such matters as:

- What they did with their buddy pupils;
- What class they had been to;
- Their personal reflections about their effectiveness;
- A summary of the project's strengths and weaknesses;
- The views of their buddy about their own life;

- Their apprehensions;
- The characteristics of their own interventions;
- What they did with their non-buddy pupils if their buddy was not there.

Additionally, we ourselves conducted observations of the students, trying to ensure that each student in a school was observed each day for some time of that day, using a specially designed observation system based upon the Maths Enhancement Classroom Observation and Recording System (MECORS) of Muijs and Reynolds (2005). This included filling in a plan of the room, observation of pupils' activities, observation of the students' activities and a log of the 'time on task' of the pupils every 10 minutes (to see if they were concentrating).

The data from the log books and from the classroom observation system was then used to 'rate' each individual student during the activities of the PPM on a number of dimensions that might have influenced their effectiveness. We generated, from our review of relevant WP literature noted in Chapter One, and from our knowledge of existing literature in the area of teacher effectiveness (Muijs and Reynolds, 2000), school effectiveness (Teddlie and Reynolds, 2000), personnel evaluation (Muijs et al, 2003) and programme evaluation (Fullan, 1991), a 'long list' of possible student characteristics that might be relevant, including:

- Clarity of vision;
- Quality of relationship with pupils;
- Self-confidence;
- Positive expectations of pupils;
- Gender;
- Ethnicity;
- Clarity of communication of the vision;
- Class behaviour and context;
- Rapport with 'buddy' pupil;
- Positive body language;
- Positive 'affect';
- Age;
- Commitment to WP activities;
- Values about the role of education.

This list of 'possibles' was then integrated with the data from all students' log books, and from all our observations of the students, to generate the final shortlist of factors that seemed to be possibly important in determining outcomes in terms of the quality of the individual student intervention. These factors were:

- Commitment to WP/Aimhigher activities;
- Clarity of approach;
- Expectations of what pupils could do;
- Quality of relationship with pupils;
- Experience in schools before PPM;
- Behavioural management of the class/group and the 'buddy' within the class;
- High involvement in activities;

- Positive approach to PPM activities;
- Length of time on project activities (in days).

All the students were then rated by our entire research team on all the above nine factors, using five-point scales (except in the case of the 'length of time' factor where we used simply the number of days) in which the scale points had been defined by the researchers (see Appendix 4).

It should be noted that, in the case of the pupil questionnaire, every attempt was made to ensure that as high a proportion as possible of the pupils completed the instrument. For the 'pre' questionnaire, the research assistants (RAs) studied the absence data to ensure that any pupil who had missed the questionnaire would be given it (by either their form tutor or if necessary the RA) on return. For the 'post' questionnaire, since it was given out in the last week of the term, only some repeat administration activities were at all possible, but where practicable they were tried.

Full details of all instruments used are in Appendices 2 and 5.

4.3 The Intervention Programme

All the evidence from existing studies of educational interventions and associated programmes (Fullan, 1991; Hopkins and Reynolds, 2001) is that many interventions do not affect the situations that they are targeted upon because they are never implemented. Lack of implementation can occur because of poorly conceptualised aims, deficient training, a lack of fidelity between the intervention and its intentions, and a lack of focus upon deliverable outcomes that are limited in number, specific rather than diffuse and easy to train for.

We therefore laid a particular emphasis upon ensuring good communication of the programme goals to our schools, students and pupils, and upon intensive training, and retraining if necessary.

The interventions

We designed a series of three interventions which operated at individual pupil, small group and whole class/year group levels in each school. A brief description of each follows.

Individual pupil task: This was the 'buddying' system where each student would be linked to a Year 6 or Year 8 pupil the school had previously identified, using factors such as gender, socio-economic status and ability to pair pupils and students according to their interests. For example, a pupil who displayed a particular aptitude or interest in music was buddied with a student with similar interests. The expectation was that the student should spend a minimum of one hour per day with their buddy, building, developing and sustaining a relationship with them. Activities could include spending tutor group time together, or offering specialist support when the pupil was in the student's specialist subject lesson or more general lesson support for other subjects, spending break and dinner times together, or being available at other times on an *ad hoc* basis. Discussions might include why the student chose to go to university, what it is like being a student, or a view of university life from the student's perspective.

Small group task: The students were expected to negotiate with the class/subject teacher and to offer whatever support was required. When this lesson was the student's specialism, support could be more specific. It was hoped that this time in lessons would be spent with the buddy and their group of friends or the group of pupils that the teacher had asked the buddy pupil to work with during that lesson.

Whole class/year group task: All the students placed together in the same school were expected to plan and deliver a task or activity to the entire class or year group. It was hoped that there would be at least one of these activities during each week of the intervention. Students were expected to liaise with the relevant class teacher or head of year to negotiate where and when they would be able to deliver this activity. Activities could be part of an assembly or tutor group time or be part of a lesson. These activities should be based on the WP agenda and could take the form of PowerPoint presentations, game show formats, adapting games such as 'top trumps' or 'snakes and ladders', or devising questions for an 'any questions panel', or any other format that the students thought was appropriate.

In addition to these three intervention tasks which were carried out in school, we were able to offer each school a number of visits to the University through one of the WP activities run by the SAS. Four of the schools visited the UoP campus on one occasion, one school visited on two occasions and one school did not visit at all. Practical workshops included specialist maths or technology activities, hands-on music lessons and film-making. Other activities included tours of the campus, visits to the Immersive Vision Theatre, and participating in discussions about aspects of university life, from studying in the library and living in halls of residence to having a drink with friends in the student union bar.

The students

More than 500 students participated in the Plymouth SAS scheme during the academic year 2008/09, split into two cohorts. Owing to the timing of the project we were primarily interested in the second cohort. The students were allocated to a number of primary and secondary schools within the Plymouth area. We then identified those students who were placed in our five schools and invited them to participate in our project and to receive further, more specialised training. Altogether, 11 students volunteered. We then invited expressions of interest from those students who were already in schools on a teaching practice placement, and 10 students volunteered to join the project, giving us a total of 21 students. Two students were placed in each primary school; two secondary schools had five students each, while the other secondary school had seven students on placement during the four-week intervention period. Each student was paid £40 per day for their participation. Six students took part for all four weeks; six students participated for three weeks, eight for two weeks and one for one week.

Each RA was linked to a particular secondary and/or primary school. They were available to all the students in the project as a mentor, adviser and to provide support with any day-to-day administrative/organisational issues as appropriate. Indeed, because of the similarity of ages and backgrounds between the RAs and the students, many friendships developed. Emails to all participating students were issued twice during the time of their intervention, and there was a social event organised two-thirds of the way through the intervention to cement relationships.

The training

Training for all the SAS students

Central to the Plymouth SAS is a three-week placement in a primary or secondary school. In order to prepare students for this, a comprehensive training programme is provided which includes the following topics:

- The national curriculum;
- Lesson planning and delivery;
- Planning and delivering a school assembly;
- An introduction to safeguarding children;
- The 'Every Child Matters' agenda;
- Micro-teaching;
- Inclusion, with an introduction to special educational needs (SEN) and the G&T agenda;
- The WP and Aimhigher agendas in education;
- Literacy and numeracy in education;
- Managing student behaviour.

The training took a variety of forms, including whole group lectures, small group seminars and interactive workshops. The trainers were a mixture of LA education advisers, university lecturers and school practitioners; several of the seminar groups were led by ASTs and senior practitioners from Plymouth schools. Students worked towards the TDA core goals, particularly those which focused on informing students about higher education, encouraging them to aim higher themselves, and raising aspirations of children and young people.

Given the evolving nature of schools, it was essential that the training provided was not simply informative but also developed skills so that the students would be able to work with the pupils. For example, lesson starters and school assemblies were modelled and the pedagogy underpinning teaching and learning was introduced. Students were then given opportunities to plan and deliver a micro-lesson, relating to their subject specialism, to a group of their peers. In addition, students were expected to plan at least one specific WP activity either individually or as part of a group.

Further training for the SAS students involved in the PPM

There was an additional one-day training session which began by outlining the aims and objectives of the PPM in more detail, and giving background information about the project. The focus of this part of the training programme was to explain about the intervention programme, the students' role during the intervention period, and the three intervention strategies. The next session asked them to reflect on their own time at school, and in groups to discuss why they had decided to go to university. Following on from this, each intervention strategy was explained in more detail and the students were given opportunities to discuss and develop their own activities to support the interventions. Exemplar PowerPoint presentations that previous students had used were shown and a selection of them given as resources for the students to adapt if they wished. Additional resources and useful contacts

were listed in the *'WP into HE – A Resource Handbook for Working on the Agenda in Schools and Colleges'* publication, a copy of which every student received (Appendix 6). The role of the researcher, who was linked to their school, was explained in some detail.

Other issues around ethics, the giving of informed consent, and ensuring pupil/staff anonymity and confidentiality were discussed. Ways of creating, developing and maintaining relationships with pupils and staff were considered, together with methods for handling school data and information. The importance of students being proactive in schools when teachers were busy was also stressed. The students were encouraged to find out as much as they could about the school before they started. Once there, they were expected to establish good relationships with everyone, to participate as fully as possible in the life of the school, to use their energy positively by being a good role model, and to play to their strengths through using any sporting, social, musical or other talent they had. A key expectation was that they should act in a professional manner at all times.

Training for the Post Graduate Certificate of Education (PGCE)/BEd students involved in the PPM

All of these students had experience of working in schools, as they had been on at least one teaching practice placement. In some cases, they were about to achieve QTS. The training programme developed for these students focused on informing the students about the intervention programme, their role during the intervention period and the three intervention strategies, and followed the same structure as the additional training day for the SAS students.

Training for the student ambassadors involved in the PPM

The background of the majority of students who volunteer to become student ambassadors is usually from the ITT/BEd courses. Many of the ambassadors return for subsequent seasons of work and so become more experienced in delivering talks and workshops each year. Newer ambassadors participate in the initial training and then build on their experiences watching others lead before leading a workshop themselves in subsequent events. As several elements – including Criminal Records Bureau (CRB) checks, setting up a workshop, class management and presenting a workshop – are covered as part of their university degree, they were not part of the training provision.

The one-day programme started with an introduction and welcome and outlined the aims of the day, giving some background to the WP agenda, including what WP is and identifying the target audience. The next session focused on making effective presentations about what HE means. Ambassadors were given the opportunity to create their own talk about HE and encouraged to differentiate between age groups and their needs and aspirations. For example, groups of older pupils may want to find out more about specific courses available, or about the course the ambassador is studying at university. A further session focused on developing knowledge and enhancing understanding about different ways of learning. The final session helped the students to develop a typical workshop session. Topics in this session included what works and what does not, health and safety issues, materials, practicalities, timing issues and how to assess/evaluate which aspects have been fun, interesting or informative.

Full details of all the materials issued to the student volunteers can be found in Appendix 6.

Issues

After the training programme with the SAS students it became clear, from the questions they were asking, that they were confused as to what the intervention programme was, particularly with regard to the buddying task and the amount of time they were expected to spend with the buddy each day. There was also confusion about the whole class/year group task. It took time to resolve the issues because the trainers and the project team had different ideas regarding the interventions. In part, that was the rationale behind writing the HEFCE-funded project and log book details (see Appendix 3), and ensuring that the RAs placed in each school would be the interface between the students and the project team. In fact, the confusion was so great that it became clear, after the first few days in school, that the interventions would need a re-launch.

This was successfully achieved through a further training session, and all students were issued with a log book, the log book details and the HEFCE-funded project log, which set out very clearly exactly what the three intervention tasks were, the purpose of the log book and an outline timetable of the schedule for the four weeks of intervention. The training programme was supplemented by an induction that they all received from the RA who had been allocated to the school. On the students' first day in school there was a meeting with the school senior manager and the RA to welcome them, to cover timetabling issues and to provide the necessary documentation. They were reminded about the interventions that were possible (buddy, small groups, class/year) and the logistics of doing them. Particular stress was put upon the importance of activities with the buddy pupil.

It also became clear at the first full project team meeting that the school link teachers were not completely clear about the nature, type and timing of the interventions, and some time was spent in clearing up misconceptions. In addition, the trainers from the SAS training programme and members of the project team had a different understanding regarding the interventions. After some discussion the issues were clarified and everyone was clear about the nature and form of the interventions.

4.4 The Intervention Schools

Profiles of each school and a brief outline of how the intervention programme was carried out in each are given below.

School 'A'

This is an 11-18 secondary school in Plymouth, with over 1,100 pupils on roll. According to the LA, 27% of students are eligible for FSM and 9.5% of students have special needs. They are a technology college, are Investors in Careers, Investors in People and Investors in the Education Business Partnership, and hold awards for sports, arts and basic skills. There are well-established relationships with the University of Plymouth; the school offers placements

for student associates, PGCE and other ITT students, and in turn makes use of the University's facilities for G&T pupils in subjects such as mathematics and science.

The school had a successful Ofsted inspection in 2007, which highlighted the excellent support provided and the good teaching and learning, and praised the breadth of the curriculum. They noted that: '[School A] is a good and improving school, and many aspects of its work are outstanding'. The school also has: 'An overarching commitment to provide students with opportunities to succeed in their education and to develop the skills that will contribute to their future personal and economic wellbeing'. As a result, the school has witnessed continuing success in their GCSE results, with results improving year on year to the mid-20s in percentage terms on the 'headline' GCSE indicator of 5 or more high grade GCSE's including English and Maths. Ofsted also reported: 'the quality of teaching is good. Teachers know their students well and want them to succeed. A well designed curriculum includes an imaginative blend of academic and vocational courses with a strong emphasis on creative flexible programmes, which are well matched with students' needs and interests'.

Seven students were placed in this school, two of whom had just completed their final teaching practice placements there and therefore already knew the school and had developed good relationships with staff and pupils. They volunteered for the project expressly to continue working in this school and to gain further experience before applying for their first teaching posts. One student was from a university in a different city, and another from a different HEI within Plymouth. The remaining students were all enrolled at the UoP, though from a variety of disciplines. Three were close to completing their teacher training courses, specialising in English, primary education and citizenship, and one was taking a course in music production which the University offered in partnership with a local production company.

Buddying between individual pupils and each student continued throughout the intervention period. There were numerous interventions between the students and small groups in the classroom and there were opportunities for the student and pupils to interact in more informal ways, especially during the activities held during the school's enrichment week. There were further opportunities for pupil/student interaction, as several students accompanied their buddy on the one-day university trip. Some students also took part in the school's sports day, competing as part of a staff team in the relay race.

Three whole year group interventions were planned and these were delivered on a class-by-class basis during lesson time, which ensured that the majority of pupils saw at least one intervention.

The first intervention was delivered by three students together and comprised three activities. In the first activity the students talked about various aspects of university life, including extra-curricular activities, study and sports, and then asked the pupils to design their ideal day as a student. In the second activity pupils matched the skills and qualifications they thought would be needed for a variety of careers, such as police officer, lawyer or teacher. The aim of this activity was for pupils to consider which vocational or academic qualifications, or skills and qualities are required for some careers. In the final activity the students were able to dispel certain myths about HE by reading out some statements about life at university and asking the pupils to answer if they thought they were true or false.

The other two interventions were delivered by the students who had recently completed their final teaching placements in the school. One intervention was a discussion which focused on what pupils believed their dream jobs to be and encouraged them to think about what they might need to do, both now and in the future, in order to achieve this dream. The other intervention was to give pupils a personality test, and then to suggest suitable jobs or careers for an introvert or extrovert personality type.

All of these interventions appeared to be well received by the pupils when observed by researchers.

Seventeen pupils from across the whole Year 8 group visited the UoP campus. In addition, the Aimhigher Science Faculty team led a science summer school which included a day on a 'floating classroom'. The Arts and History Faculty teams were coming to the end of two two-year projects based in the school, one looking at 3D design in art and the other a local history project focusing on the 'Barbican' area of Plymouth. A number of pupils visited the University as part of a WWII project.

School 'B'

School B is an 11-19 secondary school with over 1,200 pupils on roll. There is a large sixth form with over 250 pupils and the college works within a confederation of schools to provide post-16 education. In 2004, it received specialist school status and became a specialist business and enterprise college. The college draws students from a wide area of Plymouth, but predominantly from areas with high levels of disadvantage. The proportion of students entitled to FSM is 25% and 8.1% of students have special needs, according to the LA. Most students are from White British backgrounds and very few of them have English as an additional language. As a National Challenge school, there are significant challenges in terms both of buildings and of delivering high levels of attainment.

The last Ofsted report states that: 'The school's specialist status is used to good effect to enhance the curriculum...Students make the most of a good variety of opportunities to develop workplace and other skills. This and a rich programme of extra-curricular activities help to build students' self-esteem and develop their ability to take the initiative and work co-operatively in teams. The overall quality of the curriculum is good and in the sixth form it is outstanding...'.

Five students were placed in this school: three of them were studying at the UoP, while the other two attended another local HEI. Four of them started their placements in week one, but only three of them were able to participate for all four weeks because of illness. The other student participated for the last two weeks of the intervention programme.

Buddying took place for two of the five lessons every day. For the remainder of the time students were linked to their specialist subject departments (maths, science, art, information and communications technology (ICT) and design and technology (D&T)) where they would help the teachers, offering support to any pupils who required it and taking opportunities to talk to them about why they were in school and what university was like. Only some of these departmental lessons were with Year 8. In addition, the students were able to help with other

activities, including sports day and the school swimming gala. Two students attended an after-school club with some of the Year 8 pupils (rounders) and all five attended the Year 7-9 performance of 'Grease' that took place one evening.

The four students who began their placement in week one organised two whole year group activities. They were both PowerPoint presentations, given during assembly times. The first one was about university life and included topics such as what you can do at university, who can go, costs and social activities available. The students used it as an opportunity to introduce themselves, explaining what and where they were studying and telling pupils that they would be seeing them in lessons and around the school. The second presentation was about routes into university. The students mapped out a path for a fictional pupil called Stan, showing that interests he had from very early on could be pursued at university. They asked the pupils to vote on whether Stan should stay on at school and take A levels or whether he should go to college. After the vote they said that it was up to Stan to choose, but whichever path he chose he could still go to university. At the end of the intervention programme all five students produced a poster saying 'keep in touch', with their photos and email addresses, and encouraged the pupils to contact them if they wanted further information.

This school visited the UoP campus on two occasions; 25 pupils came on the first visit and 15 on the second, which was a 'Robot Challenge' day. The Aimhigher Arts Faculty team led a school-based 'Mud Days' project which examined sustainable building materials.

School 'C'

This is an 11-18 secondary comprehensive school. The school has strong links with a range of HEIs, including the UoP, and offers placements for students on PGCE and ITT courses and the SAS. The University offers a mentoring programme to some of the pupils.

There are nearly 1,200 pupils on roll, including nearly 300 in its growing sixth form. It is located in an area with a vast range of socio-economic backgrounds, with a small percentage of pupils from ethnic minorities; 10.6% of the school's pupils are entitled to FSM and 8.1% of pupils have special needs, according to the LA.

The school has specialist status in both mathematics and science. In 2006 Ofsted reported: 'The school's specialist science college status has had an outstanding impact on the whole curriculum with, for example, excellent collaborative ventures being undertaken between science and the creative arts,' and, 'The school has focused resources on particular groups of students who would benefit from extra support'. In 2008 the proportion of pupils gaining five or more A*-C GCSE grades (including English and maths) was 56%, which is well above both the national and local authority averages, which were 47.6% and 46.3% respectively. This is an improvement on previous years, where the school was seeing a downward trend of pupils receiving these grades, with only 48% of pupils gaining five or more A*-C GCSE grades (including English and maths) in 2005, dropping to 42% in 2007.

Five students were placed in this school, three of them starting at the beginning of the intervention programme and the other two joining for the last two weeks. These two students had prior experience of this school. One student fell ill and so was only able to participate for two rather than all four weeks.

At the start of the intervention period, the students went to their buddies' tutor base every registration period and this meant that they got to know the tutor group well. Buddying took place in lessons for the 3rd and 4th periods, during which time the pupils were supported with their class work. In addition, the students were timetabled for any Year 8 lessons that took place in their subject specialism (physical education (PE), art, English) throughout the week and stayed in their subject specialism teaching other year groups for the rest of the time. The PE student took part in some enrichment activities, such as cycling proficiency, during her placement, which meant that on some days she did not come into contact with any Year 8 pupils at all. One student's timetable changed after he fell ill and he decided to spend most of his time in as many lessons with the buddy pupil as possible. The other English specialist student worked in the special educational needs unit on Wednesdays, and the art specialist student took part in Year 8 art lessons and spent the rest of the time helping the school to create an art exhibition.

Three students each planned an activity which was delivered to each tutor group in turn. One student created an outdoor activity in which she asked a question about the pupil's future, such as what job they wanted to do or whether they wanted to go to university. A ball was thrown to one pupil, who would answer and then throw it to a fellow pupil, who would do the same. The student then spoke about what she studied at university and her future career. This activity was meant to be delivered to a whole class; however, because of behavioural issues it was only given to five pupils at a time from only a few of the classes. Another student delivered an activity that was called 'Positive and Negative'. The student gave out paper to each pupil and divided the class in two. One side of the class wrote what they felt were positive reasons to go to university and the other side of the class wrote what they felt were negative reasons. The class met in the middle of the room halfway through the exercise and shared the opposing views with each other. They then wrote the opposing views down on their paper, which was collected in by the student and a graph of results was produced. The student then led a discussion. The other student led a question and answer session, in which she talked to the pupils about university life, giving them a chance to ask about the costs, accommodation and what courses were available to study.

In addition to these interventions, one student ran an after-school club where pupils designed and made their own animations. Four pupils attended this, including one of the buddy pupils. All of the students produced a PowerPoint presentation which was shown to each Year 8 form during registration time. In the first week of the interventions, one tutor group visited the University for a day.

School 'D'

The school opened in September 2000 following the amalgamation of an infants and junior school. It is a larger than average, 3-11 mixed urban community school that is part of a federation located on an extensive campus. There are nearly 350 pupils on roll, 27% of whom are eligible for FSM and 9.6% of whom have special needs. While the number of pupils performing above the expected Standard Assessment Tests (SATs) level is below average, the broad aim is: 'to provide a quality education that will develop children's and young people's talents and potential to the full'. The school welcomes the involvement of parents and others in its activities. The last Ofsted report said that: 'The school provides an

effective quality of education and this is the reason why it has improved so well since being amalgamated in 2000. Since then, standards have risen dramatically and, because pupils are taught well, their achievement is good. In addition, the excellent extended services have improved local aspirations meaning that families as well as their children have an improved self-belief. It is truly living up to its title of being a community school.'

Two undergraduate students were placed in this school. One started in the first week of the interventions and the other in the second week. They both stayed for three weeks in total. Both of the students were part of the Plymouth SAS. One of the students was studying Working with Children and Young People at a local HEI. The other student was in their final year at the UoP and had just finished studying for their Psychology Degree. Previously this student had completed a year at beauty college before she realised this was not for her and decided to study for her A levels. This enabled her to talk to the pupils about university from a different angle.

Although buddying did take place it was limited because of the activities that the students were expected to do during their placements and because of the timetable in this school. One of the students was paired with a Year 6 pupil, although they spent quite a lot of time with a Year 5 pupil too as the pupil needed additional support in class; the other student worked with a Year 5 pupil. For the remainder of the time the students helped the class teachers in class or supporting small groups of pupils when they worked on computers outside the room and with other activities, including sports day, practice for the school production or going with pupils to the secondary school which was located on the same site, for activity days and for the Year 6 induction day.

One student organised two whole class activities and the other, three. The first activity was a talk to their Year 5/6 classes about university and included a PowerPoint presentation about what university is, including routes into university, courses that can be studied and who can go. One student followed this with a discussion where pupils were asked firstly what sort of things they wanted to have in the future and secondly what they wanted to do in the future. Building on the responses from the first activity she researched the jobs pupils wanted to do and designed a display board in the classroom showing how they could achieve their dream. This board was used during her second activity, which was to engage the pupils in subsequent discussions about possible future paths.

During the discussion the second student led following her PowerPoint presentation she shared her own experiences of the route she took in to university, and how she changed her mind about career choices in the past. She also briefly spoke about jobs that the pupils wanted to do. For the next activity she designed a word search containing words related to university. Once the pupils had completed it she asked them if there were any words that they did not feel were related to university or wanted to know more about, which she was then able to explain. The last activity she organised was a 'Routes into Careers' presentation, based on possible careers the pupils were interested in.

Pupils from this school did not visit the UoP campus.

School 'E'

This is a small primary school in Plymouth, with just over 200 pupils aged between 5 and 11. The school has a religious bias, is voluntary aided, situated in an area of significant social deprivation, and provides for learners from a diverse range of low socio-economic backgrounds; 10% of pupils are eligible for FSM and 6.3% have special needs. Very few pupils do not have English as their first language.

Even though when children enter the foundation stage attainment is below that typically found, this school has been classed as being outstanding. The Ofsted report in 2007 stated: 'It gives pupils a very high quality, all-round education'. The school has an excellent relationship with the pupils' parents and the local community, who appreciate that 'much time and dedication is spent to give opportunities to children to take part in numerous exciting activities'. The impact of all of this is a school which performs above average, particularly in English and literacy. Pupils flourish because they know they are 'valued, cared for and encouraged by school and Parish alike. The effects of the excellent provision for spiritual, moral, social and cultural development are clearly evident in this orderly and open-minded community'.

Two university students were placed at the school, one from the UoP and one who had just graduated from university in a different city. Both had a limited background in education. Although they both started at the beginning of the intervention period, only one was able to stay for the whole four weeks; the other stayed for three.

The students both quickly established and developed a good rapport with their allocated buddy, as well as building excellent relationships with all of the pupils in Year 6 through working with them in a variety of ways such as classroom support, whole class interventions, helping with the school musical and sports day, or working with pupils when visiting the UoP.

Classroom support for buddies, small groups and other individual pupils consisted of working with them across a wide variety of topics, including a family tree exercise. Although the students worked well with the groups and their buddies in the class eventually, there was an initial hesitation by the students, who did not want to become too involved in the class. This hesitation was related more to initial confusion over the project than anything else, and was soon resolved.

Two whole class activities were planned and delivered, and these were a question and answer session and a quiz. Both of the activities focused on encouraging pupils to find out more about HE and university life, through allowing the pupils to ask any questions that they might have, and secondly by having a quiz which set about dispelling some of the myths about HE and university life.

The Year 6 pupils from the school also visited the UoP campus, where they took part in a number of hands-on activities such as film making, practical maths sessions and a tour of the campus, and were given talks about the University. The trip was an overwhelming success, allowing pupils the opportunity to interact with both UoP students and the learning environments provided.

4.5 Conclusions

In this chapter we have outlined the parts of the PPM we were able to test, namely the effect that a specially trained group of higher education students might have on the schools and the pupils that they were allocated to.

We set out our rationale for choosing Year 6 and Year 8 pupils from a small selection of local primary and secondary schools, described our research design and our data collection methods. We then explained the training programme developed for each group of students, together with a description of the interventions themselves and a brief cameo portrait of each school.

Although there were issues, related to the training programme and a lack of clarity in our communications, these seemed to be easily and quickly resolved. All of the staff in all five schools remained totally committed, highly supportive and very enthusiastic about the interventions and the impact they may have on their pupils' aspirations to go on to higher education. In addition, they were very supportive of the students who were placed in their schools, accommodating them as best they could, given the short lead-in time, and also allowing our RAs as much access to the pupils and students as needed.

The RAs reported that at the beginning of the buddying some pupils were rather uncomfortable with it, but this altered and became very positive as the relationship with their student buddy developed. In some cases this relationship continued after the intervention period. The majority of pupils responded in a positive way to the small group and whole year/class activities.

The next chapter looks at the outcomes of the interventions in all the data we gathered.

Chapter Five

The Results of the PPM Intervention from Multiple Data Sources

David Reynolds, Linda la Velle, Judith Gunraj, James Goulbourn, Nicola Iji,
Gemma Parkinson, Carole Sutton and Iain MacLeod

5.1 Introduction

In this chapter we move on to look at the results of the PPM as it was implemented in the summer term of 2009. As we have noted before, many of the aspects of the programme are long-term, developmental ones that will take a considerable period of time to be implemented in schools, beginning in the 2009/10 academic year. But the intervention that we *were* able to do in a short time frame can be evaluated, assessed and learned from to the benefit of research, policy and practice in the WP area.

5.2 The Pre-Intervention Situation

We have two sources of data concerning the situation in our five programme schools *before* the programme began, in terms of:

- How educational personnel saw the situation of WP and school/HE links;
- How pupils saw their situation in the focus group discussions.

5.3 Staff Data Pre-Intervention

To deal with the educational personnel first, staff members (in total 30 across the five schools) were asked: **What are the general problems in getting pupils at this school to go to uni/college/HE?**

Their responses fell into the following categories:

- Low aspirations;
- Family attitudes and background;
- Lack of knowledge;
- Financial considerations;
- Lack of ability;
- Other.

Responses across the five schools were distributed as shown in Table 5.1 (note that it is possible here for there to be more than one response per person, so the overall responses may be more than 100% if summed):

(See Appendix 8)

The most frequent responses to this question were related to family attitudes and background; 26 out of 30 members of staff (87%) felt that issues surrounding family and

pupil background were some of the reasons for difficulties in getting pupils to go on to further study.

Many of the staff members also felt that low pupil aspirations, lack of knowledge about HE and financial considerations were also reasons why it was difficult to get pupils to go to university/college/HE. Three members of staff believed that the ability level of some of their pupils was also an issue.

It was suggested by some of the members of staff that these reasons are very much related; for example, the low aspiration of the pupils is perhaps due to their family's attitude towards further study.

Staff were then asked: **Are there any specific blocks on them going to HE/uni/college?**
Responses fell under the following headings:

- Financial;
- Lack of ability;
- Cultural blocks;
- No blocks;
- Other.

Responses across the five schools were distributed as shown in Table 5.2:

(See Appendix 8)

Although members of staff were aware of problems in getting pupils from their schools to go on to further study, five out of 30 members of staff (17%) did not feel that there were any specific blocks on their going. There were many (47%) who felt that money was a real issue for some of their pupils and that they would face financial blocks continuing their studies.

Some members of staff (17%) pointed out that there were pupils who would struggle academically as they did not have the ability to go on to further study. There was also a high proportion of staff (47%) who felt that there were certain cultural blocks preventing pupils continuing with their education.

Having considered possible problems and blocks on pupils going to uni/college/HE, staff were then asked: **Is it becoming more or less difficult in encouraging them to go?** Responses are shown in Table 5.3:

(See Appendix 8)

Some 40% of the staff felt that it was getting easier to encourage pupils to go to university/college/HE. Despite this there was still a high proportion of staff (30%) who felt that it was getting more difficult, and 27% felt that it was not really changing – the same

problems still exist now as there have always been. Those at the primary schools were less sure when answering this question, but all felt that it was generally getting more difficult, apart from the one member of staff who was not sure either way.

The 30% who said it was becoming more difficult were asked why it was getting more difficult. The following themes emerged:

- Lack of awareness;
- Culture and circumstance;
- Financial constraints;
- Vocational alternatives;
- Other.

These were distributed as shown in Table 5.4:

(See Appendix 8)

Of those who thought it was getting harder to convince pupils to go on to HE, 67% included financial constraints as one of the reasons for this. These members of staff believed that a combination of increasing fees and financial problems meant that pupils were more likely to let costs put them off going to university or further study.

The 40% of people who said it was getting easier were asked why it was getting easier. The following themes came up:

- Greater opportunities;
- Financial support;
- Greater awareness.

These were distributed as shown in Table 5.5:

(See Appendix 8)

Eleven out of the 12 people who thought it was getting easier to get pupils to go on to further study felt that greater awareness was a reason for this; 42% felt that the increasing number of courses and range of type of courses available meant that more pupils now consider HE.

Members of staff from the five schools were then asked to consider five interventions from the University: the Student Associates Scheme, the Gifted and Talented programme, Aimhigher activities, schools liaison, and initial teacher training students.

For the SAS, they were asked who did this, and their responses are shown in Table 5.6:

(See Appendix 8)

The majority of the members of staff asked (77%) rightly knew that students came into their school to implement this intervention; 50% knew that there were members of staff from within their school who were involved in implementing the SAS. None of the staff members asked knew of anyone else who was involved in the running of the scheme, and 17% could not or did not answer the question of 'who did the SAS?'

When asked what students on the SAS did, the members of staff mentioned the following activities:

- Lesson support;
- Buddying;
- Teaching experience;
- Linking university and school;
- Other.

Responses were distributed as shown in Table 5.7:

(See Appendix 8)

SAS students were most well known in schools for providing lesson support, with 43% of the staff mentioning this in their interviews. The fact that the SAS students were there to gain teaching experience, by taking small episodes of lessons for example, was mentioned by 40% of those asked; 20% mentioned the fact that the SAS linked the University to their school, and 13% mentioned the 'buddying' or 'shadowing' of pupils that some of the SAS students partook in. Some 40% of those asked did not or could not answer the question.

Staff were then asked **with whom they did these activities**. Their responses are shown in Table 5.8:

(See Appendix 8)

Overall, 43% of the staff mentioned the work that the SAS students did with small groups; 17% mentioned the students working with individual pupils, 17% mentioned work with whole year groups, 13% mentioned work done with the whole school, and 7% mentioned other types of group that the students worked with. Again, 40% could not or did not answer.

The members of staff were asked: **What effects did it have for pupils, staff and parents/local community?** They gave the following types of positive effects:

- Raised aspirations;
- Staff support;
- Raised awareness;
- Cultivates new teachers;
- Other.

The responses were distributed as shown in Table 5.9:

(See Appendix 8)

Half of the staff members said that the SAS provided useful support for themselves or other members of staff in the school; 37% said that the SAS students raised the aspirations of the pupils they worked with, and 37% said that it raised awareness of future options for the pupils. A fair amount of staff (23%) talked about the positive effect the scheme had on encouraging students to enter the teaching profession. A few of the teachers mentioned other positive effects; 30% did not suggest a positive effect of the SAS.

Members of staff suggested the following negative effects:

- Lack of awareness;
- Focus on students (not pupils or staff);
- Timing;
- Exclusivity;
- Misplaced students;
- Other.

Responses were distributed as shown in Table 5.10:

(See Appendix 8)

The majority (57%) of staff did not provide any negative effects. A number of staff (20%) said that the scheme was focused on the students rather than the school; however, this was generally mentioned as a comment rather than a negative effect. There was the suggestion that teachers had an additional workload taking on the students, but did not really gain a lot from having them in. In most cases the additional workload or lack of positive gain was a result of misplaced students, on past experience, and 13% suggested that misplaced students could impact negatively on pupils as well as staff. Some 17% suggested that the timing of the placements had a negative effect, 7% said that the lack of awareness in their school meant that members of the school community did not know why these students were in the building or in their classrooms, and 7% suggested other negative aspects of the SAS.

They were then asked about G&T activities: **Who did them?** Their responses are shown in Table 5.11.

(See Appendix 8)

There tended to be slightly more people aware of the G&T programme than there had been with the SAS. Overall, 77% knew of staff involvement in G&T and 47% mentioned the University's involvement. There was also some mention (3%) of students helping with G&T activities, and 13% mentioned other people who had been involved in their school's G&T; 10% did not provide an answer.

What did they do? Table 5.12 shows their responses:

(See Appendix 8)

Overall, 67% said that the G&T involved off-site activities, namely visits to the University; 50% mentioned activities that took place in their school; 7% mentioned other kinds of activity; and 13% did not answer.

With whom are G&T activities done? Responses are shown in Table 5.13:

(See Appendix 8)

In the five schools, the majority (73%) said that G&T involved small groups of pupils; 27% mentioned G&T work with individuals. Someone mentioned some whole year group work and another member of staff mentioned other types of grouping; 13% did not answer this question.

What were the effects for pupils, staff, parents/local community? Positive effects were categorised under the following headings, and responses are shown in Table 5.14:

- Different and challenging activities;
- Experience outside of school environment;
- Raising pupil awareness or aspirations;
- Shift in parental attitude;
- Other.

(See Appendix 8)

Overall, 63% thought that the G&T activities were good because they were different and challenging for the pupils; 63% felt that the activities raised awareness and aspirations of the pupils involved; 43% felt that it was good for the pupils to get away from the school

environment for the activities; 30% believed that the activities saw a shift in parental attitude; 10% gave other positive comments in addition; and 17% did not respond to this question.

Negative responses were categorised as:

- Exclusivity;
- Organisation and lack of consideration for staff;
- Competition with other schools;
- Level of delivery;
- Other.

Their responses are shown in Table 5.15:
(See Appendix 8)

Exclusivity was one of the most frequent responses, with 40% putting this forward as a negative response. Also, 40% said that the activities were difficult to organise and often caused an extra workload for staff; 7% said that the competition with other schools sometimes had a negative impact on pupils' self-esteem; 7% talked about problems with the level of delivery, be it too high level or too low level for the audience; 20% mentioned other negative effects; and 47% did not answer this question.

They were then asked about Aimhigher activities: **Who did them?** Responses are shown in Table 5.16:

(See Appendix 8)

Overall, 57% of those asked did not answer this question, but 33% did know that there were staff involved in Aimhigher activities in their school, and 13% mentioned the University's involvement in the activities. In addition, 3% said that students from University had helped with Aimhigher activities, and 3% mentioned other people who had been involved.

They were then asked: **What did they do?** Their responses are shown in Table 5.17:

(See Appendix 8)

Overall, 60% of the interviewees did not respond to this question; 30% discussed off-site activities that were part of Aimhigher; and 17% mentioned activities that took place in their school.

With whom? Responses are shown in Table 5.18:

(See Appendix 8)

Overall, 60% did not respond to this question; 27% said that the Aimhigher activities involved small groups; 13% said they had involved whole year groups; 7% mentioned Aimhigher work done with individuals; 7% said that work had been done with the whole school; and 3% mentioned other types of groups involved.

What were the effects for pupils, staff and parents/local community? The following positive effects were identified and are shown in Table 5.19:

- Raises aspirations;
- Develops confidence and self-esteem;
- Benefits for school;
- Other.

(See Appendix 8)

Overall, 57% did not answer this question; 37% of those asked said that Aimhigher activities raised the aspirations of the pupils involved; 20% said that the activities developed the confidence and self-esteem of these pupils; 13% talked about the benefits for the school; and 7% mentioned other positive effects.

The following negative effects were identified and are shown in Table 5.20:

- Administration and organisation;
- Exclusivity;
- Other.

(See Appendix 8)

Overall, 77% did not provide any negative effects; 13% said that there were problems with administration and organisation of the activities; 13% mentioned the negative effect of exclusivity; and 7% mentioned other negative effects.

They were then asked about schools liaison activities. Responses are shown in Table 5.21:

(See Appendix 8)

Overall, 73% gave no response to the question of who did this intervention; 20% said that school staff were involved; 13% said that the University were involved; and 3% mentioned student involvement.

What did they do? Responses are shown in Table 5.22:

(See Appendix 8)

Overall, 70% gave no response to this question; 27% talked about liaison with the University; and 7% gave other answers.

With whom? Responses are shown in Table 5.23:

(See Appendix 8)

Overall, 80% did not answer this question; 7% said that individual pupils were involved in schools liaison; 7% said small groups; and 7% said that whole year groups were involved.

What effect did this have for pupils, staff and parents/local community? Identified positive effects were:

- Generates awareness about University;
- Strengthens links with University;
- Other.

These responses are shown in Table 5.24:

(See Appendix 8)

Overall, 77% did not provide a positive effect; 17% said that the schools liaison generated awareness about University; 10% said that it strengthened links with the University; and 7% mentioned other positive effects.

Identified negative effects were:

- Organisation;
- Lack of awareness;
- Other.

These responses are shown in Table 5.25:

(See Appendix 8)

Overall, 80% of the interviewees did not provide any suggestions of negative effects; 7% said organisation; 10% said that there was a lack of awareness; and 3% mentioned other negative aspects.

They were then asked about ITT students: **Who did the intervention?** Responses are shown in Table 5.26:

(See Appendix 8)

Overall, 47% did not answer this question, but the remaining 53% said that students did this intervention; 17% mentioned the school staff involvement in organising this in schools, and 3% mentioned the University's role; 7% mentioned others involved.

What did they do? Responses are shown in Table 5.27 and included the following:

- Lesson support;
- Deliver lessons;
- Gain experience;
- Talk with pupils;
- Other.

(See Appendix 8)

Overall, 60% did not answer this question; 20% said that ITT students provided lesson support; 27% said that they delivered lessons; 23% said that they were in school to gain experience, which the members of school staff helped to provide for them; 17% said that the ITT students talked with the pupils; and 3% mentioned other activities

With whom? Responses are shown in Table 5.28:

(See Appendix 8)

Overall, 60% did not respond; 10% said that the ITT students worked with individuals; 17% said that they worked with small groups; 7% said that they worked with year groups; and 23% said that the students worked with the whole school.

What effect did it have for pupils, staff and parents/local community? Identified positive effects were:

- Provide positive role models;
- Variety of teachers;
- New methods and ideas for existing staff;
- Other.

These responses are shown in Table 5.29:
(See Appendix 8)

Overall, 60% did not mention any positive effects; 7% said that the students provided positive role models; 23% said that it was good for the pupils to have a variety of teacher; 23% said that it was good for the staff to discuss the latest teaching methods and ideas with the ITT students; and 17% mentioned some other positive effects from having ITT students in school.

Identified negative effects were:

- Financial incentive;
- Student calibre and personal skills;
- Enhanced workload for school;
- Other.

These responses are shown in Table 5.30:
(See Appendix 8)

Overall, 73% of staff did not suggest any negative effects from having the ITT students in school; 7% said that the financial incentive was a problem; 23% said that there were negative effects if students were not of high calibre; and 10% said that ITT students came with a lot of paperwork, and that particularly with weaker students they produced an extra workload.

Staff were asked: **Take all the past interventions from the University of Plymouth together. Were there any shortcomings?** Their responses are in shown in Table 5.31:

(See Appendix 8)

Overall, 63% said that there were some shortcomings; 17% did not think that there were any shortcomings; 13% did not know; and 3% did not answer this question.

Those who said that there were shortcomings were asked: **How might they be overcome?** They came up with the ideas below:

- Advanced planning, communication and organisation;
- Lowered costs of participation;
- Voluntary students;
- Longer term commitments;
- Inclusivity for pupils and parents;
- Other.

These were distributed as shown in Table 5.32:

(See Appendix 8)

The most common responses (63%) were related to the need for advanced planning, communication and organisation, and 37% felt that there was not enough inclusivity in previous interventions. The need for longer term commitments was mentioned by 32% of the staff members. It was thought by 16% of those asked that it was expensive to get involved in activities, particularly those based off-site; lower cost of participation was suggested by these members of staff. It was suggested by 11% of the interviewees that having volunteers in school would eliminate the issues arising from students who were 'in it for the money', and 21% suggested other ideas.

Staff were finally asked **whether there was anything else that the University of Plymouth might do in the future to help their school**. The possible future activities suggested fell under the headings:

- Raise pupil and parent awareness of higher education;
- Increase inclusivity;
- Share resources;
- More mentoring;
- University awareness of local needs.

These suggestions were distributed in the following way, as shown in Table 5.33:

(See Appendix 8)

The majority of those asked (80%) felt that the University could do more to raise pupil and parent awareness of higher education; suggestions for ways to do this were offered by the schools. There was a feeling among many of the staff that in the past interventions, only a targeted few have been involved; 40% believed that future work should include more of the pupils and also parents where possible. It was suggested by 33% of the staff members that if the University were to share resources with their school it would greatly benefit the pupils; 23% suggested more mentoring from the University, and 17% believed that it would help the school if the University took into account local needs when designing future interventions.

5.4 Summary of Staff Data Pre-PPM

Before the intervention, staff saw some problems in getting pupils to go to HE, but a slight majority thought that it was getting easier to encourage them. Of the five interventions from the UoP – the SAS, G&T activities, Aimhigher, schools liaison and ITT students – the first two seemed to have greater visibility and positive traction in the eyes of staff than the latter three. A fairly high proportion of the staff thought that there were shortcomings in the UoP offer, mostly in terms of planning, communication and organisation, and a very high proportion of staff thought that the University should encourage better awareness among parents and pupils of HE in future.

5.5 Pupil Focus Group Data Pre-PPM

The second set of data collected, both at the beginning and at the end of the project, was that from the pupil focus groups. We asked each school for up to eight pupils to take part in the pre-intervention focus groups, and they were asked a series of questions about what their experiences with previous interventions had been and what they might want from this set of interventions.

The first question was simply: **Do you want to go to uni?** Responses were categorised as follows (note here that only one major or first response per pupil is used, in contrast to the presentation of data in Section 5.3):

- Yes;
- Maybe;
- No;
- Don't know.

These responses are shown in Table 5.34:

(See Appendix 8)

Of the responses, 72% answered yes, that they would like to go to university; 10% answered no, that they would not like to go to university, with a further 10% who did not know either way, and 8% who would maybe like to go to university.

The next question asked **why those pupils who did want to go to university wanted to go**. The responses were categorised into the following:

- Better job prospects;
- Better quality of life;
- Financial benefits;
- Improve education and skills.

These responses are shown in Table 5.35:

(See Appendix 8)

Overall, 48% said that they would like to go to university because it leads to better job prospects; 33% wanted to improve upon their education or gain specialist skills; and 6% perceived financial benefits in the future. A further 5% expected a better quality of life in the future, and 8% wanted to go to university but did not know why.

Of those pupils who responded that they did not want to go to university, we asked for them **to explain their reasons for why they did not want to go**. Their responses were:

- Lack of awareness and negative perception of HE;
- Financial constraints;
- Unnecessary for pupils' future aspirations and desired employment.

These are shown in Table 5.36:

(See Appendix 8)

Overall, 50% said that HE would be unnecessary for their future aspirations or desired future employment; 17% did not know enough about HE or had negative perceptions; 12.5% stated perceived financial constraints; a further 12.5% reported other reasons; and 8% did not know why they did not want to go.

Pupils were also asked: **have you already had students in to help you with your work?**

Answers were categorised into the following:

- Yes;
- No;
- Don't know;
- No data.

Their responses are shown in Table 5.37:

(See Appendix 8)

Overall, 58% said that they had previously had university students in their schools, 20% said that they had not had university students in their schools before now, 10% said that they did not know, and a further 12% did not provide any data.

Of those pupils who answered yes, that university students had worked with them previously in school, a follow-up question was asked to ascertain what these previous interventions had

been. The pupils' responses to: **What did they [Uni students] do?** were later categorised into the following:

- Talked about future opportunities;
- Gaining classroom experience;
- Fun and alternative classroom activities;
- Off-site activities;
- Don't know.

Their responses are shown in Table 5.38:
(See Appendix 8)

Overall, 58% suggested that those university students who had been in their schools previously were in there to gain more classroom experience, which included observing classes, providing classroom support or some teaching in existing lessons. A further 19% said that previous experiences of university students working with them in school had been fun and the students had provided alternative classroom activities. Some of the pupils (11%) said that university students had been in their schools previously talking to them about future opportunities; 6% said that this led to off-site activities with university students, and a further 6% did not know what the students had done.

All of the focus groups were also asked: **Did you think having students in your class changed how you viewed your future/education?** Their responses to this question were categorised into:

- Yes;
- No;
- Maybe;
- Don't know;
- No data.

These are shown in Table 5.39:

(See Appendix 8)

Overall, 47% said that having students in the school had not changed their view of their future or education; 25% said that working with students led to a change in how they viewed their future or their education; 12.5% said that the experience might have changed how they viewed their future or their education, but that they could not be sure. A further 12.5% said that they did not know if having students had changed how they thought about their future or their education; 3% did not provide any data.

They were asked if they did or did not believe that having students in the school had an effect on their perceptions of education or their future. Their responses were categorised as follows:

- Raised awareness of university;
- Job prospects;
- Other;
- Don't know;
- No data.

These are shown in Table 5.40:

(See Appendix 8)

Overall, 32% said that they did not know why working with university students had changed their views of education; 27% had their awareness about university raised; 9% reported that there were other reasons for their views changing; 5% felt that the greater awareness of associated job prospects had changed their viewpoint; and 27% did not provide any data.

The next question asked why students did not have an effect. The responses were as follows:

- Lack of engagement with students;
- Fixed perception of future and education;
- Don't know;
- Other;
- No data.

These are shown in Table 5.41:

(See Appendix 8)

Overall, 36% did not know why working with students had not changed their view of their future or education; 22% said that their opinion had not changed because they had not really engaged with the students; a further 22% felt that the experience had not affected them because they had fixed aspirations and views of their future; 10% said that working with university students had not affected them because of other reasons; and a further 10% did not provide any data

Given that these focus groups were held prior to the beginning of the intervention period, pupils were also asked what they would like to gain from the experience of having university students in their schools. They were asked: **You'll be having students in your school from June 15th, what sorts of activities would you like from them?** Their responses were:

- Preference for 'hands on' activities and interaction;
- University talks;
- Off-site visits;
- Personal interaction;

- Don't know;
- Other.

These are shown in Table 5.42:

(See Appendix 8)

The most popular responses (65%) indicated a preference for 'hands on' activities. A further 10% said that they would like talks about university and university life, 10% said that they would like more off-site visits, and 9% said that they would prefer one to one with the university students; 2% suggested other activities that they would like to do, and 4% did not know what they would like to do.

We also sought to gain a better understanding of the cultural attitudes surrounding university in each of the participating schools. The next question was: **Do your friends want to go to uni?** Responses were:

- Yes;
- No;
- Don't know;
- Some;
- No data.

These are shown in Table 5.43:

(See Appendix 8)

Overall, 40% said that their friends would like to go to university; 28% said that only some of their friends would like to go. A further 21% said that they did not know whether or not their friends would like to go, with many of them suggesting that university was not a typical or common topic of conversation; 7% said that their friends did not want to go, and the remaining 4% did not provide any data.

To develop these themes further, and 'flesh out' some of the perceptions held, we asked for the reasons why their friends intend to go:

Responses were coded into:

- Better quality of life;
- Specialised education and training;
- Financial gain;
- Don't know;
- Other;
- No data.

Their responses are shown in Table 5.44:

(See Appendix 8)

Overall, 42% said that there was a perceived better quality of life associated with going to university; 14% saw university as a way of obtaining specialist education and training; 9% thought that friends might like to go because of the perceived financial benefits that university might lead to; and 1% suggested other reasons. A further 14% did not know why their friends would like to go to university, and 20% could not provide any data.

Pupils who reported that their friends did not want to go to university were also asked to suggest why they thought this was. Their responses were as follows:

- Personal attitudes to education;
- Cultural attitudes to education;
- Undecided;
- Fixed aspirations;
- Financial concerns;
- Don't know.

These are shown in Table 5.45:

(See Appendix 8)

Overall, 34% felt that their friends did not want to go because of cultural attitudes toward HE; 20% said that this was because of personal attitudes towards HE; a further 20% felt that this was because they were undecided about their future; 11% felt that this was because their friends had fixed aspirations for their future which did not include HE; 14% suggested that financial concerns were a barrier (such as tuition fees); and 2% did not know.

In order to develop a better understanding of how schools deal with policies such as WP from the pupils' perspectives, they were asked whether they thought their teacher would like them to go to university or not. They were asked: **Do your teachers want you to go to university?** Their responses were:

- Yes;
- No;
- Some;
- Don't know;
- No data.

These are shown in Table 5.46:

(See Appendix 8)

Overall, 40% responded that yes, their teachers would like them to go, and 28% said that some teachers wanted them to go; 15% said that they did not know whether their teachers wanted them to go, and 2% said that their teachers did not want them to go; 15% did not provide any data.

Developing this theme further, we asked the pupils: **How does this show in their [the teachers'] behaviour?** Responses were as follows:

- Reinforce and encourage;
- Relate to personal experience;
- No change in behaviour or never mentioned;
- Teacher doesn't care;
- Other;
- No data.

These are shown in Table 5.47:

(See Appendix 8)

Overall, 43% said that there was no change in their teachers' behaviour and that university was seldom mentioned. However, 35% said that their teachers offered reinforcement and encouragement; 3% responded that teachers talked to them about their own experiences at university, and another 1% said that their teachers encouraged them in other ways. A further 6% said that their teachers did not care, and 12% did not provide any data.

Another measure of cultural attitudes related to parental attitudes toward HE. Each focus group was asked: **Do your parents want you to go to university?** The following responses were identified:

- Yes;
- No;
- Maybe;
- Not sure;
- Don't mind;
- No data.

These are shown in Table 5.48:

(See Appendix 8)

Overall, 58% said that their parents would like them to go to university, while 10% said that they might like them to go and 12% said that they did not mind if they went; 8% were not sure if their parents wanted them to go or not, and 6% said that parents did not want them to go. A further 6% did not provide any data.

Responses as to why parents did want their children to go to university were as follows:

- Family member(s) went;
- Support pupil's choices;
- Desire better opportunities for children (compared to own);
- Better education;
- Greater financial opportunities;
- No data;
- Other.

These are shown in Table 5.49:

(See Appendix 8)

Overall, 40% said that their parents desired better opportunities for them; 25% said that they supported their children's choice to go to university; 11% said that they wanted them to have a better education, and a further 9% wanted their child to go because other family members had previously gone; 1% gave other reasons; 5% believed that university would lead to greater financial opportunities in the future; and 9% did not provide any data.

Pupils who suggested that their parents did not want them to go to university gave the following responses:

- Support pupil choice;
- Never mentioned;
- No data.

These are shown in Table 5.50:

(See Appendix 8)

The majority of pupils (45%) did not provide any data. However, 32% said that this was because their parents supported their choices and a further 23% said that going to university had never been mentioned in their household.

Pupils were then asked: **What kind of job do you want in the future?** Responses to this question were coded based on standardised socio-economic guidelines, as shown below:

- A (e.g. higher managerial, administrative, professional – e.g. chief executive, senior civil servant, surgeon);

- B (e.g. intermediate managerial, administrative, professional – e.g. bank manager, teacher);
- C1 (e.g. supervisory, clerical, junior managerial – e.g. shop floor supervisor, bank clerk, sales person);
- C2 (e.g. skilled manual workers – e.g. electrician, carpenter);
- D (e.g. semi-skilled and unskilled manual workers – e.g. assembly line worker, refuse collector, messenger);
- E (e.g. casual labourers, pensioners, unemployed – e.g. pensioners without private pensions and anyone living on basic benefits);
- No data.

These are shown in Table 5.51:

(See Appendix 8)

Overall, 1% said that they wanted to work in a Group A area of employment; 54% said that their future employment would fall into Group B; 7% said that future employment would be in Group C1; 15% indicated aspirations to be employed in Group C2; 8% wanted employment in Group D; and a further 15% did not provide any data.

What kind of learning/exam results do you need to get for it? Identified responses were:

- GCSEs and A levels;
- Vocational FE and work-based training;
- HE;
- Don't know;
- No data.

These are shown in Table 5.52:

(See Appendix 8)

Overall, 49% said that their 'dream job' required them to complete GCSEs and/or A level qualifications, 13% believed that they would need to complete FE or vocational training, 17% felt that they would have to go to university, 12% did not know what qualifications or training they would need for their desired job, and 9% did not provide any data.

Are you willing to do the training in order to get the job you want in the future? They responded:

- Yes;
- No;
- Maybe;
- Don't know;

- Other;
- No data.

These are shown in Table 5.53:

(See Appendix 8)

Overall, 90% said yes, they were prepared to do the training needed for their desired job; 3% did not know whether they would do the training required or not; 1% gave other responses; and 6% did not provide any data.

In order to ascertain if other people (apart from UoP students) had spoken to them about the UoP they were asked: **Has anyone, other than the students, talked to you about the UoP?**

They responded:

- Yes;
- No;
- Don't know;
- Other;
- No data.

These are shown in Table 5.54:

(See Appendix 8)

Overall, 37% said that others had spoken to them about going to UoP, 54% had not; 3% did not know whether or not anybody had spoken to them, and 6% did not provide any data.

The pupils were asked who exactly had talked to them. Their responses were:

- Teachers;
- Family;
- People from the University;
- Other people the pupils know.

These are shown in Table 5.55:

(See Appendix 8)

Overall, 11% had talked with their teachers, 49% said that their family had spoken to them, 36% had spoken with people from the University, and 4% said that other people they knew had spoken with them.

In order to find out if the pupils had previously had exposure to similar interventions outside of those run by the UoP they were asked: **Has anyone, other than the students, ever given you leaflets or said anything about going to university?** Identified responses were:

- Yes;
- No;
- Don't know;
- Other;
- No data.

These are shown in Table 5.56:
(See Appendix 8)

Overall, 26% said yes, they had been spoken to or given leaflets about going on to HE, 65% said that they had not, 1% did not know whether or not somebody had spoken to them, and 8% provided no data.

Of those pupils who replied that they had been given additional information about going to university, they were asked: **Who had given them that information?** Responses were as follows:

- University (in town/on campus);
- Family;
- School;
- Other people the pupils know.

These are shown in Table 5.57:

(See Appendix 8)

Overall, 66% said that this was given to them by people from different universities, on campus, in school, in town or elsewhere; 16% said that members of their family had given them additional information, while 13% had been given talks or leaflets by people at their school, and 5% said that other people they knew gave them additional information.

5.6 Summary of Pupil Focus Group Data Pre-Intervention

Overall and rather interestingly, the pupil focus groups suggest a somewhat mixed picture of the effectiveness of the past UoP interventions. There was a very high percentage of pupils who wanted to go to university (71%), even though only 58% reported that they had previously had university students in their schools, despite all five schools having pre-existing links with a number of universities. Approximately 50% said that having students in their classes had not changed their view of their future or education. Only 40% thought that their teachers wanted them to go to university. Only 36% said that they had people speaking to them about going to the UoP.

5.7 The Post-Intervention Situation

In the last week of the summer term 2009 we were able to re-interview 23 of the earlier sample of 30 educational staff about how they felt the intervention programme had gone, as well as about how it might be improved. The slightly smaller numbers reflect how difficult it is to conduct research in the last week of the academic year.

Staff members were asked: **What activities of ours did you notice that were going on in the last month?**

Their responses fell into the following categories (note that it is possible here for there to be more than one response per person, so that overall responses may be more than 100% if summed):

- On-site intervention;
- Off-site intervention;
- Buddying;
- Classroom assistance;
- Other;
- Don't know.

These are shown in Table 5.58:

(See Appendix 8)

Overall, 70% knew about the off-site interventions that had occurred, and another 70% knew about particular activities that had taken place in school by students from the University. Only 30% mentioned the buddying that had taken place and another 30% mentioned classroom assistance, as two of the activities. One member of staff was not aware of any particular activities during the interventions period.

They were asked: **What effects do you think these activities had on: the school as a whole, the classes that were involved, individual pupils who were buddied, and groups in the classrooms involved?**

Responses were as follows:

- Positive;
- No effect;
- Negative;
- Don't know.

These are shown in Table 5.59:

(See Appendix 8)

The overwhelming majority (87%) felt that, overall, the effects had been positive; 4% felt that there had been no impact; and 9% were not sure whether or not there had been an effect on the school as a whole, classes that were involved, individual pupils who were buddied, or groups in the classrooms involved. Reassuringly, nobody felt that there had been a negative impact of any kind.

From those who said that there had been positive effects, the following benefits were suggested:

- Greater awareness of university;
- Greater links with university;
- Role models for pupils;
- Additional support in lessons;
- Curriculum enrichment;
- Other.

These are shown in Table 5.60:

(See Appendix 8)

Overall, 80% said that one of the positive effects was greater pupil awareness of university; 50% thought that the additional support in lessons was positive for the teachers involved and that pupils would tend to achieve more as a result.

Although on the whole the effects had been positive, the following responses were offered as reasons why the effects may not have been as positive as they could have been:

- Organisation, planning and timing;
- Lack of student enthusiasm or expertise;
- Other.

These are shown in Table 5.61:

(See Appendix 8)

Overall, 13% said that there were issues with organisation, planning and timing, and 13% said that the lack of student enthusiasm or expertise in some cases meant that pupils did not benefit as much as they potentially could have.

Were the activities well organised? They responded:

- Yes;
- No;
- Don't know.

These are shown in Table 5.62:

(See Appendix 8)

Overall, 65% believed that the activities were, in general, well organised; 22% thought that they were not; and 13% did not know either way.

Of those who said that they were well organised, the following positive aspects were identified as reasons for this:

- Time of year;
- Management within time constraints;
- Students' enthusiasm.

These are shown in Table 5.63:

(See Appendix 8)

Overall, 13% who thought the activities were well organised thought that this was because of the time of year, 53% thought that the project was well managed given the time constraints, another 53% thought that student enthusiasm played a part, and 27% did not give a reason for how/why it was well organised.

How could they be better organised? Suggestions for improvement were categorised as follows:

- Timing, planning and greater consideration of school agenda;
- Communication between all parties involved;
- Target different students;
- Cannot be better organised;
- Other.

These are shown in Table 5.64:

(See Appendix 8)

The most popular response (48%) was that timing, planning and consideration of the school agenda could have been improved; 30% thought that there had been a lack of

communication in one way or another, be it within the school itself or between the University and the school, and this should be another area for improvement.

In future activities of this kind how could things be different in terms of content, organisation, etc (what sort of thing would you like to do and how)? There was a range of responses to this question, and these have been categorised in the following way:

- Wider pupil and parental inclusion;
- Greater meaning and ownership for pupils;
- Greater staff and tutor involvement;
- Prior information on students and numbers;
- More students;
- Follow-up and long-term commitments;
- Enhanced and advanced planning;
- Other;
- Don't know.

These are shown in Table 5.65:

(See Appendix 8)

The most frequent suggestions for future activities were: to give greater meaning and ownership for pupils (39%), use of enhanced and advanced planning (39%), wider pupil and parental inclusion (30%), greater staff and tutor involvement (30%), follow-up activities and longer term commitments (30%).

Is there anything else you would like to talk about related to the University of Plymouth's involvement in schools? Responses were categorised as follows:

- Stronger long-term relationships;
- Implementing suggestions for improvements (responses listed in Table 5.64);
- General positive feedback;
- Other.

These are shown in Table 5.66:

(See Appendix 8)

Overall, 35% talked about their desire for stronger long-term relationships between their school and the UoP; 35% reiterated the importance of implementing the improvements previously mentioned if the University is to be involved with the schools (see responses listed in Table 5.64); 39% gave general positive feedback about their experiences with the University.

Other than the activities like these that we have been trialling, what do you think are the most powerful ways of raising the educational aspirations of pupils from disadvantaged backgrounds? Their responses were:

- Wider pupil participation in university interventions;
- Raising parental awareness and aspirations;
- More positive role models;
- Educate and raise awareness of opportunity;
- Other.

These are shown in Table 5.67:

(See Appendix 8)

Overall, 57% thought that one of the most powerful ways of raising the educational aspirations of pupils from disadvantaged backgrounds was through education and raising awareness of available opportunities, 35% thought that using role models would help, and another 35% thought that raising parental awareness and parental aspirations would help. Overall, 26% thought that wider pupil involvement in university interventions would help, 9% thought of other suggestions, and 4% did not provide any data.

5.8 Staff Data Post Intervention

The staff interviews paint a very positive picture of the interventions indeed. A very high percentage (87%) held the view that the interventions had positive effects, although a very small minority mentioned logistical, organisational issues. A very high proportion (65%) thought that the activities were well organised. Suggestions for improvement in future focused upon better planning and more 'ownership' of activities by pupils.

5.9 Pupil Focus Group Data Post Intervention

For the second part of post-intervention data collection, we asked the pupil focus groups to report on the quality, effectiveness and efficiency of the intervention activities. In general their responses were extraordinarily positive, as follows (note that the sample size is reduced from that in the pre-intervention focus groups because of absence towards the end of term).

What did the students in your class do? Responses were as follows (note here that only one major or first response per pupil is used):

- WP and Aimhigher activities;
- Off-site activities;
- Classroom support;
- Informal chats;
- Don't know;
- No data.

These are shown in Table 5.68:

(See Appendix 8)

Overall, 39% identified WP and Aimhigher activities, 7% identified off-site activities (visits to UoP campus), 37% identified in-class support provided by the students, 12% identified informal chats, 2% did not know what the students had been doing during the intervention period, and 3% did not provide any data.

What activities did the students do with you individually? Responses were as follows:

- Nothing;
- 'Buddying';
- In-class support;
- Questions and answers (Q&A) about university, future aspirations and school;
- Informal conversation;
- Other;
- No data.

These are shown in Table 5.69:

(See Appendix 8)

Overall, 39% identified in-class support, while 18% did not provide any data; this could be because of pupil attitudes regarding the perceived exclusiveness of the 'buddy' relationship – only 7% had been 'buddied'. A further 17% said that the students had done nothing with them on a one-to-one basis, again highlighting the perceived exclusivity of the 'buddy' relationship. In all, 11% mentioned discussing, on a one-to-one basis, their own views of HE with the students, and 7% mentioned that they had had informal conversations. A further 1% gave other responses.

They were asked to think about all of the activities they had participated in over the course of the intervention period and to identify positive and negative features. Positive responses were as follows:

- Information about university;
- In-class support;
- Approachable students;
- Break from the norm;
- Off-site and enrichment activities;
- Don't know;
- Other.

These are shown in Table 5.70:

(See Appendix 8)

Overall, 39% referred to providing more information about university and their future opportunities, through WP activities and informal conversations; 19% mentioned the in-class support; and 14% said that the most positive aspect of the intervention for them was that the students were friendly and approachable. A number of pupils (8%) said that the most positive aspect was the visit to the UoP campus, 8% did not know what the most positive part of the intervention had been, 7% said that the break from the norm was the most positive part, and 5% gave other responses.

Responses relating to what they perceived to be the negative aspects were as follows:

- Boring or unchallenging activities;
- Need more activities and information;
- Intrusion of personal space;
- Break from the norm;
- Exclusivity;
- Don't know;
- Other.

These are shown in Table 5.71:

(See Appendix 8)

Overall, 60% could not name any negative aspects of the interventions, thus suggesting that they were well received by the pupils; 14% said that the activities were not challenging enough; and 8% thought that some of the intervention activities were too invasive of their personal space, especially those pupils who wanted to talk with friends during lessons. Because of the presence of students, the pupils felt that they had to remain on task rather than chat. Some 6% did not like the break from the norm, citing missing lessons such as PE, and others felt that the teachers may have behaved differently because of the presence of the students or researcher in class. A further 6% said that they needed more activities as well as information about university and future possibilities; 3% said that one negative aspect of the intervention was the perceived exclusivity relating to access to the students – this could be a knock-on effect from the buddying activities which formed a significant part of this intervention; 3% said other reasons.

One of the intervention activities was a visit to the UoP campus. Four schools took advantage of this activity. This meant that some of the pupils who took part in the focus groups had visited the campus. In this section the questions were designed to find out how effective these visits were; whether the pupils could identify positive and negative features of their visit; and whether the pupils who had not had the opportunity were now more interested in visiting and, if so, what sorts of activities they would like to do.

They were asked if they had visited the UoP during the preceding four weeks. Their responses were either:

- Yes; or
- No.

These are shown in Table 5.72:

(See Appendix 8)

Overall, 45% had visited; however, the majority (55%) had not. This equates to the following: across the two secondary schools, 44% had visited and 56% had not; and in the two primary schools it was split 50:50.

Positive aspects of the campus visits were as follows:

- Greater awareness about university;
- Hands-on activities;
- Being off-site;
- No data.

These are shown in Table 5.73:

(See Appendix 8)

Overall, 61% said that hands-on activities were the most positive part of visiting the campus (examples of these included making short films, participating in science experiments, and using origami to make 3D shapes), 24% said that the visit generated a greater awareness about university life, 11% did not provide any data, while 4% simply liked being away from the school for a day.

Negative aspects of the campus visits were as follows:

- Break from routine;
- Don't know.

These are shown in Table 5.74:

(See Appendix 8)

The vast majority (93%) were unable to suggest any negative aspects relating to the campus visits. The other 7% believed that the visit meant that they would have to catch up with missed school work on their return.

They were asked if anyone had spoken to them about visiting the UoP campus during the preceding four weeks. Their responses were:

- Yes;
- No;
- Don't know.

These are shown in Table 5.75:
(See Appendix 8)

The majority (87%) said that they had been spoken to about a UoP campus visit in the preceding four weeks, 7% said that they had not, and 6% did not know.

They were asked who had spoken to them about visiting the UoP campus. Their responses were as follows:

- UoP students;
- Other people from UoP campus;
- Other.

These are shown in Table 5.76:

(See Appendix 8)

Overall, 98% said that it had been the UoP students who had given them information about the UoP, 1% said that it had been someone else from the UoP, and the other 1% said that it was other people altogether.

Have the intervention activities altered your view about university? Responses were as follows:

- More positive;
- No change;
- More negative;
- Don't know.

These are shown in Table 5.77:

(See Appendix 8)

Overall, 80% said that they felt more positive, 16% reported no change, 2% said that they felt more negative, and a further 2% did not know.

Pupils who had not visited the UoP were asked if they would have liked to visit the campus. Their responses were:

- Yes;
- No;
- Don't know.

These are shown in Table 5.78:

(See Appendix 8)

The overwhelming majority (95%) said that they would have liked to visit the campus, 1% did not, and a further 4% did not know.

They were then asked what activities they would have liked to have participated in. Their responses were as follows:

- Subject-specific activities;
- Tours and learning about university;
- Buddying students and participating in day-to-day university life;
- Don't know;
- Other.

These are shown in Table 5.79:

(See Appendix 8)

Overall, 44% said that they would like to participate in subject-specific activities, while 36% said that they would like to tour the site and learn more about university. A further 15% would like to shadow a student for a day and to be buddied, while 4% did not know and 1% said other activities.

The final question was: **Are you more or less likely to go to university as a result of all the intervention activities over the preceding four weeks?** Responses were as follows:

- More likely;
- No change;
- Less likely;
- Don't know.

These are shown in Table 5.80:

(See Appendix 8)

The majority of the sample (86%) reported that they were now more likely to go to university as a result of these intervention activities, 10% said that there had been no change, and 2% said that they were now less likely to go to university. A further 2% did not know if the intervention activities had changed their opinion or not.

5.10 Summary of Pupil Focus Group Data Post Intervention

These pupil focus groups were used as a direct quality monitoring mechanism, in that they questioned the pupils regarding their experiences. WP activities were perceived as the main vehicle for disseminating information about HE in general. Overall, 60% said that there weren't any negative aspects of the intervention activities.

Fewer than 50% of the pupils were able to visit the University, and the most popular activities were those that were 'hands on'; 87% had been spoken to about visiting the UoP campus; and 86% said that they were more positive about going to university because of the interventions. This is a very high positive response given the short period of intervention activities and the difficulties with setting up the intervention activities in the first place.

5.11 Student Questionnaire Post Intervention

All of the students were given a questionnaire to complete at the end of the four-week interventions period. These findings are cautiously optimistic about the effects of the intervention activities (for this data only one or the major response is used per person).

Prior to your HEFCE/SAS experience, have you helped in any capacity at the school where you conducted your HEFCE placement? Their responses were:

- Yes;
- No;
- No data.

These are shown in Table 5.81:

(See Appendix 8)

Overall, 57% said that they had not had previous experience in their placement school; 24% had, and therefore had previous relationships in place to develop and build upon; 19% did not provide any data.

Did you have contact with your buddy's form/class during this time? Their responses were:

- Yes;
- No;
- Don't know.

These are shown in Table 5.82:

(See Appendix 8)

Only five students responded to this question, of whom: 60% did have contact, 20% did not and 20% did not know.

Prior to doing the buddying, how did you feel about doing it? Their responses were:

- Confident;
- Excited;
- Worried/nervous;
- Other;
- No data.

These are shown in Table 5.83:

(See Appendix 8)

The majority (43%) felt worried or nervous, 23% felt excited and 10% were confident. These figures may be explained by whether or not the individual student had previous experience with pupils (e.g. PGCE school placement). A further 19% did not respond and 5% gave other reasons.

How did the relationship with the buddy change throughout your time buddying them? Responses were:

- Stronger interpersonal relationship;
- More comfortable around each other;
- No time to develop relationships;
- Uncomfortable with the situation;
- No data.

These are shown in Table 5.84:

(See Appendix 8)

Overall, 33% said that they felt more comfortable as time went on, and 29% said that they developed stronger relationships; 10% said that there was not sufficient time to develop relationships, and a further 10% felt uncomfortable with the situation. Another 18% did not provide any data.

How do you feel the buddy benefited from the buddying? Responses were:

- Better understanding of future options;
- Greater self-esteem;
- Enjoyed the attention;

- Benefited from alternative, positive role models;
- Other.

These are shown in Table 5.85:

(See Appendix 8)

Overall, 33% said that their buddy benefited by developing a greater understanding of their possible future options; 33% said that they benefited by having different positive role models; 24% said that they developed greater self-esteem; 5% enjoyed the attention; and a further 5% gave another reason.

How could the buddying experience be improved? Responses were (note that it is possible here for there to be more than one response per person):

- Better timing;
- Better communication between all parties;
- Shadowing groups rather than an individual;
- Designated buddy time;
- More tailored selection of buddies;
- Other
- No data.

These are shown in Table 5.86:

(See Appendix 8)

The main improvement (suggested by 22%) was better timing, and 20% suggested improved communications between all parties; 14% suggested improvements to buddy selections, 11% said shadowing groups, and a further 11% said designated buddy times; 11% said other improvements, and 11% did not provide any data.

Students were asked to comment on what they thought both their and the pupils' high and low points during the buddying experience might be.

Students' high points included:

- Getting to know the buddy's form/class and the positive way that they responded to the student;
- When the buddy hit a shot out of the field to score a rounder the student celebrated with the other pupils on the buddy's team and at that point realised that a strong relationship with the buddy had been developed;
- When the buddy pupil received two commendations for good work;
- Observing pupil interactions and being able to participate in this;
- Being able to observe the buddy in lots of different lessons and being able to discover what the buddy's talents were;

- Watching the buddy performing in a talent contest;
- Being able to build/sustain and develop a positive relationship with the buddy and gaining their trust;
- The buddy showing an interest in university, which continued throughout the intervention period;
- Learning about what the buddy's aspirations were and realising that they were far more intelligent than they thought;
- When the pupil was happy and positive and showing trust in the student.

Students' low points included:

- Attending lessons where they were not able to interact with their buddy;
- The buddy being too shy to be able to get to know them;
- A first impression of the buddy – as they came to the lesson the pupil was chewing gum, had not completed homework and was detained for spraying an aerosol during the lesson;
- Being the only student placed in the school during the first week and therefore feeling isolated;
- When the buddy was put into isolation for breaking school rules;
- The buddy refusing to try in some lessons and not realising their full potential;
- The buddy feeling that they had tried their hardest but feeling devalued;
- Having to leave at the end of the project.

Students' perception of pupils' high points included:

- When the buddy was proud of completing their work and receiving attention and encouragement from the student;
- When the buddying began and it was something new and exciting;
- The ability to have conversations with the student with 'no barriers';
- Having a student witness their achievements;
- The out-of-school activities day, where the buddy was able to splash the students on the log flume at a theme park;
- Having a student there to help with their work;
- Having a student there to cheer them on at sports day.

The low points included:

- The buddy feeling mocked by their friends because they were singled out to be a buddy;
- Feeling disappointed at the fact that they had chosen not to run in sports day, even though they were good at it;
- The buddy was upset when the student showed their disapproval at their bad behaviour;
- Being embarrassed for being told off in front of the student;
- Feeling overwhelmed by attention from the student and avoiding them in some of the activities;
- At the beginning the buddy being unsure of why the student was around.

Overall, the student questionnaire showed that despite the majority of students being initially apprehensive about the buddying, in most cases the relationships between the students and the buddies became stronger. The students provided support for the pupils by acting as positive role models and as a source of information and guidance. Pupils gained increased knowledge of possible future options and a greater understanding of their potential and abilities.

5.12 Pupil Questionnaire

We now come, lastly, to the pupil questionnaire results from the 'pre' and 'post' questionnaires administered in early June and in mid-July 2009. There are a number of reasons to believe that this data is more unreliable than other data collected from tape-recorded interviews with the focus groups, interviews with staff and the student questionnaire. These reasons are:

- The pupil questionnaire was administered by the form tutors/teachers to their classes. This may have generated bias through pupils' feeling unable to give their true views through fear of the consequences.
- The questions may have been pitched at too high a level, particularly for Year 6, who consequently show high levels of 'don't knows' (see Tables 5.87 to 5.90).
- The 'post' questionnaire was administered during the final week of term, leading to a significant proportion of 'don't knows' (approx. 15% of the total sample).
- It is also likely that the somewhat atypical nature of education in schools in the summer term of the academic year, particularly in the second half of the term, may have made it difficult for pupils to develop coherent opinions and attitudes about the matters referred to in the questionnaires given to them.

5.13 Year 6 Data – All Pupils

We have conducted two analyses of the data from the pupil questionnaire – one using all the pupils who were present in school and did the questionnaire at each time point, and another with pupils who were present twice ('matched'). Since a very large number of pupils were not at school for the final questionnaire, the response rate for the 'matched' group analyses was on much lower numbers than what we called the first 'unmatched' group.

This 'unmatched' group delivered the following results, for Year 6 pupils in the primary schools, as shown in Tables 5.87 to 5.90 below.

(See Appendix 8)

5.14 Summary of Year 6

In the data collected relating to how the Year 6 children thought they were performing academically, there are few notable changes.

On their attitudes to school, there is again little change between the 'pre' and 'post' views of pupils, except the rather bizarre changes between the two points in the percentage of pupils

saying that other children like them (minus 15% in these saying 'Yes') combined with substantial positive change in the area of views of teachers. On their attitudes and self-images, the overwhelming picture is one of very similar self-views at the two time points.

However, on the Year 6 group views of going to university, there are notable changes. The percentage of pupils thinking that they will go to university rises by 7.7 percentage points to 57.7 percentage points. The percentage thinking that their favourite teacher expects them to go to university rises by 20 percentage points?. And the percentage thinking that most pupils in their class will go to university rises by approximately 22 percentage points to 46.2 percentage points.

These are dramatic rises in expectations of going to university, of a kind that do not exist in the literature on WP at the moment. But note of course that these were relatively young children – aged 10 or 11 in summer term 2009 – and note also that they were participating in a relatively extensive intervention that added a student to their experience every day for five days a week for four weeks.

5.15 Year 8 Data – All Pupils

The Year 8 pupils in the unmatched data set also provide us with interesting data, as in Tables 5.91 to 5.94 below.

(See Appendix 8)

5.16 Summary of Year 8 Data – All Pupils

There is an extraordinary consistency to this data, comparing pre and post. If we look at these unmatched subjects, on 'in school' and 'me' there is only a fractional percentage change between 'pre' and 'post', suggesting – even more than the Year 6 data – that the 'deep drivers' are remarkably stable over time. Given that the pupils in Year 8 are two years older, this is not surprising.

But if we look at what the pupils in Year 8 are telling us, then there are changes in their expectations of HE, which although not as dramatically positive as the Year 6 pupils, are still substantial. The pupils themselves are 5 percentage points more likely to think that their education will continue on to university. They think that most pupils in their class are almost 10 percentage points more likely to think of university, and their favourite teacher is over 6 percentage points more likely to think that they – the pupil – are going to university. Given everything we noted in earlier chapters about the lack of effects of WP programmes, and given the age of these pupils, these are very promising results of our intervention as a part of our PPM.

5.17 Matched Data

As well as the data reported above we undertook one further analysis of the pupil questionnaire data, this time focusing only on those pupils where we had data at the beginning of the project (the 'pre') and the end (the 'post'). For Year 6 this meant that the sample of 78 for our first analysis dropped to 76, through exclusion of two pupils. For Year 8, this meant that our sample of 482 dropped to 377, through exclusion of 105 pupils.

Our logic in doing this analysis with 'matched' data was that there may have been biases in the samples of pupils at 'pre' and 'post' that could have generated the marked improvements in HE aspirations that we saw. It is possible that, for example, if less able pupils were not in school in the final week of term and if they were less likely to have aspirations for university, then the 'post' unmatched results simply reflected the fact that they were not there.

The changes from the earlier results for Year 6 are minimal, as we would expect given the numbers of pupils excluded in the 'matched' sample. Year 8 shows a slight reduction in the scale of the increase in aspirations between 'pre' and 'post' in the case of pupils' own rated aspirations, but an increase in aspirations for what pupils think their teachers think they are aspiring to, for the 'matched' analysis (see Tables 5.95 to 5.102 in Appendix 8).

Overall, across Years 6 and 8 the increases in aspirations are dramatic whatever kind of analysis one performs. We should add that we heard later that the bias in results concerning aspiration level being affected by pupil absence in the 'post' testing may have operated in a different direction to what we hypothesised. There was some absence of more *able* pupils at enrichment activities in the final week of term among the Year 8 sample, making the sample more predisposed to have lower aspirations, and therefore making our results all the more impressive on the 'matched' sample.

5.18 Variation among Students

We attempted one last analysis of data to see if we could identify the precise factors that may affect pupil attitudes and aspirations, using our ratings of the students who were in the schools, based upon their log books, our general observations of them over time and our reading of their own pupil observations. This we correlated with the positive/negative change of the students' 'buddy pupils' over time, using data derived from the four indices taken from the pupil questionnaire we mentioned above, namely 'my subjects', 'my school', 'me', and 'my future'. The pattern of the intercorrelations was somewhat bizarre – one would expect positive intercorrelations between high buddy scores on, say, 'my future' and students possessing a high quality of relationship with the buddy. But correlations (see Table 5.103 in Appendix 8) were mostly low, non-significant and often slightly negative.

We conclude that we failed to identify any factors that might have been important in affecting variation in buddy pupils change in attitudes over time. Given the very small sample size (only 17 buddies were used out of 24 in total because of missing data on attitudes at the starting point, finishing point, or both), and the fact that we had limited and somewhat non-relevant material to base our ratings on, this is not surprising.

5.19 Conclusions and Summary of Results from Multiple Data Sources

We have outlined in this chapter a considerable range of data relevant to testing the impact of the PPM, in terms of judging its effectiveness in raising aspirations. Staff prior to the PPM thought that certain interventions from the UoP were useful, but there were certain shortcomings. For the pupils at the beginning of the intervention, they showed quite high aspirations to go to HE (71.5% wanting to), but reported low (58.3%) levels of students being

present in their school, and only 40% of them thought that their teachers wanted them to go to HE.

At the end of the intervention, the staff painted a highly positive picture of the PPM intervention, viewing it as positive in its effects and well organised. In the focus groups a very high proportion of pupils (85.2%) reported that they are now more likely to go to HE as a result of the intervention.

The debriefing questionnaire from the students is similarly positive about their experiences and about the relationship between them and their buddies.

The final data set – derived from the pupil questionnaire given to all Year 6 and Year 8 – shows little change in the ‘deep drivers’ of pupils in terms of their views of school, of their own achievements and of themselves, but does show a marked change in their aspirations for going to HE, and a reported marked change in what pupils think their classmates and their favourite teacher expect of them. Put simply, their behaviour – or predicted behaviour – is changing, although their underlying character, values and predispositions may be remaining more stable, a not unusual finding in research on behaviour-orientated interventions such as ours. In most of the literature, the ‘insides’ of pupils later change to reflect their changed behaviours (or anticipated behaviours in our case), but we were unable to continue following the sample of pupils to find out if this happened in our sample, too.

In the next chapter we now move beyond the presentation and discussion of our results to discuss in detail their implications, as we see them, for research, for practice and for policies.

Chapter Six

Testing the PPM: Conclusions and Implications for Future Research, Practice and Policy

David Reynolds, Jon Nichol, Linda la Velle, Judith Gunraj, James Goulbourn, Nicola Iji, Gemma Parkinson, Carole Sutton and Iain MacLeod

6.1 Introduction

We have reported in this study on our development of a model of school/HE links that we believe will have wide applicability and utility to the English educational system. We were able to test only one part of it in the time we had available, namely an intensive, well-trained input of students into the lives of individual pupils and classes, in a sample of schools. But the results of this intervention upon the levels of aspiration of the pupils targeted – especially in the primary schools – were dramatic, especially given the very short space of time that the intervention lasted. We are unaware of any other intervention of this kind that has achieved similar results.

The results we report are even more impressive, given the following circumstances that might have predisposed to other kinds of results:

- The schools chosen were already closely linked with the UoP in terms of school liaison, school placement and more generally, so would already have had considerable external influences potentiating their improvement. One might therefore have expected them to be somewhat ‘maxed out’ already in terms of the aspirations of their pupils.
- The schools were all situated in socially disadvantaged areas, where interventions may have found it hard to produce positive effects.
- The intervention was implemented in the summer term when schools lose pupils and have a looser, less structured feel organisationally, meaning that any input may well not be impacting on an ordered educational system, as it were.
- The intervention was aimed at younger pupils than has normally been the case with similar interventions historically, with the possibility that the whole discourse about university aspirations might have been seen as non-relevant by them.

6.2 Benefits of the PPM to the HE Sector

In addition to the clear benefits for the pupils of PPM, it is also clear that there are large potential benefits from an HE perspective to PPTM activities such as those we report on here.

In terms of process, HE involvement can cover:

- HEI and school teams working on a subject/topic-specific area to enhance the knowledge and understanding of the pupils (master classes);
- Science, technology, engineering and mathematics (STEM) four-day programmes (one day per subject per week);
- Stand-alone specialist days along the same lines;
- Challenge days;
- Digital age activities;
- HE student support/coaching/mentoring/clubs/tutoring/sessions/ pre and after school;
- Trips or visits;
- Celebration events;
- Staff development/parental and more general involvement;
- Taster days;
- Workshops on a sequential basis over the time span allocated;
- Coaching/mentoring /tutoring/peer support;
- Club support over an extended period;
- Problem solving;
- Modern foreign languages – support for language learning;
- Summer school/intensive weeks;
- SWJU;
- HAIRs (subject specialist);
- PEIRs (pedagogic specialist);
- HE student-in-residence (subject specialist);
- HE student-in-residence (pedagogic specialist);
- ELF (school member of staff as HE lecturer/senior lecturer/reader/professor).

The roles of HE students can also be very large in number, so large indeed that it should be possible to match individual students with opportunities that will potentiate their own professional and personal development in addition to that of their pupils.

Additionally, there is a wide range of benefits from the PPM for HEI directly. These are:

- *Enhanced employability of HE students*
This is enhanced through the professional training programme for working in schools. Training ensures that they work fully and effectively within a professional milieu and are accepted as proto-professionals. The SAS training programme for HE students working with disadvantaged pupils has a clear employability focus as a precursor to ITT. The PPM extends this training to all HE students working in schools.
- *Enhanced viability of HEI initial teacher and continuing education programmes*
Crucially, the PPM can solve the problem of financing HEI involvement in pre-, initial and continuing professional development courses through moving the bulk of the T (teaching/training) costs from the HE to the school sector. Related to this is the concept of integration of the HEI and school workforce for professional development, with a concomitant reduction in HE staffing costs.

- *Promoting HEI enterprise agenda*
The PPM also supports the HE enterprise agenda. HEIs need to access alternative forms of funding and support in an era of diminishing state funding. Schools are major employers and contributors to their local economies. The PPM is an entrée for HEIs to benefit from contractual opportunities that working with schools, LAs and the wider children's workforce can provide.
- *QAA accreditation for schools from HEIs*
Specifically and directly, the PPM provides an integrated, holistic, QAA-accredited programme for whole school workforces. Accreditation ranges from Certificate to Doctoral level. It involves Foundation and Honours Degrees and the award of PGCerts, PGDips and Masters and Doctoral Degrees. As an awarding body, the HE sector can benefit directly from the funding stream that accreditation provides.
- *Academic enhancement of HE students*
HE students enhance and deepen their discipline and domain knowledge through having to teach their subject to pupils, particularly those in the GCSE, Advanced Subsidiary level (AS level) and A level age ranges. They can also use schools as research/enquiry sites for HEI assignments.
- *Potentiating the HE research agenda*
The PPM has an HE research dimension, potentially very important in demonstrating impact. The HE sector's educational research and development benefits from close involvement of HE staff with school staff. Major national examples of this include the EXEL Literacy Project at the University of Exeter (Wray and Lewis, 1997) and the 'design initiative' elements of the TLRP Interactive Education Project at the University of Bristol (see, for example, Baggott la Velle et al, 2003). Both projects saw HE staff working in schools and in collaboration with teachers in professional and curriculum developments.
- *Enhanced recruitment to HE*
Finally, HE can benefit in terms of recruitment: social background, quality and numbers.

6.3 The Implications for Future Research

We noted earlier that it is remarkable that so little has been done historically to conduct research on the core issues concerning WP in general and school/HE links in particular. One might have expected detailed research on a number of issues, given their national importance:

- The nature of the aspirations for HE in different sections of the population;
- The strategies that may affect those aspirations;
- The long-term effects of such strategies;
- The blocks to aspirations, and how they might be removed.

But, aside from the limited work outlined in Chapter One, there is little to draw upon to generate agreed findings or an agreed body of knowledge. Our views on how to improve this situation are as follows.

More research

We need more research initiatives, such as the HEFCE-funded studies, to ‘pump prime’ work in this area. Given the tendency for policy-related research to find it difficult to compete against more ‘pure’ research in the competition for Research Council funding – and no research can be more ‘policy related’ than that conducted in this area – then more investment of resources is necessary. More research means more researchers, means more visibility for WP-based issues.

Research into the entire PPM

We have outlined in this report how even the very brief, limited application of a partial version of the PPM has had positive effects in improving aspirations for HE entrance in groups of disadvantaged children. If the other aspects of the PPM outlined in Chapter Three – such as school staff being placed in HE and HE staff being placed in school – can additionally be implemented and evaluated, then there may be even more positive effects to report through an additive synergy of PPM programme components and their interaction effects.

Long-term follow-up studies

Our sample of young people achieved major changes in only four weeks of the intervention. But the question remains whether these effects are longer term or will ‘wash out’ like so many other educational interventions. Many interventions aimed at academic outcomes ‘wash out’ after six months of the intervention ending, and many show that the young people on the particular programme are indistinguishable in their characteristics from those not on it within a few more months.

Our intervention here was of course concerned with a ‘softer area’ than that of academic outcomes, being concerned with aspirations into the future rather than competences in the present. However impressive are these gains in aspiration levels, will they survive over time? Do they survive longer with certain groups of pupils – girls, for example – than others? We need to know, and longer term follow-up of the PPM sample is therefore clearly necessary. The same need applies for the long-term dimension to all other research in this area.

Possible contextual variability

Our PPM was designed to be used in certain lower socio-economic settings – not in upper socio-economic status catchment areas where aspirations would already be high and not in a very disadvantaged setting, where they would be very low, but in *moderately* disadvantaged settings where there is, for example, enough residual respect for HE to ensure that students arriving in school would have received a welcome rather than being ostracised.

But is the PPM, particularly the limited parts of it that we were able to implement, effective in those other settings? Is it only a contextually *specific* innovation or an innovation *generally* effective across contexts? If there is evidence that it is not equally effective across settings, then we need to develop it further to optimise its effectiveness. It is possible that in highly disadvantaged settings more attention may be needed to be paid to parents/carers of children as they may have a considerable dampening effect on aspirations not seen in our Plymouth settings. In lower middle-class settings also, aiming to generate aspirations when they are already likely to be present may not be a useful way forward – more useful might be a focus for a marginal lower middle-class group on how HE may actually be afforded, given the focus of financial incentives upon lower social class groups.

How contextually applicable is the PPM? We need to know. How does it need to change if it does not universally produce effects, but only in specific contexts?

Injecting an efficiency dimension

Our evaluation of the PPM necessarily focuses here on issues to do with its effectiveness – does it ‘work’ in improving pupil outcomes? But assessment of the utility of interventions as possibly broader public policies – especially in times of resource constraints – needs to also relate potential educational benefits to their actual costs. The aspects of PPM evaluated in this project – school visits by students – are likely to be very cheap, because they are ‘overheads covered’ interventions in which a programme is piggy-backed upon ‘paid for’ students and funded educational institutions.

But aspects of the PPM only now being planned for – school staff in HE, HE staff in school, for example – may have additional, more marked costs. If one evaluated the broad PPM, will it still be as cost effective as the school/HE links run through students? And will any of the other interventions in this area of policy – if evaluated on their ‘efficiency’ as well as their effectiveness – be equally useful? Again, as above, we need to know.

Testing the validity of our findings nationally

Additionally, we need research that is orientated to testing out the reliability of our findings in other school settings to see how generalisable they are. Our ‘before’ data, in particular, needs to be checked out elsewhere in the following areas:

- We show a marked drop in aspirations to go to university between Years 6 and 8. Is this a national situation?
- We show quite high levels of aspiration among pupils to go to HE overall, by comparison with what we might have been led to expect. Is this a national situation?
- We show quite low levels of awareness of some of the major conventional mechanisms of school/HE links, such as Aimhigher and schools liaison. Is this a national situation?

The need for changed research designs

Lastly, there are a number of issues surrounding the evaluation of WP activities. In the past, researchers have given questionnaires after events, and occasionally before the event as

well, to see if there has been a change. These types of survey are generally used to see whether the participants have enjoyed a particular activity and occasionally to see if there has been a shift in opinions. Although this is useful in terms of refining future activities on the basis of what has been most enjoyable, it is difficult to establish whether there has been a lasting change using this method. An additional problem with this type of surveying is that, given the fact that the pupils would have just finished participating in an activity, they may be likely to report some kind of positive change. There is also the issue of the fact that some of the pupils may have attended more than one event (EKOS Consulting, 2007), leading to a confusion of what may be causing any change.

Through research by EKOS Consulting (2007) it has been found that to have lasting impact, a number of events over time would be required. However, there has been little research activity undertaken to monitor impact at a pupil, or beneficiary, level over time. Instead, approaches have tended to view activities in isolation or 'one-offs'. One option would be to focus on changes in pupils' attitudes and what contributes to these, rather than focusing on events, as happens at present. This could be achieved through annual, or twice-yearly, surveys of target client groups or even of the complete cohort of young people of certain ages.

6.4 The Implications for Future Practice

The experience of adding a novel intervention to an already running programme – as reported here – was educative in itself. Doing it, we learned a lot about what is necessary to generate optimal practice within our programme, and we think that it is likely that our findings are appropriate to the very wide range of programmes now being trialled in the area of school/HE links. We therefore note here our suggestions to improve practice.

Training needs to be optimised in quality

The additional training that we gave could be improved by the following:

- A focus upon aspects of HE not covered at present, but likely to be important issues in schools for their pupils, like financial issues, accommodation, personal safety, etc;
- More modelling of the behaviours for students who 'work' with 'buddies' and small groups. These should cover the teacher effectiveness behaviours that 'work' as well as the more therapeutic behaviours that are shown to be effective 'one on one';
- More support for students during their time in schools (where we used our research assistants) to 'buddy' the students, but there are other supports – visits by programme personnel, telephone and contact for example – that might have been useful;
- Better 'matching' of the students with their buddies, where our use of gender and teacher training subject area could have been extended by greater use of more affective social and emotional characteristics. We acknowledge though that there are issues of time, appropriateness, intrusiveness and availability of approaches/instruments here that may limit matching on more characteristics;
- Better, more productive interaction between all the various organisations and sub-units within organisations that are involved in school/HE links. All the research

evidence is that the reliability of interventions puts a ceiling upon their validity. To put it another way, good ideas or programmes may not get good outcomes if they are not consistently and reliably implemented. Our own intervention involved the LA, schools, HE staff, HE students and a programme and evaluation team – it is possible that ensuring consistency of approach needed to be higher on our list of priorities. This would necessarily have involved time in briefings that we did not possess because of the short lead-in time for our work.

Other improvements to our, and most likely to other, programmes involve the following areas.

Better induction of schools

We made a point of visiting all of our schools that were involved in the PPM and of meeting the head teacher and associated staff. In some of the schools we were able to tour them, visit classes, speak to teachers and interact with pupils in order to explain what would be happening as the programme impacted them.

This informal system of communication could have been usefully supplemented by the use of more formal means – either electronic or hard copy – that went to everyone in the school to ensure that they were informed about what was happening with the PPM before it began. We did formally induct teachers and pupils before the activities in their interventions and their focus groups respectively, but this may not have been as effective as ensuring the fullest knowledge about the project *before* it ever began actively to impact their lives.

Better initiation of the buddy pupil

As will have been clear earlier, we laid particular emphasis upon the minimum of one hour per day of interaction between each of our students and their specially selected ‘buddy’ pupil. There is some evidence of a degree of awkwardness in some of the initial student/buddy meetings that might have been eased by the student shadowing the buddy through a morning or afternoon of school experience, for example, and/or by a special setting for the initial student/buddy meeting, perhaps outside the formal authority structure of the classroom.

More university-based activities

The visits to the University for the pupils involved were regarded as popular and more likely to make the pupils want to apply to university. Even in this specially designed programme of the PPM though, only a proportion of the pupils visited the University.

6.5 The Implications for Future Policies

As well as having implications for research and practice in the area of school/HE links, our PPM research reported here has possible implications for national policies, too. Here we summarise what those implications may be, expressed in the form of recommendations for national policy action:

1. *Start interventions with younger pupils.* The results for our intervention show that the PPM had greater effects in boosting the aspirations of the younger Year 6 pupils than those of Year 8. Very often interventions in schools, by contrast, are limited to pupils older than Year 8 and to secondary schools only.

Moving interventions to earlier age phases would seem to be sensible, although if this were done there would need to be attention given to the transition phase between Key Stages 2 and 3 and to ensure that aspirations do not drop as pupils get older, in the way they seem to at present in our sample. Given the fact that a class in primary school is the unit in which teaching of all subjects takes place, by contrast to the different set and class experiences that are likely to be the secondary school experience, then the presence of a student within the same group of pupils all day long may have powerful effects. It is possible that a 'balance effect' is also operating in this setting where, because the class is together all the time, any change in individual aspirations has effects in changing the collective 'balance' of the class.

2. *Focus upon the activities that are effective/efficient.* Our results show that the PPM has been superimposed upon what seems to be a rather varied set of existing programmes, in terms of the perception of their effectiveness by those within the educational system. The SAS has recognition, a clear range of activities, and a positive impact expressed about it – 37% of our staff respondents saw that it raised aspirations, and the same proportion that it raised awareness; 50% thought that it gave staff useful support. The G&T programme also had high 'reach' in terms of staff awareness and ratings of effectiveness.

But Aimhigher, HE/schools liaison and the activities of HE students on ITT courses who were on placement in the schools all had less visibility, less clarity in terms of what they were concerned with, and lower effectiveness ratings from staff, although it is possible that impact upon pupil achievement may still have been positive over time (University of Plymouth, 2005).

We cannot calculate the relative costs of these five interventions to compare with the perceptions of their effectiveness, so we cannot compute any 'efficiency' or 'cost effectiveness' levels, but it seems likely from what we do know of the situation nationally that the three latter activities may not be as cost effective as the first two – more recent – activities.

Concentrating upon relatively low cost, but high perception, programmes may be sensible. Alternatively, it may be possible to specify what 'works' in the Aimhigher and conventional HE/school liaison activities, so that a more defined effective 'technology of practice' could be featured nationally. The latter would require probably quite considerable research and dissemination activities were it to be done.

3. *Addressing the teachers' and school cultures.* It is a salutary experience to look at the data we collected upon teachers' views of their pupils' aspirations of going to HE. In the focus groups a high proportion of teachers (87%) identified parental background and attitudes as a significant problem. Before the intervention – in the 'steady state' – 42.3% of the primary pupils said that the teacher who was most liked

by them thought that they would go to university. For the secondary sample the comparable figure was 45.6% (on the pupils' questionnaire in both cases). One wonders what the comparable figures would be for the teachers the pupils thought they liked less.

It is also interesting that for the primary and secondary pupils (marginally in this latter case) their own assessment of whether they were going to HE was higher than that of the teachers on the pupil questionnaire. In the focus groups also 103/144 pupils replied positively to the question, 'Do you want to go to university?'

It is, lastly, interesting that although parents had been identified by staff as the major negative factor in shaping pupil aspirations, in reply to the focus group question 'Do your parents want you to go to university?' 84/144 pupils said yes, 15 said that their parents might like them to go and 18 said that their parents would not mind. Only 8 said that their family was negative towards HE.

It seems that teachers may need to possess more positive attitudes to their pupils, their aspirations and their parents for the WP agenda to be addressed effectively in schools. It may be that a somewhat negative culture may be in existence that reflects:

- Past 'problem pupils' with low aspirations who cause disproportionate problems for teachers in schools;
- Historically low levels of entry to HE generally, and from disadvantaged populations in particular;
- An absence of knowledge about the contemporary WP agenda, its importance for the nation's future and its importance for the individuals who need to be propelled away from forming an 'underclass' of low-aspiration, low-achievement pupils devoid of HE experience in the future.

How might this culture be combated? Provision of clearer guidelines about what schools should be doing to raise aspirations may be part of the solution. More attention to WP issues within ITT courses may be another solution, particularly since the proportion of students on them who may have had good information through student volunteering may not be high. Whatever the precise policy levers that may be necessary to combat these likely cultural problems, we need to acknowledge, with Warren (2005), that many well-intentioned programmes end up with disappointing results if they fail to root with, and engage with, stakeholders at local school level.

Appendix 1

Glossary of Terms and Abbreviations

ACT	Association of Citizenship Teachers
A level	Advanced level
AS level	Advanced Subsidiary level
ASE	Association for Science Education
ASTs	Advanced Skills Teachers
BACE	Brunel Able Children's Centre
BPRS	Best Practice Research Scholarship
CARA	Creative Action Research Awards
CAT	Cognitive Abilities Test
CETLs	Centres for Excellence in Teaching and Learning
CfBT	Centre for British Teachers
CME	Centre for Mathematics Education
CPD	Continuing professional development
CRB	Criminal Records Bureau
CY 1-4	Class/year group activity 1-4
D&T	Design and technology
DCSF	Department for Children, Schools and Families
DfES	Department for Education and Skills
EAZs	Education Action Zones
ELFs	Expert Learning Fellows
ERIC	Education Resources Information Center
ESRC	Economic and Social Research Council
EXEL	Exeter Extending Literacy
FSM	Free school meals
G&T	Gifted and talented
GCSE	General Certificate of Secondary Education

HA	Historical Association
HAIRs	HE Academic Experts-in-Residence
HE	Higher education
HEFCE	Higher Education Funding Council for England
HEIs	Higher education institutions
ICT	Information and communications technology
ITE	Initial teacher education
ITT	Initial teacher training
JULIs	Junior Universities Learning Institutes
LAs	Local authorities
LSC	Learning and Skills Council
MECORS	Maths Enhancement Classroom Observation and Recording System
MFL	Modern foreign languages
MTL	Masters in Teaching and Learning
NAGTY	National Academy for Gifted and Talented Youth
NCEE	National Council for Educational Excellence
NFER	National Foundation for Educational Research
Ofsted	Office for Standards in Education
OFFA	Office for Fair Access
P4P	Partnerships for Progression
PE	Physical education
PEIRs	Pedagogic Experts-in-Residence
PPMPGCE	Post Graduate Certificate of Education
PGCert	Post Graduate Certificate
PGDip	Post Graduate Diploma
PPM	Plymouth and Peninsula Tri-Level Model
PROLOG	PROgramming in LOGic
Q&A	Questions and answers

QAA	Quality Assurance Agency for Higher Education
QCA	Qualifications and Curriculum Authority
QTS	Qualified Teacher Status
R&D	Research and development
RAs	Research assistants
SAS	Student Associates Scheme
SATs	Standard Assessment Tests
SCITTs	School Centred Initial Teacher Training Partnerships
SEN	Special educational needs
SG1-4	Small group activity 1-4
SSAT	Specialist Schools and Academies Trust
STEM	Science, technology, engineering and mathematics
SW GATE	South West Gifted and Talented Education
SWHub	South West HEI Excellence Hub
SWIFT	South West Initiative for Teaching
SWJU	South West Juniors University
TDA	Training and Development Agency for Schools
TISP	Targeted Intervention and Support Programme
TLRP	Teaching and Learning Research Programme
UUK	Universities UK
UoP	University of Plymouth
WP	Widening participation
YGT	Young Gifted and Talented

Appendix 2

A: Sample of Classroom Observation Instrument (completed by RA)

Date:	17/06/09
Time:	11:10
School:	School C
Class:	MS
No. of pupils in whole class:	32/33
No. of students in whole class:	2
Subject/topic class is being taught	Literacy: Family Tree Exercise
No. of students being observed:	2

Please draw a plan of the classroom. Show location of the student/pupil group. Include windows/doors/desks, educational resources etc.

Please provide a rich description of the students' activities focussing on the content, form, quality of delivery, quality of application and relationship to full class activities. How are they engaging with their group of pupils? How do their group activities relate to the rest of the class? What tasks are the students setting the pupils?	
Time (10 min intervals)	What's happening?
11:10	<p>Students await the start of the lesson's activities. Once the work has been explained to the class, the students begin talking with pupils about their work. The teacher begins to question pupils about the work completed in previous lessons. The students remain quiet.</p> <p>Students remain at the pupils' tables but with little or no interaction with pupils or class activity. Some pupils appear to be drifting off topic (drawing on books etc.) The room remains quiet.</p> <p>Student A discusses work with pupil next to her, assisting him to complete his workbook.</p> <p>Student A helps pupil next to her by handing a clip board and talking with the small group of pupils sat nearest to her.</p> <p>Student B helps the small group of pupils with whom she is sat, answering questions and explaining tasks at hand.</p> <p>Student A answers the questions asked by a girl sat next to her, but as</p>
11:20	
11:30	
11:40	

11:50	<p>she is sat at the end of the table, she is a tad detached from the group.</p> <p>Both students continue to talk with pupils about the work they are doing. Student A re-reads the task for herself while the teaching assistant explains the task to a small group of pupils.</p> <p>Both students continue to discuss work with pupils both individually and in groups.</p> <p>Student B answers queries from a pair of pupils, she moves from where she is sat and goes to the pupils' place at the desk and they ask further questions of her about their work.</p> <p>Student A is asked to check answers by members of the small group next to her and is also asked questions by the girl sat next to her.</p>
12:00	<p>Student A continues to offer suggestions to the pupil next to her. This encourages the group nearest to engage in discussion of the work among themselves. At this point, Student A backs off.</p> <p>Student B continues to work with pupil before moving back to original place at table. She continues to work with the whole group at the centre table, answering questions and helping pupils to fill out their work.</p>
12:10	<p>Student A works with pupil sat nearest to her, reading through workbook with her.</p> <p>Both students continue to work with pupils next to them.</p> <p>Student A reads through workbook of girl closest while Student B discusses work with group of pupils closest.</p> <p>Students remain quiet while homework is explained by teacher.</p> <p>Student A is asked a question about the homework by a pupil.</p>
12:15	<p>Unheard by observer due to chatter.</p> <p>Pupils put away work and are led in prayer before lunch break.</p> <p>Lesson ends</p>

Please provide a rich description of the **pupils** and how they are engaging with the students. Are they questioning, discussing or listening? What behaviours are they exhibiting? What are their reactions to the students? Are they working on their own or in a group? What are they doing?

Time (every 10 min)	% pupils on task	Pupil activities
11:10	90%	Pupils have been given work from previous lesson activities on a 'family tree'. Students begin by talking with pupils about their work in previous session. The teacher asks questions of the pupils about their previous work and what information they have completed. This brings any pupils off task back on. The majority of pupils have their hands up ready to answer questions, the rest appear to be checking through their work for relevant answers. Pupils with their hands up are asked questions and are addressed by their first name. Some, who appear to be checking their work, are also asked questions.
11:20	100%	Teacher goes on to explain what will be done in this

11:30	90%	<p>lesson and what pupils have to do. Pupils are assigned a task which requires them to fill in information from both the whiteboard and workbooks onto a worksheet. The data includes names, dates and places. Pupils appear eager to continue but the teacher is having to ask them to wait before they continue with the task and checks that what is expected is clear to pupils. The teacher also explains to pupils where and why capital letters are required, e.g. names and places, and why this is important.</p> <p>Pupils begin the task in silence.</p> <p>Some pupils ask questions of the students relating to the work. The pupils are sat in close proximity to the students they are asking, and the questions and conversations seldom extend beyond pupil groups of 3-4.</p> <p>Chatter volume rises quickly. Both students continue to answer queries from the pupils. As a result, students appear to act as a bridge between pupil and teacher when questions need to be asked. 'What is a grandpa?' The number of pupils on task rises when the teacher goes around the room to check individuals' work.</p> <p>Pupils remain on task and seem to ask more questions when student is sat at their table. The questions asked are from individuals and groups of pupils sat at the same table to the student; and also between individual pupils in the group at the table with student. All of these questions are work related and therefore on task.</p> <p>Pupils' chatter volume rises significantly when the teacher leaves the room briefly to do some photocopying. For one pupil sat next to Student B, the table becomes more appealing to write on than paper.</p> <p>Chatter volume in class continues to rise. Students continue to talk with pupils in their proximity when addressed by them. The teacher returns to the room, this is met by a swift decrease in chatter volume.</p> <p>One of the students, Student B, is asked a question from the other end of her table. Student B goes to the pupil to address the question.</p> <p>Chatter volume begins to sneak upward.</p> <p>Pupils' chatter volume is addressed by teacher who says that 'for those who do not complete the work, they will have to finish the task another time.' The teacher stresses that this may mean completing the work when pupils have a 'basketball talk' the next day, therefore missing the activity. Silence falls.</p> <p>Teacher goes over details of the task to clarify what is needed with the whole class.</p> <p>Pupils continue to work on workbooks. The teacher goes around the class suggesting corrections to individual</p>
	70%	
11:40		
11:45	100%	
	70%	
	70%	
11:55	80%	

12.05		<p>pupils.</p> <p>Pupils continue writing in workbooks but chatter volume rises with more and more pupils appearing off task. This, however, is not the case for those pupils sat in the proximity of the students, who appear more engaged with the task.</p> <p>Pupils are set homework to make their own family trees by asking parents and grandparents questions. The teacher stresses that should the students feel that this might cause any distress to themselves or family members to leave sections out. Students and pupils remain quiet while homework is explained. When finished, the teacher is asked a series of questions from various pupils regarding whether step parents can be included in the family tree. The teacher answers tentatively that they could have a separate box for parents who are not biological.</p> <p>Other questions include "My mum's dad left before she was born, how can I include him?" Ans: "Don't worry, leave that box blank" and "What happens if a grandparent mysteriously disappeared?" Ans: "If you don't have any information then leave it blank, but I'm not getting into Bermuda triangles right now."</p> <p>Student A is asked a question about the homework by a pupil. Unheard by observer due to chatter.</p> <p>Pupils put away work and are led in prayer before lunch break.</p>
12.15		<p>Lesson ends</p>

Appendix 2

B: Excerpt from Student's Log Book: Buddying Diary

WEEK ONE: day 1

I had the chance of meeting my buddy. He is 12 years old. He is interested in music, sports especially football. He is a very confident young man who isn't shy of voicing his opinion. From first impressions he appears to be a very disruptive person who constantly seeks attention from his teacher and his peers. Teachers find him very volatile and likely to disturb their lessons. He comes across quite intelligent. When quizzed by myself and by the teacher during the lesson he can show a good sense of understanding and intelligence. I asked him 'if he knows and understands the topic why does he refuse to work?' His response was that it is boring. He seems to be the type of child who has to be entertained. I wonder if he could do what he wanted, linked to the current topic in his lessons – would he get on with it? His first lesson was science – which was a lesson on Healthy Living (smoking and alcohol). He spent a lot of the lesson misbehaving with another child. They completed some of the work but fussed a lot over what seemed quite a simple task. I noticed that the teacher spent a lot of the lesson telling the children off for misbehaving.

I followed the child to his next lesson which was D&T. He was not interested in talking to me on the way to the lesson. For the lesson I sat back and just observed how he got on during the lesson. He seemed to show a keen interest in the subject. He said he enjoyed it because it was a practical lesson and he was able to use his hands. This made me think about the activities I have to plan. Maybe a good idea to plan hands on, practical activities?

After the break I followed my child to his Art lesson. He had already stated to me that he enjoys drawing. He seemed to have a real knack for artwork and produced a real nice piece of work. He was quiet during the lesson and seemed happy enough carrying on with his work. Though with his peers around him, he became very distracted towards the end of the lesson. As the lesson came to an end he had an argument with another child which broke into a fight. The teacher kept him after the lesson to have a few quiet words.

During this lesson I asked why was his topic "Graffiti" and his response was that he was unsure, he just does what he is told. Also asked if he had creative control and a chance to express himself. The response was again that he just does what he is told.

Lesson 4 of the day for my child was languages and it was German. During the lesson he showed good subject knowledge and understood the basics. Although again he was quite disruptive during the lesson he managed to get some work done. During the lesson he repeatedly moaned how boring this was and how he can't be bothered. Also kept asking if he could draw something. Again this made me think about the activities that I have to do.

Lesson 5 of the day was a test in his English lesson. After being late and some fussing he quietly went about the test. After the lesson I asked him how he thought it went and all I got was a shrug of the shoulders and a "I don't know".

WEEK ONE – day 2

9.15-10.15 Geography – Discussion on Newquay's beaches and design and write a postcard. The lesson began, and I sat on a table with my pupil. We were sat with two of his friends. From the start of the lesson, my buddy and his friend refused to do any work. They were more interested in playing around than anything else. Once the activities were set by the teacher and the teacher came over and explained to the boys their task, they began their activity. She got them going by setting a fun activity at the end as sort of a reward. She understood that they enjoyed drawing and art and therefore set an activity where they could

design their own postcard. Not content with just drawing, he wanted to make his postcard 3D. Therefore with some fuss he tried to make a 3D postcard. It was good to see how my buddy got the other two boys on his table involved in his own little task. His overall contribution to the lesson was good but he was easily distracted by his peers.

10.15-11.10 PE – Triple Jump and Relay – The lesson was aimed at teaching the children how to attempt the triple jump. The start of the lesson was very chaotic. My buddy didn't get involved. He was very keen to get on with the lesson as he suggested to me that he is good at the long jump therefore wanted to see if he is good at the triple jump. My buddy attempted the triple jump once, and then decided he was rubbish at it. I decided that I would try to encourage him to try again and listen to the teacher's advice. The teacher went through the technique with the children again. My buddy then had another go at it and he did a bit better. He seemed quite pleased with himself. He was then very keen to get involved in the next activity which was the relay. My buddy was eager to do well in his relay race.

WEEK ONE – day 3

13.00-14.00 Religious Studies – Communes – This lesson with my buddy was very successful, fortunately his peers were sent out of the classroom very early on during the lesson. This gave my buddy and me the opportunity to work on a one to one basis. I would recommend this to others shadowing pupils. It is a very effective way of getting to know your pupil. I was able to relate the class topic to my buddy's interests, and then I used this to talk with him and find out more about his background and interests. He seems to be a very outgoing person who enjoys telling the odd story, whether it be a football match or how he broke his wrist. After listening to him for a short time he then started to ask me questions about my University lifestyle. The conversation then led onto his aspirations for life. He told me that he would like to pursue a career in teaching PE. I could then talk to him about what it would take for him to get to that career. I discussed with him that he can do PE at GCSE level. I also highlighted that he would need at least a C in English, Science and Maths. I feel like we had a good discussion about University life where I was able to tell him about the good points of my own University life. This discussion definitely raised my buddy's interest in moving out of his parents' house with his friends – a sense of independence.

14.00-15.00 Maths – Mock exam paper with a calculator – During this lesson I was able to sit with my buddy again where we worked together through his exam paper. From the last lesson, my buddy seemed quite a lot more open with me. He was able to stay on task for longer periods during this lesson. I also heard him state to his maths teacher that he is not good at maths but he needs a C in his maths GCSE to become a PE teacher which was the advice that I gave him during the last lesson. It was rewarding for me that he actually listened to me and thought about the things I suggested. It has become apparent that I need to link the messages I am trying to get across with the things that interest my buddy such as sports, socialising and being independent.

WEEK ONE – day 4

11.30 Geography – I met up with my buddy for his geography lesson which was his third lesson of the day at 11.30. The lesson was carried out in the computer suite. The lesson was to carry on from the previous lesson, where the topic was Newquay. The children's task was to plan the teacher's weekend. They had to think about how she would get there, where she would stay and what activities would she participate in. My buddy was very slow to get started. I offered some encouragement to him and his partner who he was working with. His partner gave me a derogatory comment. To my surprise my buddy defended me and asked his partner not to talk to me in such a way. They then began their work. Slowly but surely I feel like I am making progress with my buddy. During this lesson I was able to discuss with my Buddy and two of his friends about University. Why I was there and what I do at University. I did my best to talk with them as if they were my friends and not to talk

down to them. I thought best not to belittle them. It seemed to work as they became very comfortable with the conversation as they started to ask some personal questions. I answered them the best I could. I then started to ask about whether they had thought about Uni? Their answers were that they hadn't really thought about their choices for year 9 yet, let alone University. My buddy then suggested his career idea about being a PE teacher. His peers thought this to be a good idea. This then made them think about other jobs that involved playing sports.

Next lesson: Modern Language – German.

13:00-14:00 – Creative Writing – Again this lesson carried on from the last lesson. On entering the room, my buddy had already fetched me a chair so I could sit near him. I wasn't sure if this was so I could help him or whether he just wanted me to sit near to him. Either way it's definite progress for our relationship as pupil and role model. My buddy was again very slow to begin his work and muttered that he couldn't be bothered a lot. With some encouragement he did begin work. During the lesson he was adamant about telling me stories about his pet dog and about his football at weekends. I tried to ask him questions about his background, such as where does he live and where did he attend primary school?

AIMS FOR NEXT WEEK:

- Try and work with my buddy on a one to one basis
- Try and see my buddy in his social time like a break time or maybe an after school club – Badminton!!

Appendix 2

C: Excerpt from Student's Log Book: End of Day Log Book Entries

WEEK ONE: day 1

Today I met the child I will be shadowing for the next couple of weeks. Therefore I spent all day with his Year 8 classes. I found the whole day very interesting. It was good to see how each teacher not only had their own approaches and techniques to teaching, but also towards dealing with behaviour management. Not just whole class behaviour, but how each teacher dealt with my child's behaviour. Each teacher had a different method of handling his behaviour which was interesting to see which ones worked and which ones didn't. It seemed more effective to have a bit of fun with him, rather than shout and bark orders at him. I will take this into account when I attempt to work with him in the future.

I got to see a range of different lessons – science, technology, art, foreign language and English. It was good how different lessons seemed to stimulate different children. I was interested to see how and why certain children were motivated in some lessons and not in others.

Throughout the day I also saw many different abilities. It was apparent that the children who struggled were the ones mainly misbehaving. It also became obvious that the higher ability children were distracted by certain children's behaviour. It made me think about our whole year presentation and if we want the children to listen and get involved with our activities, then we will have quite a task to control the naughtier children.

WEEK ONE: day 2

I followed my child again to his first lesson which was geography. The lesson was based on how Newquay was attempting to make a man-made reef. It was interesting to me how the focus of the lesson was based on a true life situation. My interest was not shared with the children. The children didn't seem motivated to participate in the lesson. The teacher tried to motivate the children and linked it to what they enjoyed. The children then got involved in the lesson once it suited them. Again this made me think about our presentation and how we will go about it. How will we motivate the children to listen and participate?

I then went with my subject child to his next lesson which was PE. The lesson took so long to get going. The subject was split into gender type. I stayed with the boys' group. They were almost out of control, running around, fighting and using equipment they were not permitted to use. It then appeared that once the children got to do what they wanted, they got on with it. This theme is becoming more apparent. Once they have a choice they seem more motivated to participate, rather than being told what to do. Choices are important to children.

With a lot of fuss, the lesson ran as smoothly as it could. After speaking to the teacher, he suggested that these Year 8 boys were always like this and that he has tried everything to get them to work sensibly.

I was able to partake in a Year 7 science lesson. It was an interesting lesson. The class was very mixed – mixed by ability and a mixture of behaviour. Some children were very attentive and others were not interested. The teacher went around the class trying to get the children involved. The practical part of the lesson had all of the children's attention. It would appear that practical activities hold the children's attention and can really motivate the children to get involved.

The last lesson of the day was science with a Year 9 class. The teacher explained how the class were winding down and this gave the teacher a chance to have some fun activities to do with science. She had planned some practical activities which the children really enjoyed. Again, this reiterates how children 'get to grips' and show an interest when there is something practical to do – something to think about when working with my case study child and when we plan our presentation.

WEEK ONE: day 3

I spent the morning working on planning our first presentation – we looked at giving a realistic perception of University. We looked also at using 'modern terminology', trying to keep it simple and keep it down to earth. Our plan was to 'keep it simple' by using a PowerPoint presentation and simply talk to the whole year group – almost like a chat rather than a formal presentation.

The first lesson I attended today was a Year 8 science lesson. This class was a lower ability class. The children were quite well behaved as the teacher had a really nice way with the kids. She explained how she has taught this class for nearly two years now and has built up good relationships with the children. I was able to ask some boys in the class about University. It was a good response, because both boys really enjoyed carrying out investigations and I discussed some courses that involved science and a chance to continue carrying out investigations.

In my next lesson, I returned to follow my case study child. His next lesson was religious studies. This lesson began with lots of disruptions. Fortunately his friends were sent out for misbehaving. This gave me the opportunity to have a one-to-one with him. With this opportunity, I was able to establish some common ground with him. We spoke about his interests, which led onto him informing me about some of his background, such as where he lives and what primary school he attended. Using his interest in football, I was able to get him started on his lesson. Using something he was familiar with seemed to motivate him during the lesson. It seems as if when a child has an understanding about something, they are motivated to share that knowledge or use it as they can. My thoughts were that I could use this strategy again in another lesson with him.

I followed him to his next lesson, which was maths, where they carried out a calculator maths paper. From the previous lesson my child and I had started to build a sound relationship, therefore I was able to work with him again on a one-to-one basis. This is a very useful way of communicating and interacting with him. It was nice to be able to help him during lessons. It seemed to me as if he now realised that I was there to help him rather than watch over him to make sure he isn't naughty.

I definitely made some headway today with my relationship with my case study child. After discussing the fact he may go to University to become a PE teacher, I informed him that he may need a grade C in his GCSE maths. He then told his teacher this and made his teacher aware that he needs to become better at maths.

WEEK ONE: day 4

My day began with a rare opportunity. I went along to a science/English talk with a famous author, who had come into school to talk with the Year 10 class. It was amazing to watch how the author grasped the enthusiasm and interest of her audience. She tried to get the children to come up with a story, as a group, in a fun, interactive way.

Later today, I went along to my child's geography lesson. The lesson was undertaken in the Information and Communications Technology (ICT) suite. Their lesson objective was to come up with a PowerPoint presentation or leaflet, highlighting a weekend away in

Newquay. The aim was for them to highlight location, accommodation, weather and entertainment. I didn't just work with my child – I was able to work in a three. I helped them all and we worked together, which was rewarding. Come the end of the lesson, the boys I was working with started to ask me about University. They seemed to be interested in what I do at University, with my course and spare time.

The next lesson was a MFL lesson in German. I followed my case study child there. This lesson involved him working independently. He seemed to find it difficult to work on his own. I tried to give some motivation. With a lot of fuss, he attempted to work. He moaned quite a bit. He stated that the work was boring. I decided to take his mind off his work for five minutes and spoke to him about his personal life. We then returned to his work after a few minutes. As we carried on with our chat I was able to suggest things to write about. We could then work together to translate it, so it made sense in German.

AIMS FOR NEXT WEEK:

- Plan and undertake, with my group, a Year 8 assembly – to talk about the idea of University.
- Gain more Year 8 opinions on University.
- Ask Year 8 children about our assembly and see if they have any ideas.
- Take part in an after school activity.

Appendix 3

Supplementary Information Given to Student Volunteers

A: HEFCE project details

During your time in school you will need to plan and deliver 3 types of intervention task, working with an individual pupil, working with small groups and working with the whole class/year group:

1. Individual Pupil Task: You will be attached to a Year 6 or a Year 8 pupil, who is the median by ability in their tutor group/class. You will also be attached to the tutor group that this pupil belongs to. You will buddy this student for **1 hour every day**. The lessons that you buddy in can be your subject specialism or any other lesson that the pupil wants you to go to. The pupil may ask you to spend time with them during lunch or break time, which is fine as you will be acting as a buddy.
2. Small Group Task: You should plan small group activities to include the buddy pupil. These should be negotiated with the class/subject teacher.
3. Whole Class/Year Group Tasks: You should also plan an activity to deliver to the whole of a Year 6 or Year 8 each week. You should liaise with the class teachers/tutors and/or the Year head and do this as a group, individually or in pairs. The activity could be an assembly or an activity that can be delivered in 15 – 20 minutes during a lesson or in other allocated time. Some of the schools have produced a list of activities that the staff would like to be delivered to the pupils. We would like you to do some of these activities, perhaps from the Widening Participation (WP) Handbook or other ideas that you can think of. PowerPoint presentations are available to get you started: these will be sent to you by email. The activities can be WP or subject based activities, it is entirely up to you. Activities should be delivered to all Year 6 or Year 8 pupils, so you will need to plan time slots with staff at your school to ensure that this happens.

Your Records

You will be given an A5 notebook to keep a Log Book of your buddying experiences, planning for activities and your personal reflections at the end of each day. We have started the book off for you so you can see how we would like the entries to look. You can write as much as you like. But make sure you start each new log entry or buddying session entry on a new headed page. The buddying record will be written at the front of the book and the daily Log will be written upside down at the back. Please record your experiences for each day prior to leaving the school, so that you do not forget. This is a very important element of the project, so please set time aside to do this.

Please hand your Log Books to your researcher at the end of your time in school. We must stress that when you hand in your Log Book you may do so anonymously, if you so wish. If you are doing additional weeks in school you will also need to fill out the payment form and hand these in on your final day.

If you need any help or support during your time in school then please don't hesitate to contact your researcher.

We hope you all have a brilliant time in school!

Appendix 3

B: Log Book – A suggested plan of approach

(You will be working with Y6 or Y8 pupils)

Week One

Day One:

- Get bearings of school, staff and departments.
- Look at school provision for social time.
- Find out some background information about the school.
- Identify pupil (teacher will tell you his/her name); gain teacher impressions etc; find out about background.
- Use last 30mins of school day (3.30-400) to write up your daily Log Book. It is important to do this on the day to make your entries as accurate and valid as possible. Ideally, you should sit down as a team and do it in a quiet place before you go home.
- Share ideas and problems and challenges.

Day Two:

- Introduction to pupil, general discussion about your role and their perceptions of ability, etc.
- Observe them in lessons, consider behaviour, contributions in class, group/individual work etc.
- Secondary – work with pupil in your main subject (or English, Maths, Science if not timetabled) and just one other (perhaps suggested by the pupil) (two hours or two periods a day maximum).
- Primary – choose part of the day when you will work with the pupil directly (two hours a day).
- Invite the pupils to visit you at the university – we are going to arrange this for some. Note the names of any who react positively.
- Planning session for small group activity 1(SG1).

Day Three:

- Explore further what does the 'buddy' pupil want from the relationship.
- Reflect on what you want from this experience.
- Deliver SG1.
- Planning session for whole class/year group activity 1 for year 6 or 8 (CY1).

Day Four:

- Continue buddying.
- Deliver SG1 to a small group containing your buddy pupil.
- CY1 when possible.

Day Five:

- End of first week – evaluate so far. Discuss with other students how things are going. Discuss with researcher.
- Reinforce the plan for next week.
- Deliver SG1 to a different small group and CY1 when possible, if not done.
- Plan second small group and class/year activities (SG2 and CY2).

Week Two – Continued contact and evaluation

Day Six:

- Continue buddying. How is s/he responding?
- Deliver SG2 to your buddy group.
- Continue log book through week.

Days Seven, Eight and Nine

- Continue planned contact with pupil 'buddy'.
- Deliver SG2 to a different small group.
- Deliver CY2.
- Plan to sit down together to read each other's Log Books and share ideas.
- Be collaborative – this is a team project!
- Plan SG3 and CY3.

Day Ten:

- Get some feedback from the pupil buddy on how it is for him/her.
- Report to team and talk to researcher.
- Deliver SG2 to a different group and CY2 if not yet done.

Week Three – Continue programme in accordance with second week's evaluation.

Day Twelve:

- Continue buddying. How is the buddy relationship developing? How is the buddy responding to you as a university student? Have they talked about uni at all?
- Deliver SG3 to your buddy group.

Day Thirteen:

- Plan SG4 and CY4 (if staying on for week 4).
- Deliver SG3 to a different small group.
- Deliver CY3.

Day Fourteen:

- Plan how you will let your pupil 'buddy' know about your return to University and departure from the school, and tell your 'buddy'. (This could be more important than you think as it's likely that your 'buddy' will miss you).
- Explain that the pupils may visit you at the university – we are going to arrange this for some.
- Talk about your Log Book entries and reflect with the pupil what you feel you have learnt about them...what have they gained from knowing you?
- This is not an easy task but an important one!
- Deliver SG3 to a different small group.
- Deliver CY3 if not yet done.

Day Fifteen:

If this is your last day:

- Explain to your 'buddy' that s/he still has support in the school
- Meet and have a final lunch together (pupils and students?) Or final group discussion?
- Give your Log Book to your researcher.
- Say goodbye...

If this is not your last day:

- Continue planned contact with pupil 'buddy'.
- Continue writing reflective daily Log Book.

- Plan a sit down session together to read each other's notes and share ideas.
- Finalise plans for SG4 and CY4.

Week Four – Continuing programme in accordance with Week Three

- Plan how you will let your pupil 'buddy' know about your return to University and departure from the school, and tell your 'buddy'. (This could be more important than you think as it's likely that your 'buddy' will miss you).
- Talk about your Log Book entries and reflect with the pupil what you feel you have learnt about them...what have they gained from knowing you?
- Deliver SG4 with your 'buddy' group, and with different groups throughout the week.
- Deliver CY4.

Final Day

- Explain to your 'buddy' that s/he still has support in the school.
- Meet and have a final lunch together (pupils and students?) Or final group discussion?
- Give your Log Book to your researcher.
- Say goodbye...

Appendix 4

Scale Points for Student Characteristics

Scale point 2 would characterise a student with characteristics between scale points 1 and 3, and likewise, scale point 4 would characterise a student with characteristics between scale points 3 and 5.

Commitment to WP/Aim Higher activities

1. No interest in WP/Aim Higher agendas evidenced, student only active in day-to-day school activities.
- 2.
3. Student evidenced little commitment to WP/Aim Higher agendas, greater interest in day-to-day activities.
- 4.
5. Student actively involved in WP/Aim Higher agendas, student evidences belief that their participation can affect change.

Clarity of approach

1. Student did not evidence an ability to communicate at appropriate level.
- 2.
3. Student evidences some ability to communicate at appropriate level, student's approach sometimes unclear.
- 4.
5. Student evidences strong communication skills, levels of communication both clear and appropriate.

Expectations of what pupils could do

1. Students evidence little interest in future potential of pupils.
- 2.
3. Students evidence some interest in what pupils can go on to achieve. However, expectations appear capped.
- 4.
5. Student evidences strong beliefs in what pupils have the potential to do, often dispelling myths and barriers to future aspirations.

Quality of relationship with buddy

1. Student fails to build good rapport with 'buddy', communication is kept to a minimum.
- 2.
3. Student builds some rapport with 'buddy', communication is sporadic.
- 4.
5. Student builds excellent rapport with 'buddy', communication frequent and reciprocal.

Whether student had been in schools prior to project

1. Student has little to no in-school experience.
- 2.
3. Student has participated in other SAS scheme(s) or voluntary work on a limited basis.
- 4.
5. Student has had extensive in-school experience.

Behaviour management with buddy/groups/whole class

1. Student evidences no ability to manage pupil behaviour.
- 2.
3. Student evidences limited abilities to manage pupil behaviour.
- 4.

5. Student evidences strong behavioural management skills.

Actively involved in activities

1. Student evidences little to no participation in activities; involvement in activities requires instruction and encouragement from teachers, pupils or RA.
- 2.
3. Student evidences involvement in activities, though sometimes requires encouragement.
- 4.
5. Student evidences proactive involvement in activities, student requires no encouragement.

Enthusiasm/can do attitude

1. Student evidences a lack of enthusiasm and has negative attitude toward project.
- 2.
3. Student demonstrates a positive approach toward project and shows some enthusiasm.
- 4.
5. Student evidences enthusiastic and positive attitude to project throughout.

Length of time on project

0 – 20 days

Appendix 5
Research Instruments
A: Pupil Questionnaire

School Questionnaire (Pre/Post)

What is your name? _____

Code number _____ (to be entered by researcher)

✂ -----

Code number _____ (to be entered by researcher)

School name _____

Class/Group _____

Form Teacher/Teacher name _____

I am a Boy Girl ☐

☐

NO ONE WILL KNOW YOUR ANSWERS - NOT EVEN YOUR TEACHER.

What to do.

You are coming to the end of another year in school and we would like to know what you think about yourself, your learning and being in school. We are asking you a number of questions about how **YOU THINK** things are. **There are no right or wrong answers.**

Don't think too long about the answer. Your first answer is usually the best one. The questions will look like the one shown below. Please tick one box.

	Agree strongly	Agree	Disagree	Disagree strongly
I like playing computer games				

The person who gives out this questionnaire will give instructions and answer any questions you may have. If there are any questions you do not want to answer, for any reason, you don't have to.

Please respond to as many questions as you can. Thank you for your help!

Section One: What am I like?

✓ Please tick one box

A	My Subjects	Really agree	Agree	Disagree	Really disagree
1]	The teachers think I'm good at Maths				
2]	I often find Maths hard				
3]	I'm one of the best in my school at Maths				
4]	The teachers think I'm good at Science				
5]	I often find Science hard				
6]	I'm one of the best in my school at Science				
7]	The teachers think I'm good at English				
8]	I often find English hard				
9]	I'm one of the best in my school at English				

✓ Please tick one box

B	Me and My School	Really agree	Agree	Disagree	Really disagree
1]	Other children like me				
2]	I don't have many friends				
3]	I usually enjoy school				
4]	My teachers don't try hard enough to make lessons interesting				
5]	My teachers usually try to help me				
6]	I like going to school				
7]	I'd rather not be at school				
8]	The teachers aren't interested in us children				

✓ Please tick one box

C About Me	Really agree	Agree	Disagree	Really disagree
1] I'm glad to be me				
2] I would like to be someone else				
3] I often think I'm worthless				
4] I've got a lot to be proud of				
5] I'd change a lot about myself if I could				

Section Two: My Future

✓ Please tick one box

I think my education will last until:	
I finish Y11 (I finish GCSEs)	
I finish Y12 (I finish AS levels or equivalent)	
I finish Y13 (I finish A levels)	
I finish Uni	

✓ Please tick one box

I think most pupils in my class expect their education will last until:	
they finish Y11 (I finish GCSEs)	
they finish Y12 (I finish AS levels or equivalent)	
they finish Y13 (I finish A levels)	
they finish Uni	

✓ Please tick one box

Think of the teacher in your school that you like the best. How long does this teacher think your education will last until:	
I finish Y11 (I finish GCSEs)	
I finish Y12 (I finish AS levels or equivalent)	
I finish Y13 (I finish A levels)	
I finish Uni	

What type of job would you like to do? Why? (Please give us lots of details)

Do you want to go to Uni? (Please tick one box)

yes

☐

no

☐

If yes

- **Which Uni would you like to go to?**

- **Which Subject/Course would you like to do?**

If no

- **Why don't you want to go (please give us lots of details)**

Thank you very much for your help 😊

Appendix 5

B: Pupil Focus Groups: Pre-Intervention Schedule

Introduction

Hello, my name is xxxxxxxx and I work at the University of Plymouth. My job is to come and talk to you about what you think it might be like to go to University, and also what you think about having students from the University to help you with your work. Thank you very much for agreeing to take part in this discussion group. Your views are very important to us.

First of all, let me tell you about our study. We are trying to find lots of different ways to help pupils in school find out more about University; what it's like there, what it's like to be a student, what courses you can study and how much it might cost. We also want to find out what types of support and activities the students from the University can do to help you learn. We want to know what works and also what isn't so helpful, how we can improve and provide different activities for you.

What are we going to do?

In this session we are going to have a discussion, getting a group of you together, asking you all a few questions and encouraging you to give us your views, whatever they may be, so that we can get an accurate picture about our activities. There will be no right or wrong answers, this is about what your ideas are, and we want to hear what you have to say. At any time during this discussion you may stop answering our questions. We would like to tape record this discussion so that we remember all we talked about. Your names will be removed from the recordings afterwards and we will put a code in its place, so no-one else will know what you have said.

As this discussion group is being recorded, please speak loudly and clearly, and one at a time. Once again we must stress that what is said here is very important to our work and will be kept private so please don't discuss anything we talked about outside of this room.

Does anyone have any questions before we start?

- ***Turn on the recorder at this point and don't forget to check that it is recording periodically!***
- ***Say the school, form group and the date into the tape recorder.***
- ***Get the pupils in the focus group to start by each saying their names in turn.***

Questions

1. Do you want to go to Uni?

Why? Why not?

2. Have you already had students in your school to help you with your work?

If yes, when and what activities did they do with you?

3. Did you think that having the students in your class changed how you view your future/ your education?

Why? Why not?

4. You will be having students helping you from June 15th. What types of activities would you like from them?
5. Do your friends want to go to Uni? (yes/no)
Why do they think this?
6. Do your teachers want you to go to Uni? (yes/ no)
How does this show in how they behave with you?
7. Do your parents want you to go to Uni? (yes/no)
Why do you think this is?
8. What kind of job do you want in the future?
9. What kind of learning/exam results do you need to get for it?
Are you going to do the training?
10. Has anyone, other than the students, ever talked to you about going to the University of Plymouth?
If so, who?
11. Has anyone, other than the students, ever given you leaflets or said about going to University.
If so, whom?

Debrief

Thank you very much for your time and help with our project. We will write up the recording so that we take full account of your views. If you would like to see the Project Report once it is finished I can give you my contact details. Are there any questions that you would like to ask?

Appendix 5

C: Pupil Focus Groups: Post-Intervention Schedule

Prompts for discussion are:

- What did the students in your class do?
- What did the students do with you as an individual?
- Think about all the activities you did:
 - What were the positives?
 - What were the negatives?
 - What was the best thing that was done?
 - What was the worst thing that was done?
- Did you visit the University at all? (If yes, probe what happened – positive/negative experiences, etc)
- Has anyone talked to you about going to Plymouth University in the last month? (If yes, did this alter your view? Would you have liked to visit? What sort of things would you like to have done there?)
- Do you think that all this contact with university students has made you more or less likely to go to Uni yourself?

Appendix 5

D: Head Teacher/Form Tutor/Stakeholder Interview: Pre-Intervention

1. What are the general problems in getting pupils at this school to go to Uni/College/HE?
2. Are there any specific blocks on them going?
3. Is it becoming more or less difficult in encouraging them to go? Why?
4. Thinking about the different interventions that have been in this school from the University of Plymouth:

SAS
G&T
Aim Higher activities
Schools liaison
ITE students

For **each** one:

Who did them? (students/staff)

What did they do?

With whom? (pupils/years)

With positive/negative effects for?

For:

Pupils? (self esteem, achievement etc)

Staff? (pressure, morale etc)

Parents/community?

5. Take all the past interventions from the University of Plymouth together. Were there any shortcomings? If so, how might these be overcome in the future?
6. Is there anything else that the University of Plymouth might do in future to help your school?

Appendix 5

E: Head Teacher/Form Tutor/Stakeholder Interview: Post-Intervention

1. What activities of ours did you notice that were going on in the last month? (probe for detail)
2. What effects do you think these activities had – positive and/or negative – on:
 - a. The school as a whole
 - b. The classes that were involved
 - c. The individual pupils who were buddied
 - d. Groups in the classrooms involved?
3. Were the activities well organised? How could they be better organised?
4. In future activities of this kind, how could things be different in terms of content, organisation, etc? (What sort of thing would you like to do and how?)
5. Is there anything else you would like to talk about related to the UoP's involvement in schools?
6. Other than the activities like these that we have been trialling, what do you think are the most powerful ways of raising the educational aspirations of pupils from disadvantaged backgrounds?

Appendix 5

F: Student Questionnaire: Post-Intervention

Please answer the following questions as fully as possible.

Your Name:

Buddy Name:

Buddy Form:

Your Subject Specialism:

1. Prior to your HEFCE/SAS experience, have you helped in any capacity at the school?

Yes [] No []
If so, how and why?
2. Did you have contact with your buddy in this time? If so, please explain how much contact there was.
3. Did you have contact with your buddy's form or Year 8's during this time? If so, please explain how much contact there was.
4. Prior to doing the buddying, how did you feel about doing it?
5. How did these feelings change during your buddying experience?
6. Initially, how do you think your buddy felt about having you as their buddy?
7. How did this and your relationship with the buddy change throughout your time buddying them?
8. Do you feel that the buddy benefited from the buddying? If so, how?
9. What were the high and low points for you during your time buddying?
10. What do you think the high and low points were for your buddy?
11. How could the buddying experience have been made better?

Appendix 6

Materials Issued to All Student Volunteers

A: Widening Participation into Higher Education – A Resource Handbook for Working on the Agenda in Schools and Colleges (section 9 – WP activities, workshops and special projects – some ideas to get you started).

B: TDA Training entry profile: Plymouth Student Associate Scheme 2008-2011

C: SAS Handbook 2008/09

D: SAS Guide to school-based work

Appendix 7

Materials Issued to All Participating Schools

A: Plymouth SAS Guide for schools and colleges 2008/09

B: Project summary

For some time, higher education institutions (HEIs) have developed links with schools and colleges in their own right or, from 2001 onward, through government programmes such as Excellence Challenge, Partnerships for Progression and Aimhigher. The extensive range, quality and quantity of work already undertaken between schools, colleges and higher education indicates that there is considerable understanding by HEIs of the conditions necessary to make such arrangements successful. HEFCE has put forward a grant funding programme, to enable institutions to undertake pilot research into effective models for school/college-HE links.

The University of Plymouth (UoP) was one of 10 pilot proposals to win funding and will build on the already strong school/college-UoP links. The UoP will work with four Plymouth secondary schools and four of their feeder primary schools (one per secondary school).

This is a three-month research project, starting in June and reporting at the end of August. It will involve:

- The Principal Investigator (DR) and Co-Investigator (LLV) visiting the four secondary schools to explain the project and seek their co-operation.
- Briefing the SAS and ITE students on their role in the project activities that they will undertake with the pupils while on placement in the four schools.
- Administering a questionnaire to Y6/Y8 pupils before and after the intervention (which takes 30 mins to complete) by the students.
- Fly-on-the-wall observation by a researcher of the intervention lessons.
- Focus groups with the researchers and groups of 8-10 pupils.
- Semi-structured interviews with the form teachers of Y6/Y8, the head teachers and senior management concerning University/school links.

The timetable is as follows:

Date	Activity
2 nd June	Baseline data collection: Y6/Y8 pupil questionnaires
8 th June	Baseline data collection: Headteachers/Senior Management/Y6/Y8 form teachers interviews Advisory Board Meeting Training in administering research instruments
15 th June	Intervention begins (4 weeks collection of research on intervention activities)
22 nd June	Intervention continues
29 th June	Intervention continues

6th July

Intervention continues

13th July

Repeat questionnaires with Y6/Y8 pupils and interviews with
Headteachers/Senior Management/Y6/Y8 form teachers

The Research Assistants will be contacting the schools on 1st June to make arrangements for their work.

Full results will be fed back to participating schools in September 2009.

C: Y6/Y8 data collection proforma

School name_____

Y6/Y8 nor_____

Class name	Form tutor name	No. in class	Boys/Girls	FSM

Appendix 8

Tables from the Text

Table 5.1 Problems in getting pupils to go on to HE

Problems	Total number of responses	Overall % response
Low aspirations	13	43%
Family attitudes and background	26	87%
Lack of knowledge	13	43%
Financial considerations	11	37%
Lack of ability	3	10%
Other	1	3%

Table 5.2 Blocks on HE

Blocks	Total number of responses	Overall % response
Financial	14	47%
Lack of ability	5	17%
Cultural blocks	14	47%
No blocks	5	17%
Other	1	3%

Table 5.3 Difficulty of getting pupils to go to HE

Response	Total number of responses	Overall % response
More	9	30%
Less	12	40%
No change	8	27%
Don't know	1	3%

Table 5.4 Reasons for increased difficulty

Reason	Total number of responses	Overall % response
Lack of awareness	2	22%
Culture and circumstance	1	11%
Financial constraints	6	67%
Vocational alternatives	2	22%
Other	2	22%

Table 5.5 Reasons for going to HE getting easier

Reason	Total number of responses	Overall % response
Greater opportunities	5	42%
Financial support	1	8%
Greater awareness	11	92%

Table 5.6 Participation in SAS

Response	Total number of responses	Overall % response
Staff	15	50%
Students	23	77%
University	0	0%
Other	0	0%
No data	5	17%

Table 5.7 What SAS involved

Response	Total number of responses	Overall % response
Lesson support	13	43%
Buddying	4	13%
Teaching experience	12	40%
Linking university and school	6	20%
Other	1	3%
No data	12	40%

Table 5.8 With whom

Response	Total number of responses	Overall % response
Individual pupils	5	17%
Small groups	13	43%
Whole year group(s)	5	17%
Whole school	4	13%
Other	2	7%
No data	12	40%

Table 5.9 Effects of SAS

Response	Total number of responses	Overall % response
Raised aspirations	11	37%
Staff support	15	50%
Raised awareness	11	37%
Cultivates new teachers	7	23%
Other	3	10%
No data	9	30%

Table 5.10 Negative effects of SAS

Response	Total number of responses	Overall % response
Lack of awareness	2	7%
Focus on students	6	20%
Timing	5	17%
Exclusivity	2	7%
Misplaced students	4	13%
Other	2	7%
No data	18	57%

Table 5.11 Participation in G&T

Response	Total number of responses	Overall % response
Staff	23	77%
Students	1	3%
University	14	47%
Other	4	13%
No data	3	10%

Table 5.12 What G&T involved

Response	Total number of responses	Overall % response
On-site activities	15	50%
Off-site activities	20	67%
Other	2	7%
No data	4	13%

Table 5.13 With whom

Response	Total number of responses	Overall % response
Individual pupils	8	27%
Small groups	22	73%
Whole year group(s)	1	3%
Whole school	0	0%
Other	1	3%
No data	4	13%

Table 5.14 Effects of G&T

Response	Total number of responses	Overall % response
Different and challenging activities	19	63%
Experience outside of school environment	13	43%
Raising pupil awareness or aspirations	19	63%
Shift in parental attitude	9	30%
Other	3	10%
No data	5	17%

Table 5.15 Negative effects of G&T

Response	Total number of responses	Overall % response
Exclusivity	12	40%
Organisation and lack of consideration for staff	12	40%
Competition with other schools	2	7%
Level of delivery	2	7%
Other	6	20%
No data	14	47%

Table 5.16 Participation in Aimhigher

Response	Total number of responses	Overall % response
Staff	10	33%
Students	1	3%
University	4	13%
Other	1	3%
No data	17	57%

Table 5.17 What Aimhigher involved

Response	Total number of responses	Overall % response
On-site activities	5	17%
Off-site activities	9	30%
Other	0	0%
No data	18	60%

Table 5.18 With whom

Response	Total number of responses	Overall % response
Individual pupils	2	7%
Small groups	8	27%
Whole year group(s)	4	13%
Whole school	2	7%
Other	1	3%
No data	18	60%

Table 5.19 Effects of Aimhigher

Response	Total number of responses	Overall % response
Raises aspirations	11	37%
Develops confidence and self-esteem	6	20%
Benefits for school	4	13%
Other	2	7%
No data	17	57%

Table 5.20 Negative effects of Aimhigher

Response	Total number of responses	Overall % response
Administration and organisation	4	13%
Exclusivity	4	13%
Other	2	7%
No data	23	77%

Table 5.21 Participation in schools liaison

Response	Total number of responses	Overall % response
Staff	6	20%
Students	1	3%
University	4	13%
Other	0	0%
No data	22	73%

Table 5.22 What schools liaison involved

Response	Total number of responses	Overall % response
Liaise with University	8	27%
Other	2	7%
No data	21	70%

Table 5.23 With whom

Response	Total number of responses	Overall % response
Individual pupils	2	7%
Small groups	2	7%
Whole year group(s)	2	7%
Whole school	0	0%
Other	1	3%
No data	24	80%

Table 5.24 Effects of schools liaison

Response	Total number of responses	Overall % response
Generates awareness about University	5	17%
Strengthens links with University	3	10%
Other	2	7%
No data	23	77%

Table 5.25 Negative effects of schools liaison

Response	Total number of responses	Overall % response
Organisation	2	7%
Lack of awareness	3	10%
Other	1	3%
No data	24	80%

Table 5.26 Participation in ITT

Response	Total number of responses	Overall % response
Staff	5	17%
Students	16	53%
University	1	3%
Other	2	7%
No data	14	47%

Table 5.27 What ITT involved

Response	Total number of responses	Overall % response
Lesson support	6	20%
Deliver lessons	8	27%
Gain experience	7	23%
Talk with pupils	5	17%
Other	1	3%
No data	18	60%

Table 5.28 With whom

Response	Total number of responses	Overall % response
Individual pupils	3	10%
Small groups	5	17%
Whole year group(s)	2	7%
Whole school	7	23%
Other	0	0%
No data	18	60%

Table 5.29 Effects of ITT

Response	Total number of responses	Overall % response
Provides positive role models	2	7%
Variety of teachers	7	23%
New methods and ideas for existing staff	7	23%
Other	5	17%
No data	18	60%

Table 5.30 Negative effects of ITT

Response	Total number of responses	Overall % response
Financial incentive	2	7%
Student calibre and personal skills	7	23%
Enhanced workload for school	3	10%
Other	0	0%
No data	22	73%

Table 5.31 Views of Plymouth interventions

Response	Total number of responses	Overall % response
Yes	19	63%
No	5	17%
Don't know	4	13%
No data	1	3%

Table 5.32 Improving Plymouth interventions

Response	Total number of responses	Overall % response
Advanced planning, communication and organisation	12	63%
Lowered costs of participation	3	16%
Voluntary students	2	11%
Longer term commitments	6	32%
Inclusivity for pupils and parents	7	37%
Other	4	21%

Table 5.33 Future Plymouth interventions

Response	Total number of responses	Overall % response
Raise pupil and parent awareness of higher education	24	80%
Increase inclusivity	12	40%
Share resources	10	33%
More mentoring	7	23%
University awareness of local needs	5	17%

Table 5.34 Participation in HE

Response	Total number of responses	Overall % response
Yes	103	72%
Maybe	11	8%
No	15	10%
Don't know	15	10%
Total responses	144	100%

Table 5.35 Reasons for going to HE

Response	Total number of responses	Overall % response
Better job prospects	57	48%
Better quality of life	6	5%
Financial benefits	7	6%
Improve education and skills	39	33%
Don't know	10	8%
Total responses	119	100%

Table 5.36 Reasons for not going to HE

Response	Total number of responses	Overall % response
Lack of awareness and negative perception of HE	4	17%
Financial constraints	3	12.5%
Unnecessary for pupils' future aspirations and desired employment	12	50%
Don't know	2	8%
Other	3	12.5%
Total responses	24	100%

Table 5.37 Past student help

Response	Total number of responses	Overall % response
Yes	84	58%
No	29	20%
Don't know	14	10%
No data	17	12%
Total responses	144	100%

Table 5.38 Content of past help

Response	Total number of responses	Overall % response
Talked about future opportunities	10	11%
Gaining classroom experience	52	58%
Fun and alternative classroom activities	17	19%
Off-site activities	5	6%
Don't know	5	6%
Total responses	89	100%

Table 5.39 Effect of past student help

Response	Total number of responses	Overall % response
Yes	24	25%
No	45	47%
Maybe	12	12.5%
Don't know	12	12.5%
No data	3	3%
Total responses	96	100%

Table 5.40 Reasons for effect of student help

Response	Total number of responses	Overall % response
Raised awareness of university	12	27%
Job prospects	2	5%
Other	4	9%
Don't know	14	32%
No data	12	27%
Total responses	44	100%

Table 5.41 Reasons for absence of student effect

Response	Total number of responses	Overall % response
Lack of engagement with students	11	22%
Fixed perception of future and education	11	22%
Don't know	19	36%
Other	5	10%
No data	5	10%
Total responses	51	100%

Table 5.42 Wishes for future help

Response	Total number of responses	Overall % response
Preference for 'hands on' activities and interaction	90	65%
University talks	13	10%
Off-site visits	13	10%
Personal interaction	12	9%
Don't know	5	4%
Other	2	2%
Total responses	135	100%

Table 5.43 Friends' views on HE

Response	Total number of responses	Overall % response
Yes	57	40%
No	10	7%
Don't know	30	21%
Some	41	28%
No data	6	4%
Total responses	144	100%

Table 5.44 Reasons for friends' wanting to go to HE

Response	Total number of responses	Overall % response
Better quality of life	35	42%
Specialised education and training	11	14%
Financial gain	7	9%
Don't know	11	14%
Other	1	1%
No data	16	20%
Total responses	81	100%

Table 5.45 Reasons for friends' not wanting to go to HE

Response	Total number of responses	Overall % response
Personal attitudes to education	11	20%
Cultural attitudes to education	19	34%
Undecided	11	20%
Fixed aspirations	6	10%
Financial concerns	8	14%
Don't know	1	2%
Total responses	56	100%

Table 5.46 Teachers' views on HE

Response	Total number of responses	Overall % response
Yes	58	40%
No	3	2%
Some	41	28%
Don't know	21	15%
No data	21	15%
Total responses	144	100%

Table 5.47 Teachers' behaviour relating to HE

Response	Total number of responses	Overall % response
Reinforce and encourage	50	35%
Relate to personal experience	4	3%
No change in behaviour or never mentioned	63	43%
Teacher doesn't care	9	6%
Other	1	1%
No data	17	12%
Total responses	144	100%

Table 5.48 Parents' views on HE

Response	Total number of responses	Overall % response
Yes	84	58%
No	8	6%
Maybe	15	10%
Not sure	11	8%
Don't mind	18	12%
No data	8	6%
Total responses	144	100%

Table 5.49 Reasons for parents' views

Response	Total number of responses	Overall % response
Family member(s) went	9	9%
Support pupil's choices	27	25%
Desire better opportunities for children (compared to own)	42	40%
Better education	12	11%
Greater financial opportunities	5	5%
No data	10	9%
Other	1	1%
Total responses	106	100%

Table 5.50 Negative reasons for parents' views

Response	Total number of responses	Overall % response
Support pupil choice	10	32%
Never mentioned	7	23%
No data	14	45%
Total responses	31	100%

Table 5.51 Future job aspirations of pupils

Response	Total number of responses	Overall % response
Socio-economic Group A	1	1%
Socio-economic Group B	79	54%
Socio-economic Group C1	10	7%
Socio-economic Group C2	21	15%
Socio-economic Group D	12	8%
Socio-economic Group E	0	0%
No data	21	15%
Total responses	144	100%

Table 5.52 Qualifications needed for future jobs

Response	Total number of responses	Overall % response
GCSEs and A levels	70	49%
Vocational/FE/work-based training	19	13%
HE	24	17%
Don't know	18	12%
No data	13	9%
Total responses	144	100%

Table 5.53 Training required for future jobs

Response	Total number of responses	Overall % response
Yes	129	90%
No	0	0%
Maybe	0	0%
Don't know	5	3%
Other	2	1%
No data	8	6%
Total responses	144	100%

Table 5.54 Non-student sources of information about Plymouth

Response	Total number of responses	Overall % response
Yes	53	37%
No	78	54%
Don't know	5	3%
Other	0	0%
No data	8	6%
Total responses	144	100%

Table 5.55 Sources of information about UoP

Response	Total number of responses	Overall % response
Teachers	6	11%
Family	26	49%
People from the University	19	36%
Other people the pupils know	2	4%
Total responses	53	100%

Table 5.56 Non-Plymouth sources of information

Response	Total number of responses	Overall % response
Yes	38	26%
No	93	65%
Don't know	1	1%
Other	0	0%
No data	12	8%
Total responses	144	100%

Table 5.57 Origins of Non-Plymouth information

Response	Total number of responses	Overall % response
University (in town/on campus)	25	66%
Family	6	16%
School	5	13%
Other people the pupils know	2	5%
Total responses	38	100%

Table 5.58 Intervention activities seen

Activity	Total number of responses	Overall % response
On-site intervention	16	70%
Off-site intervention	16	70%
Buddying	7	30%
Classroom assistance	7	30%
Other	6	26%
Don't know	1	4%

Table 5.59 Effects of intervention activities

Effect	Total number of responses	Overall % response
Positive	20	87%
No effect	1	4%
Negative	0	0%
Don't know	2	9%

Table 5.60 Positive effects of intervention activities

Positive aspect	Total number of responses	Overall % response
Greater awareness of university	16	80%
Greater links with university	4	20%
Role models for pupils	3	15%
Additional support in lessons	10	50%
Curriculum enrichment	7	35%
Other	1	5%

Table 5.61 Negative effects of intervention activities

Negative aspect	Total number of responses	Overall % response
Organisation, planning and timing	3	13%
Lack of student enthusiasm or expertise	3	13%
Other	1	4%

Table 5.62 Organisation of intervention activities

Well organised?	Total number of responses	Overall % response
Yes	15	65%
No	5	22%
Don't know	3	13%

Table 5.63 Positive aspects of organisation

Positives	Total number of responses	Overall % response
Time of year	2	13%
Management within time constraints	8	53%
Students' enthusiasm	8	53%
No data	4	27%

Table 5.64 Suggestions for improvement

Improvements	Total number of responses	Overall % response
Timing, planning and consideration of school agenda	11	48%
Communication between all parties involved	1	30%
Target different pupils	7	9%
Cannot be better organised	2	4%
Other	4	17%

Table 5.65 Desired future activities

Improvements	Total number of responses	Overall % response
Wider pupil and parental inclusion	7	30%
Greater meaning and ownership for pupils	9	39%
Greater staff and tutor involvement	7	30%
Prior information on students and numbers	3	13%
More students	2	9%
Follow-up and long-term commitments	7	30%
Enhanced and advanced planning	9	39%
Other	4	17%
Don't know	2	9%

Table 5.66 Possible future activities

Response	Total number of responses	Overall % response
Stronger long-term relationships	8	35%
Implement suggestions for improvement	8	35%
General positive feedback	9	39%
Other	1	4%
No data	4	17%

Table 5.67 Ideal future activities

Response	Total number of responses	Overall % response
Wider pupil participation in university interventions	6	26%
Raising parental awareness and aspirations	8	35%
More positive role models	8	35%
Educate and raise awareness of opportunity	13	57%
Other	2	9%
No data	1	4%

Table 5.68 Student activities seen

Response	Total number of responses	Overall % of response
WP and Aimhigher activities	48	39%
Off-site activities	9	7%
Classroom support	45	37%
Informal chats	14	12%
Don't know	2	2%
No data	4	3%
Total responses	122	100%

Table 5.69 Individual help from students

Response	Total number of responses	Overall % of response
Nothing	21	17%
'Buddying'	8	7%
In-class support	47	39%
Q&A about university, future aspirations and school	14	11%
Relaxed conversation	9	7%
Other	1	1%
No data	22	18%
Total responses	122	100%

Table 5.70 Positive features of interventions

Response	Total number of responses	Overall % of response
Information about university	47	39%
In-class support	23	19%
Approachable students	17	14%
Break from the norm	9	7%
Off-site and enrichment activities	10	8%
Don't know	10	8%
Other	6	5%
Total responses	122	100%

Table 5.71 Negative features of interventions

Response	Total number of responses	Overall % of response
Boring or unchallenging activities	17	14%
Need more activities and information	7	6%
Intrusion of personal space	10	8%
Break from the norm	7	6%
Exclusivity	4	3%
Don't know	73	60%
Other	4	3%
Total responses	122	100%

Table 5.72 Visit to UoP campus

Response	Total number of responses	Overall % of response
Yes	55	45%
No	67	55%
Total responses	122	100%

Table 5.73 Positive aspects of UoP campus visits

Response	Total number of responses	Overall % of response
Greater awareness about university	13	24%
Hands-on activities	34	61%
Being off-site	2	4%
No data	6	11%
Total responses	55	100%

Table 5.74 Negative aspects of UoP campus visits

Response	Total number of responses	Overall % of response
Break from routine	4	7%
Don't know	51	93%
Total responses	55	100%

Table 5.75 Spoken to about UoP campus visit

Response	Total number of responses	Overall % of response
Yes	107	87%
No	8	7%
Don't know	7	6%
Total responses	122	100%

Table 5.76 Source of information about the UoP

Response	Total number of responses	Overall % of response
UoP students	105	98%
Other people from UoP campus	1	1%
Other	1	1%
Total responses	107	100%

Table 5.77 Views about the intervention activities

Response	Total number of responses	Overall % of response
More positive	97	80%
No change	19	16%
More negative	3	2%
Don't know	3	2%
Total responses	122	100%

Table 5.78 Desire to visit UoP

Response	Total number of responses	Overall % of response
Yes	63	95%
No	1	1%
Don't know	4	4%
Total responses	68	100%

Table 5.79 Desired activities during UoP campus visit

Response	Total number of responses	Overall % of response
Subject-specific activities	29	44%
Tours and learning about university	24	36%
Buddying students and participating in day-to-day university life	10	15%
Don't know	3	4%
Other	1	1%
Total responses	67	100%

Table 5.80 Effects of intervention activities on HE aspirations

Response	Total number of responses	Overall % of response
More likely	104	86%
No change	12	10%
Less likely	3	2%
Don't know	3	2%
Total responses	122	100%

Table 5.81 Previous experience in placement school?

Responses	Total number of responses	Overall % response
Yes	5	24%
No	12	57%
No data	4	19%
Total	21	100%

Table 5.82: Contact with buddy's form/class

Response	Total number of responses	Overall % responses
Yes	3	60%
No	1	20%
Don't know	1	20%
Total	5	100%

Table 5.83: Feelings about buddying before intervention period

Response	Total number of responses	Overall % responses
Confident	2	10%
Excited	5	23%
Worried/nervous	9	43%
Other	1	5%
No data	4	19%
Total	21	100%

Table 5.84: Changes to buddy relationship

Response	Total number of responses	Overall % responses
Stronger interpersonal relationship	6	29%
More comfortable around each other	7	33%
No time to develop relationships	2	10%
Uncomfortable with the situation	2	10%
No data	4	18%
Total	21	100%

Table 5.85: Buddy benefits of buddying?

Positive response	Total number of responses	Overall % responses
Better understanding of future options	7	33%
Greater self-esteem	5	24%
Enjoyed the attention	1	5%
Benefited from alternative, positive role models	7	33%
Other	1	5%
Total	21	100%

Table 5.86 Improvements to the buddying experience

Response	Total number of responses	Overall % responses
Better timing	8	22%
Better communication between all parties	7	20%
Shadowing groups rather than an individual	4	11%
Designated buddy time	4	11%
More tailored selection of buddies	5	14%
Other	4	11%
No data	4	11%
Total	36	100%

Table 5.87 Me and my subjects – Year 6

	Good at maths	Yes	No	Don't know	Missing
Pre		47.4	3.8	48.7	-
Post		42.1	6.6	51.3	-
	Find maths hard				
Pre		35.9	52.6	10.4	1.3
Post		32.1	52.6	11.5	1.3
	Best at maths				
Pre		16.7	48.7	32.1	2.6
Post		20.5	55.1	21.8	2.6
	Good at science				
Pre		47.4	3.8	47.4	1.3
Post		46.2	3.8	47.4	2.6
	Find science hard				
Pre		24.4	66.7	9.0	-
Post		26.9	56.4	14.1	2.6
	Best at science				
Pre		23.1	43.6	33.3	-
Post		24.4	44.9	26.9	3.8
	Good at English				
Pre		37.2	12.8	47.4	2.6
Post		35.9	12.8	47.4	3.8
	Find English hard				
Pre		28.2	57.7	12.8	1.3
Post		33.3	52.6	10.3	3.8
	Best at English				
Pre		7.7	56.4	35.9	-
Post		16.7	53.8	26.9	2.6

Table 5.88 Me in school – Year 6

	Other children like me	Yes	No	Don't know	Missing
Pre		83.3	3.8	12.8	-
Post		67.9	6.4	23.1	2.6
	Don't have friends				
Pre		17.9	74.4	6.4	1.3
Post		14.1	67.9	14.1	3.8
	Enjoy school				
Pre		71.8	7.7	20.5	-
Post		61.5	17.9	16.7	3.8
	Teachers don't try				
Pre		15.4	59.0	25.6	-
Post		6.4	57.7	33.3	2.6
	Teachers help				
Pre		7.7	82.1	9.0	1.3
Post		14.1	78.2	4.0	3.8
	Like going				
Pre		55.1	15.4	29.5	-
Post		50.0	15.4	30.8	3.8
	Rather not go				
Pre		21.8	48.7	29.5	-
Post		21.8	51.3	24.4	2.6
	Teachers not interested				
Pre		11.5	56.4	32.1	-
Post		6.4	65.4	25.6	2.6

Table 5.89 Me – Year 6

	Good to be me	Yes	No	Don't know	Missing
Pre		78.2	9.0	11.5	1.3
Post		74.4	12.8	10.3	2.6
	Want to be another				
Pre		19.2	73.1	5.1	2.6
Post		23.1	62.8	11.5	2.6
	Worthless				
Pre		25.6	51.3	20.5	2.6
Post		30.8	53.8	12.8	2.6
	Proud				
Pre		66.7	11.5	17.9	3.8
Post		62.8	19.2	15.4	2.6
	Would change				
Pre		44.9	39.7	12.8	2.6
Post		38.5	42.3	15.4	3.8

Table 5.90 Me and going to university – Year 6

	Higher education – pupils	Yr 11 aspiration	Yr 12 aspiration	Yr 13 aspiration	Uni aspiration	Missing
Pre		26.9	16.7	26.9	24.4	5.1
Post		20.5	17.9	12.8	46.2	2.6
	Higher education – teacher					
Pre		21.8	10.3	21.8	42.3	3.8
Post		15.4	5.1	12.8	62.8	3.8
	Higher education – me					
Pre		24.4	10.3	11.5	50.0	3.8
Post		19.2	10.3	10.3	57.7	2.6

Note: Sample size is 78 throughout. Percentages reported are of whole sample, including missing.

Table 5.91 Me and my subjects – Year 8

	Good at maths	Really disagree	Disagree	Agree	Really agree	
Pre		3.2	21.6	65.8	9.5	(n=444)
Post		1.8	18.0	70.9	9.3	(n=399)
	Find maths hard					
Pre		6.9	45.8	38.5	8.8	(n=452)
Post		7.5	48.8	33.8	10.0	(n=402)
	Best at maths					
Pre		34.5	54.8	8.5	2.2	(n=447)
Post		33.0	51.0	12.8	3.3	(n=406)
	Good at science					
Pre		2.7	20.8	64.7	11.8	(n=442)
Post		2.8	18.3	66.9	12.0	(n=399)
	Find science hard					
Pre		15.4	48.3	31.4	4.9	(n=449)
Post		12.8	50.3	32.0	5.0	(n=400)
	Best at science					
Pre		27.4	56.3	13.3	2.9	(n=442)
Post		27.6	52.0	14.6	5.8	(n=398)
	Good at English					
Pre		3.4	22.0	65.5	9.1	(n=441)
Post		3.0	20.8	66.8	9.5	(n=406)
	Find English hard					
Pre		15.1	50.7	28.2	6.1	(n=444)
Post		17.3	48.0	29.0	5.8	(n=406)
	Best at English					
Pre		28.9	55.7	12.3	5.1	(n=447)
Post		25.4	54.4	16.5	3.7	(n=401)

Table 5.92 Me in school – Year 8

	Other children like me	Really disagree	Disagree	Agree	Really agree	
Pre		0.9	5.6	67.3	26.2	(n=447)
Post		1.5	4.5	65.8	28.2	(n=401)
	Don't have friends					
Pre		44.0	45.1	8.9	2.0	(n=448)
Post		45.4	43.4	8.7	2.5	(n=401)
	I enjoy school					
Pre		9.8	26.4	57.2	6.7	(n=451)
Post		12.0	24.6	54.9	8.5	(n=399)
	Teachers don't try					
Pre		7.4	43.9	36.8	11.9	(n=446)
Post		5.3	42.4	38.3	14.0	(n=399)
	Teachers help me					
Pre		2.2	19.8	66.6	11.4	(n=449)
Post		4.5	19.6	68.3	7.5	(n=398)
	Like school					
Pre		14.3	29.1	48.0	8.5	(n=444)
Post		16.6	29.9	45.2	8.3	(n=398)
	Teachers not interested					
Pre		24.2	54.4	15.6	5.9	(n=443)
Post		22.3	55.0	18.5	4.3	(n=400)
	Rather not be at school					
Pre		11.6	41.4	28.1	18.9	(n=449)
Post		12.7	43.8	25.8	17.7	(n=395)

Table 5.93 Me – Year 8

	Good to be me	Really disagree	Disagree	Agree	Really agree	
Pre		3.3	6.7	45.7	44.3	(n=449)
Post		1.5	8.8	48.7	41.0	(n=398)
	Want to be another					
Pre		43.1	38.7	14.7	3.6	(n=450)
Post		42.8	40.6	13.6	3.0	(n=392)
	Worthless					
Pre		30.4	42.6	22.3	4.7	(n=448)
Post		30.5	42.4	21.6	5.6	(n=394)
	Proud					
Pre		4.4	22.2	51.3	22.0	(n=450)
Post		3.6	18.3	55.2	22.9	(n=394)
	I'd change myself					
Pre		15.3	34.9	33.1	16.7	(n=450)
Post		17.7	34.9	31.4	15.9	(n=395)

Table 5.94 Me and going to university – Year 8

	Higher education – pupils	Yr 11 aspiration	Yr 12 aspiration	Yr 13 aspiration	Uni aspiration	
Pre		41.6	18.5	26.3	13.6	(n=433)
Post		31.2	17.3	28.1	23.5	(n=388)
	Higher education – teacher					
Pre		15.5	15.3	23.5	45.6	(n=412)
Post		15.0	13.6	19.4	52.0	(n=381)
	Higher education – me					
Pre		20.1	11.4	22.2	46.2	(n=437)
Post		22.4	11.3	25.4	50.9	(n=389)

Note: The sample size is 482. There is high non-response in the sample on all items, as the sample size for individual questions show, so valid percent figures are used.

Table 5.95 Me and my subjects – Year 6

	Good at maths	No	Yes	Don't know	Missing
Pre		3.9	47.4	48.7	
Post		6.6	42.1	51.3	
	Find maths hard				
Pre		52.6	36.8	9.2	1.3
Post		53.9	32.9	11.8	1.3
	Best at maths				
Pre		48.7	17.1	31.6	2.6
Post		56.6	21.1	22.4	
	Good at science				
Pre		3.9	46.1	48.7	1.3
Post		3.9	47.4	48.7	
	Find science hard				
Pre		68.4	23.7	7.9	
Post		57.9	27.6	14.5	
	Best at science				
Pre		43.4	23.7	32.9	
Post		46.1	25.0	27.6	1.3
	Good at English				
Pre		11.8	38.2	47.4	2.6
Post		13.2	36.8	48.7	1.3
	Find English hard				
Pre		59.2	27.6	11.8	1.3
Post		53.9	34.2	10.5	1.3
	Best at English				
Pre		55.3	7.9	36.8	
Post		55.3	17.1	27.6	

Table 5.96 Me in school – Year 6

	Other children like me	No	Yes	Don't know	Missing
Pre		3.9	82.9	13.2	
Post		6.6	69.7	23.7	
	Don't have friends				
Pre		75.0	17.1	6.6	1.3
Post		69.7	14.5	14.5	1.3
	I enjoy school				
Pre		7.9	71.1	21.1	
Post		18.4	63.2	17.1	1.3
	Teachers don't try				
Pre		59.2	14.5	26.3	
Post		59.2	6.6	34.2	
	Teachers help me				
Pre		7.9	81.6	9.2	1.3
Post		14.5	80.3	3.9	1.3
	Like school				
Pre		15.8	53.9	30.3	
Post		15.8	51.3	31.6	1.3
	Rather not be at school				
Pre		48.7	22.4	28.9	
Post		52.6	22.4	25.0	
	Teachers not interested				
Pre		56.6	11.8	31.6	
Post		67.1	6.6	26.3	

Table 5.97 Me – Year 6

	Good to be me	No	Yes	Don't know	Missing
Pre		9.2	77.6	11.8	1.3
Post		13.2	76.3	10.5	
	Want to be another				
Pre		72.4	19.7	5.3	2.6
Post		64.5	23.7	11.8	
	Worthless				
Pre		50.0	26.3	21.1	2.6
Post		55.3	31.6	13.2	
	Proud				
Pre		11.8	67.1	17.1	3.9
Post		19.7	64.5	15.8	
	I'd change myself				
Pre		39.5	46.1	11.8	2.6
Post		43.4	39.5	15.8	1.3

Table 5.98 Me and going to university – Year 6

	Higher education – me	Yr 11 aspiration	Yr 12 aspiration	Yr 13 aspiration	Uni aspiration	Missing
Pre		22.4	10.5	11.8	51.3	3.9
Post		19.7	10.5	10.5	59.2	
	Higher education – pupils					
Pre		27.6	15.8	26.3	25.0	5.3
Post		21.1	18.4	13.2	47.4	
	Higher education – teacher					
Pre		19.7	10.5	22.4	43.4	3.9
Post		15.8	5.3	13.2	64.5	1.3

Note: Sample size for the matched sample is 76. There is of course still additional non-response from individual questions. Both cases were missing from the 'post' phase

Table 5.99 Me and my subjects – Year 8

	Good at maths	Really disagree	Disagree	Agree	Really agree	Missing
Pre		3.2	22.0	63.9	9.3	1.6
Post		1.6	18.0	70.3	8.8	1.3
	Find maths hard					
Pre		6.6	47.2	37.7	8.5	
Post		7.4	49.6	32.6	9.3	1.1
	Best at maths					
Pre		34.5	53.8	8.2	2.1	1.3
Post		31.8	51.5	11.9	3.4	1.3
	Good at science					
Pre		2.7	20.7	64.7	10.1	1.9
Post		2.1	18.0	66.3	11.7	1.9
	Find science hard					
Pre		14.6	47.2	33.2	4.8	0.3
Post		12.5	49.9	31.3	4.8	1.6
	Best at science					
Pre		25.5	56.0	13.0	3.2	2.4
Post		26.0	52.3	13.5	6.1	2.1
	Good at English					
Pre		3.4	21.5	66.0	7.4	1.6
Post		2.4	21.2	65.8	9.0	1.6
	Find English hard					
Pre		14.9	50.4	28.1	5.6	1.1
Post		16.4	48.0	28.4	5.6	1.6
	Best at English					
Pre		27.3	57.0	11.9	2.7	1.1
Post		24.7	55.7	15.1	3.2	1.3

Table 5.100 Me in school – Year 8

	Other children like me	Really disagree	Disagree	Agree	Really agree	Missing
Pre		0.3	4.8	68.4	26.0	0.5
Post		1.3	4.2	65.3	27.9	1.3
	Don't have friends					
Pre		43.5	44.6	9.0	2.4	0.5
Post		45.1	43.0	8.8	1.9	1.3
	I enjoy school					
Pre		9.0	26.8	52.0	7.2	
Post		11.4	24.4	54.1	8.5	1.6
	Teachers don't try					
Pre		7.4	45.1	35.8	10.9	0.8
Post		5.0	41.6	38.5	13.3	1.6
	Teachers help me					
Pre		2.1	19.9	66.0	11.4	0.5
Post		4.0	19.1	67.6	7.2	2.1
	Like school					
Pre		13.3	28.6	48.8	8.0	1.3
Post		15.6	29.7	44.6	8.2	1.9
	Rather not be at school					
Pre		12.5	41.9	27.9	17.2	0.5
Post		11.7	43.0	25.5	17.2	2.7
	Teacher not interested					
Pre		23.1	55.4	13.8	5.8	1.9
Post		21.5	54.9	18.0	4.0	1.6

Table 5.101 Me – Year 8

	Good to be me	Really disagree	Disagree	Agree	Really agree	Missing
Pre		3.4	5.6	48.3	42.4	0.3
Post		1.3	8.5	48.5	40.1	1.6
	Want to be another					
Pre		41.4	41.4	12.7	3.7	0.8
Post		42.2	40.8	12.2	2.9	1.9
	Worthless					
Pre		29.7	43.5	21.0	5.0	0.8
Post		30.0	41.6	20.4	5.6	2.4
	Proud					
Pre		4.2	21.2	53.8	20.2	0.5
Post		3.2	17.5	54.1	22.5	2.7
	I'd change myself					
Pre		14.3	35.8	32.9	16.4	0.5
Post		17.0	35.3	30.2	15.1	2.4

Table 5.102 Me and going to university – Year 8

	Higher education – me	Yr 11 aspiration	Yr 12 aspiration	Yr 13 aspiration	Uni aspiration	Missing
Pre		18.6	11.7	20.4	46.2	3.2
Post		21.0	11.4	15.4	48.8	3.4
	Higher education – pupils					
Pre		39.8	16.4	26.0	13.8	4.0
Post		29.4	16.7	27.9	22.0	4.0
	Higher education – teacher					
Pre		13.5	15.1	19.6	42.2	9.5
Post		13.3	12.7	18.8	49.3	5.8

Note: For Year 8 there were 105 unmatched cases; 29 were in the pre phase and 76 in the post phase. Total matched cases were 377

Table 5.103 Change index and buddy variables

Pupils	Commitment to WP/ Aimhigher		Clarity of approach		Expectations of what pupils could do		Quality of relationship with buddy		Student in schools prior to project		Behaviour management with buddy/groups whole class	
	r	sig	r	sig	r	sig	r	sig	r	sig	r	sig
Index 1: My subjects	.076	.825	-.101	.767	-.168	.622	-.067	.845	-.292	.384	-.036	.917
Index 2: Me and my school	.186	.562	.126	.695	.215	.503	.631*	.028	-.083	.797	.245	.443
Index 3: About me	-.368	.196	-.379	.181	-.538*	.047	-.439	.119	-.531	.051	-.616*	.019
Index 4: My future	-.257	.376	-.133	.649	-.117	.690	-.243	.402	-.102	.728	-.428	.127

Students	Actively involved in activities		Enthusiasm/can-do attitude		Length of time on project	
	r	sig	r	sig	r	sig
Index 1: My subjects	-.129	.706	.171	.616	.069	.840
Index 2: Me and my school	.167	.604	.160	.619	.334	.288
Index 3: About me	-.353	.216	-.204	.483	.209	.473
Index 4: My future	-.166	.570	-.278	.336	.008	.979

References

- Adnett, N. and Davies, P. (2002) 'Education as a positional good: Implications for market-based reforms of state schooling', *British Journal of Educational Studies*, 50 (1), pp. 189-205.
- Archer, L. and Hutchings, M. (2002) 'Bettering yourself? Discourses of risk, cost and benefit in ethnically diverse young working class non-participant constructions of higher education', *British Journal of Sociology in Education*, 21 (4), pp. 555-74.
- BACE (2009) See:
www.brunel.ac.uk/about/acad/sse/sseres/sseresearchcentres/bacehome.bsp
- Baggott la Velle, L., McFarlane, A. and Brawn, R. (2003) 'Knowledge transformation through ICT in science education: A case study in teacher-driven curriculum development', *British Journal of Educational Technology*, 34 (4), pp. 183-199.
- Baker, S., Brown, B. and Fazey, J. A. (2006) 'Individualization in the widening participation debate', *London Review of Education*, 4 (2), pp. 169-182.
- Bath University (2009) *University of Bath Learning and Teaching Strategy*, Bath: University of Bath.
- Battersby, D., Berry, J., Kelly, P. and Pratt, N. (2006) 'From the outside looking in', *Journal of In-Service Education*, 33 (1), pp. 41-65.
- Bennett, S. N. and Carré, C. (eds.) (1993) *Learning to teach*. London: Routledge.
- Bourdieu, P. and Wacquant, L. (1992) *An invitation to reflexive sociology*. Chicago: Chicago University Press.
- Brill, J. M. (2001) 'Situated cognition', in Orey, M. (ed.) *Emerging perspectives on learning, teaching, and technology*. Georgia: University of Georgia. Available through:
<http://projects.coe.uga.edu/epltt>
- Brown, J. S. and Duguid, P. (1991) 'Organizational learning and communities of practice – towards a unified view of working', *Organization Science*, 2 (1), pp. 40-57.
- Brown, J. S., Collins, A. and Duguid, P. (1989) 'Situated cognition and the culture of learning', *Educational Researcher*, 18 (1), pp. 32-42.
- City Challenge Gifted and Talented Education Strand (City GATES) (2009) See:
<http://ygt.dcsf.gov.uk/Community/CityGATES/Content.aspx?contentId=925&contentType=5>
- Collins, A. (1988) *Cognitive apprenticeship and instructional technology*. Camb, MA: BBLabs.
- Collins, A., Brown, J. S. and Newman, S. E. (1989) 'Cognitive apprenticeship: Teaching the craft of reading, writing and mathematics', in Resnick, L. B. (ed.) *Knowing, learning and instructions: Essays in honour of Robert Glaser*. Hillsdale: Erlbaum.
- Crozier, G., Reay, D., Clayton, J., Colliander, L. and Grinstead, J. (2008) 'Different strokes for different folks: Diverse students in diverse institutions – experience of higher education', *Research Papers in Education*, 23 (2), pp. 167-177.

David, M., Parry, G., Vignoles, A., Hayward, G., Williams, J., Crozier, G., Hockings, C. and Davies, P. (1995) 'Response or resistance? Access students and government policies on admissions', *Journal of Access Studies*, 10 (1), pp. 72-80.

David, M., Parry, G., Vignoles, A., Hayward, G., Williams, J., Crozier, G., Hockings, C. and Fuller, A. (2008) *Widening participation in higher education: a commentary by the Teaching and Learning Research Programme*. London: TLRP. Available at: www.tlrp.org/pub/documents/HEcomm.pdf

Department for Children, Schools and Families (DCSF) (2007) *The children's plan*. London: HMSO. Available at: www.dcsf.gov.uk/childrensplan

Department for Education and Employment (DfEE) (1999) *Excellence in cities*. London: DfEE Publications.

Department for Education and Skills (DfES) (2003a) *Every child matters*. London: HMSO. Available through: <http://publications.everychildmatters.gov.uk>

Department for Education and Skills (DfES) (2003b) *The future of higher education*. London: HMSO.

Department for Education and Skills (DfES) (2006) *Widening participation in HE: creating opportunity, releasing potential, achieving excellence*. London: HMSO.

Department of the Environment, Transport and the Regions (DETR) (1998) *Index of local deprivation*. London: DETR

Department for Education and Science (1992) *Circular 9/92. The new requirements for ITT*.

Desimone, L. M. (2009) 'Improving impact studies of teachers' professional development: Towards better conceptualisations and measures', *Educational Researcher*, 38 (3), pp. 181-199.

Devon County Council (2009) *Targeted intervention and support programme (TISP)*. Devon: Devon County Council.

Duncombe, R. and Armour, K. M. (2004) 'Collaborative professional learning: from theory to practice', *Journal of In-Service Education*, 30 (1), pp. 141-166.

EKOS Consulting (2007) *Aimhigher area studies: Final report to HEFCE by EKOS Consulting*. Edinburgh: EKOS.

Exeter University (2008) *Exeter University SAS/HEI student scheme: Working with pupils of outstanding potential (Gifted and Talented Pilot Project 2008-09)*. Mentor and email buddy handbook. Exeter: University of Exeter.

Exeter University (2009) *Student recruitment office outreach plan 2007-08*. Exeter: University of Exeter.

Exeter University Sport (2009) Sport volunteer scheme. See: <http://atom.exeter.ac.uk/news/uni/2008/01/sportvolunteer.html>

Fines, J. and Nichol, J. (1997) *Teaching primary history*. Oxford: Heinemann.

Fines, J. and Nicol, J. (1994) *Doing history 16-19: a case study in curriculum innovation and change*. London: Historical Association.

Fullan, M. (1991) *The new meaning of educational change*. London: Cassell.
Further and Higher Education Act 1992. London: HMSO.

Gorard, S., Smith, E., May, H., Thomas, L., Adnett, N. and Slack, K. (2006) *Review of widening participation research: Addressing the barrier to participation in higher education*. A report to HEFCE by the University of York, Higher Education Academy and Institute for Access Studies. Available at: www.hefce.ac.uk/pubs/rereports/2006/rd13_06/barriers.pdf

Harland, J. and Kinder, K. (1997) 'Teachers' continuing professional development: Framing a model of outcomes', *Journal of In-Service Education*, 23 (1), pp. 71-84.

Hatcher, R. (1998) 'Class differentiation in education: Rational choices?', *British Journal of Sociology*, 19 (1), pp. 5-22.

Hatt, S., Baxter, A. and Tate, J. (2007) 'Measuring progress: An evaluative study of Aimhigher SouthWest 2003-2006', *Higher Education Quarterly*, 61 (3), pp. 284-305.

HEFCE (2007) *Higher education outreach: Targeting disadvantaged learners*. Bristol: HEFCE. Available at: www.hefce.ac.uk/pubs/hefce/2007/07_12

HEFCE (2009) *Widening participation: Working with institutions to embed WP*. See: www.hefce.ac.uk/widen/strategy

Higher Education Act 2004. London: HMSO. Available at: www.opsi.gov.uk/acts

Hopkins, D. and Reynolds, D. (2001) 'The past, present and future of school improvement: Towards a third age', *British Educational Research Journal*, 27 (4), pp. 459-475.

Hustler, D., McNamara, O., Jarvis, J., Londra, M., Campbell, A. and Howson, J. (2003) *Teachers' perceptions of continuing professional development*. London: DFES (RR429).

International Baccalaureate (2009) *Creativity, action, service (CAS)*. See: www.ibo.org/diploma/curriculum/core/cas

Ireland, E., Golden, S. and Morris, M. (2006) *Evaluation of integrated Aimhigher: Tracking surveys of young people*. Slough: NFER (RR811).

Joseph Rowntree Foundation (2005) *Rethinking working class drop-outs from university*. York: Joseph Rowntree Foundation. Available at: www.jrf.org.uk

Koshy, V. and Pinheiro-Torres, C. (2009) *The Brunel urban scholars programme: Annual report*. London: University of Brunel.

Koshy, V., Casey, R. and Taylor, A. (2007) *A four-year study relating to the design and evaluation of an intervention programme delivered to teenagers (12-16 years of age)*. London: University of Brunel.

Lave, J. and Wenger, E. (1991) *Situated learning: legitimate peripheral participation*. Cambridge: Cambridge University Press.

Mathers, J. and Parry, J. (2009) 'Why are there so few working-class applicants to medical schools? Learning from the success stories', *Medical Education*, 43 (3), pp. 219-28.

Morris, M. and Golden, S. (2005) *Evaluation of Aimhigher: Excellence Challenge; interim report, 2005*. London: DfES (RR648).

Muijs, D. and Reynolds, D. (2000) 'School effectiveness and teacher effectiveness: Some preliminary findings from the evaluation of the Maths Enhancement Programme', *School Effectiveness and School Improvement*, 11 (3), pp. 323-337.

Muijs, D. and Reynolds, D. (2005) *Effective teaching: Evidence and practice*. 2nd edn. London: Paul Chapman Publishing.

Muijs, D., Reynolds, D. and Treharne, D. (2003) 'Teacher evaluation and teacher effectiveness in the United Kingdom', *Journal of Personnel Evaluation in Education*, 17 (1), pp. 83-100.

Murphy, C and Begg, J. (2008) *An Innovative Model of Professional Development: Coteaching between Teachers and Student Teachers*. Paper presented at the annual conference of the European Educational Research Association. Helsinki.

NAGTY (2005) *Developing Expertise Awards 2005/06*. Warwick: NAGTY. Available at: <http://ygt.dcsf.gov.uk/Community/Content.aspx?contentId=362&contentType=1>

National Audit Office (2008) *Widening participation in higher education*. London: Comptroller and Auditor General.

National Council for Educational Excellence (NCEE) (2008) *National Council for Educational Excellence: recommendations*. (DCSF-00803-2008) Available at: <http://publications.dcsf.gov.uk/eOrderingDownload/NCEE-Recommendations.pdf>

National Foundation for Educational Research (NFER) (2002) *Excellence Challenge: Executive summary of the baseline evaluation report*. Slough: NFER.

Nichol, J. and Turner-Bisset, R. (2006) 'Cognitive Apprenticeship and teachers' professional development' *Journal of In-service Education*, 32, (2) pp. 149-69

Nichol, J. (2009) 'Bringing the history classroom to life for 12-13 year olds through cognitive acceleration in history/humanities education (CACHE) and Nuffield history', in Chapman, A. and Cooper, H. (eds.) *Constructing history 11-19*. London: SAGE Publications.

Nichol, J., Briggs, J. and Dean, J. (eds.) (1988) *PROLOG, children and students*. London: Kogan Page.

Panel on Fair Access to the Professions (2009) *Unleashing aspiration: summary and recommendations of the full report*. London: HMSO. Available at: www.agcas.org.uk/assets/download?file=1204&parent=465 (also: Panel on Fair Access to the Professions (2009) *Unleashing aspiration: the final report of the Panel on Fair Access*. Available at: www.cabinetoffice.gov.uk/media/227102/fair-access.pdf)

Parker, D. (2006) 'South West initiative for training', *The International Professional Development Association Annual Conference*. London, September 10th 2006.

Plaskoff, J. (2006) 'Intersubjectivity and community building: Learning to learn organizationally', in Easterby-Smith, M. and Lyles, M. A. (eds.) *Handbook of organizational learning and knowledge management*. Oxford: Blackwell Publishing.

- Plymouth SAS (2008) *Partnership agreement: For the direction and management of the Plymouth Student Associates Scheme*. Plymouth: Plymouth LA and the University of Plymouth.
- Ramsden, P. (2003) *Learning to teach in higher education*. London: Routledge Falmer.
- Robson, J. (2006) *Teacher professionalism in further and higher education: Challenges to culture and practice*. London: Routledge.
- Rose, J. (2009) *Historical, geographical and social understanding*. London: DCSF. Available at: www.dcsf.gov.uk/primarycurriculumreview/downloads/historical-geographical-and-social-understanding.pdf
- Rose, J. (2009) *Independent review of the primary curriculum*. London: DCSF. Available at: www.dcsf.gov.uk/primarycurriculumreview/
- Rule, B. (2006) *Using peer coaches to explain and tackle the underachievement of gifted students*. NAGTY Developing Expertise Award report. Warwick: NAGTY.
- Schon, D. (1983) *The reflective practitioner*. New York: Basic Books.
- Specialist Schools and Academies Trust (SSAT) (2009) See: <https://www.ssatrust.org.uk/Pages/home.aspx>
- Strange, D. and Fullam, C. (2009) 'Through the eyes of a great astronomer', *Primary Science*, No. 108, May-June, pp. 5-7.
- Sutton Trust (2008) *Report to the National Council for Educational Excellence: Increasing higher education participation amongst disadvantaged young people in schools and poor communities*. London: Sutton Trust. Available at: www.suttontrust.com/reports/NCEE_interim_report.pdf
- SW GATE (2008) *Memorandum of understanding: SW GATE and SW Excellence Hub*. Plymouth: University of Plymouth.
- SWHub (2008) *South West HEI Excellence Hub and SW GATE autumn courses for gifted and talented pupils*. Plymouth: University of Plymouth.
- Teddlie, C. and Reynolds, D. (2001) *The international handbook of school effectiveness research*. London: Falmer Press.
- Thames Valley University (2009) *Training for sustainable employability in tourism and hospitality (SETH): Impact and transferability of a business/schools/HE project for young people (14-19)*. Slough: TVU.
- University of Bath (2009) *Widening participation strategic assessment 2009/10-2011/12*. Bath: University of Bath.
- University of Plymouth (2005) *Widening participation strategy 2004-2010*. Plymouth: University of Plymouth.
- University of Plymouth, Mathematics Education, Centre for Teaching Mathematics (CTM). See: www.tech.plym.ac.uk/research/mathematics_education

Wakeford, N. (1993) 'Beyond "Educating Rita": mature students and access courses', *Oxford Review of Education*, 19 (2), pp. 217-219.

Warren, M. (2005) 'Communities and schools: A new view of urban education reform', *Harvard Educational Review*, 75 (2) pp.100-130.

West, A., Hind, A. and Xavier, R. with Jupp, J. (2003) *Evaluation of Aimhigher: Survey of opportunity bursary award applicants 2001/02: Preliminary findings*. London: DfES (RR497).

Wood, D. E. and Lowe, H. (2005) *Evaluation of continuing professional development in creative partnerships*. Westminster Institute of Education, Oxford Brookes University (unpublished paper).

Woodrow, M. (1999) 'Student finance: assessing opportunity', in *Fairness for the future*. Report by the Independent Committee of Enquiry into Student Finance. Edinburgh: The Scottish Parliament.

Wray, D. E. and Lewis, M. (1997) *Extending Literacy: Children reading and writing non-fiction*. London: Routledge.

York Consulting (2005) *Training and Development Agency for Schools: Evaluation of the impact of the Student Associates Scheme: Final report*. York: York Consulting Ltd. Available at: www.yorkconsulting.co.uk/uploads/23_Evaluation_of_the_Impact_of_SAS.pdf