YEARBOOK



SUPPORT Highlights of our year



Schools Programme

Schools Leadership Programme

"The Schools Leadership Programme will make me take action in my school"



MFL Autumn Residential

"It is fantastic to now be part of a network where we can ultimately make a difference in shaping the future of MFL"

Geography, Mathematics and Science Summer Residential

"What an amazing opportunity. I will no longer be afraid to fully explore the complexity of many issues on a range of subjects and areas"



Emma Jane Kirby BBC Correspondent **Dr Rita Gardner CBE** Director, Royal Geographical Society

> Anu Ojha OBE Director, National Space Academy

Headteachers' Residential

"This conference has reinforced my vision and supported my leadership direction. This will have lasting effect on my school"



200 SUBJECT LEADERS AND HEADTEACHERS ATTENDED, 93% OPTED TO JOIN OUR PROGRAMMES

SITE Highlights of our year

Fieldwork in Salford Quays





Inspirati

professi

CPD Subject Days

500 teachers attended 28 exciting events, taking expert knowledge back to school

Launch of the Primary Leadership Programme

"I feel inspired to strengthen the importance given to subject knowledge - improving teacher education and professional development"

"I felt inspired within 10 minutes of starting. I am looking forward to trying everything"



Launch of the new **PTI Staffroom**

Over 3,000 teaching

"I have found interest in topics that I previously would have been nervous about. I was able to love my subject and be challenged by it"

MiD

85

.

*1

1c

1946

10

Re

ine:

£5-8

410

No

a.c.2

-

Peti

1483

Se

11.54

218

Ni

18.7

44

Pd

DDE 4

78

Pt

191.1

110

Ds

32

Ge

15

13

Bi

9.0

D



A STRUE

Educational resol

Subject English (623) Maths (425) General Sciences (2 Modern Foreign Lar History (804) ces (233) Geography (365) Continue (1

Key stage

Years 1-2 (KSI) (23-0 Years 3-6 (KS2) (398) Years 7-9 (KS3) (2285) Years 10-11 (KS4) (2288) Years 10-11 (KS4) (2288) Year 12 (1612)

Search: > CLEARABACCITERAL > Sorted by: Des Addres Showing 50 of \$405 results. Page 7 of 55. < PREVIOUS MADE INCODES

Dr Katle Steckles: Mathematical Magic 安安安安安 Upleaded by The PELOffice Dr Steckles demonstrates many tricks involving rembers, playing cards and keyrings, and then Tears 740 0000 Years 13-01 Oct-10 Year 12 Year 12 MUG LILIALL >

Dr Peter Wethers: Atoms, brains and gala An introduction to spectroscopy ***** ed by The PTI Office Dr Peter Wathers gives a details the spectroscopic methods. He etailed overview of all of s. He explains how they... Vote 32 Name 13 MARE DITALL

1 L

How we raise standards

"The Schools Programme is helping us to add to the depth and enjoyment of the curriculum"

THE SCHOOLS PROGRAMME FOR SUBJECT LEADERS

Promoting excellent subject teaching

We connect teachers with academics, authors, engineers, linguists and diplomats to bring them the latest high-level thinking in their subjects.

We re-ignite teachers' passion for their subject and support them to continue to update their subject knowledge throughout their careers.

Inspiring teachers to raise the level of challenge for all pupils

In 2014/15

- **91%** of members have increased the coherence and quality of challenge within their curriculum
- 77% have increased the level of extra-curricular provision in their department
- **75%** have increased the amount of subject-based professional development that they do

"The most effective teachers have deep knowledge of the subjects they teach, and when teachers' knowledge falls below a certain level it is a significant impediment to students' learning"

The Sutton Trust, What Makes Great Teaching, October 2014

THE SCHOOLS LEADERSHIP PROGRAMME FOR SCHOOL LEADERS

A focus on whole-school leadership that puts subjects at its heart

Members gather annually to reflect on the purposes of education and share their experiences in all aspects of school leadership. We support them to develop whole-school approaches to leadership, staffing and the curriculum, in order to improve quality, rigour and challenge for pupils of all abilities and backgrounds.

In 2014/15

- **96%** of members have increased the development of leadership skills in their school
- **94%** have increased the focus on teaching and learning in their school
- **79%** have increased their links with other schools

"Without a doubt the Schools Programme has reinvigorated my approach to A Level and raised the bar for GCSE"

838 subject departments and senior leadership teams in 351 schools are PTI members



A look ahead One-day Courses

For up to date information see www.princes-ti.org.uk/events

ENGLISH

Autumn 2015 The play's the thing: Whole text teaching of Shakespeare

Spring 2016 Inspiring non-fiction

Paradise found: Using challenging texts to engage and motivate students

> **Summer 2016** Gothic love in the 19th century novel





MODERN FOREIGN LANGUAGES

Autumn 2015 "La musique, c'est du bruit qui pense": Bringing music into the French classroom

Cuba in the classroom

Spring 2016

Es lebe Berlin: Bringing the city to life at KS3-5

Using authentic film in the Spanish classroom

HISTORY

Autumn 2015 Civil rights at A Level

The Middle Ages at KS4: The Norman Conquest and medieval kingship

Spring 2016 The rise and fall of the transatlantic slave trade

Summer 2016 Reshaping the Middle East: Collapse of empire and regional turbulence





GEOGRAPHY

Autumn 2015 International development and Africa

> **Spring 2016** GIS for all key stages

Summer 2016 Rocks, weathering and soils (a two-day residential course)



MATHEMATICS

Autumn 2015 The power of problem solving

Spring 2016 The history of maths

Computing (a two day course: one day in spring and one in summer 2016)

SCIENCE

Autumn 2015 Why does a battery go flat?

Spring 2016 Unzipping your genetic potential

> Transition metals: Colourful chemistry

Summer 2016 Modelling scientific understanding



MUSIC

Autumn 2015 The piano: Performing, composing, improvising and listening

Spring 2016 Informal musical learning

> **Summer 2016** Musical theatre

91990 A look ahead Residential Courses

Primary Residential for primary headteachers 1st-2nd October 2015

Autumn Residential for subject leaders: Art, Music, English, Mathematics & Science 14th-16th November 2015

Headteachers' Residential for secondary headteachers 25th-26th January 2016

Summer Residential for subject leaders: History, MFL, English, Mathematics & Science 20th-22nd June 2016

E PRINCE'S CHING TITUTE

Insp

na



Designed for new teachers, these Saturday courses give guidance on subject-specific teaching strategies, access to a wealth of subject-based resources, and contact with some of the latest academic thinking.

Courses are run by experienced practising teachers, ensuring their relevance to the curriculum and classroom practice. They are joined by guest speakers from top universities and institutions. The days are spaced throughout the year and provide support for new teachers as they develop in their careers.

Subjects covered

Mathematics, English, Biology, Chemistry, Physics, History, Geography, French, German and Spanish.

Locations

London, Birmingham, Manchester and Harrogate

Eligibility

School-based teacher trainees, NQTs, second and third year teachers

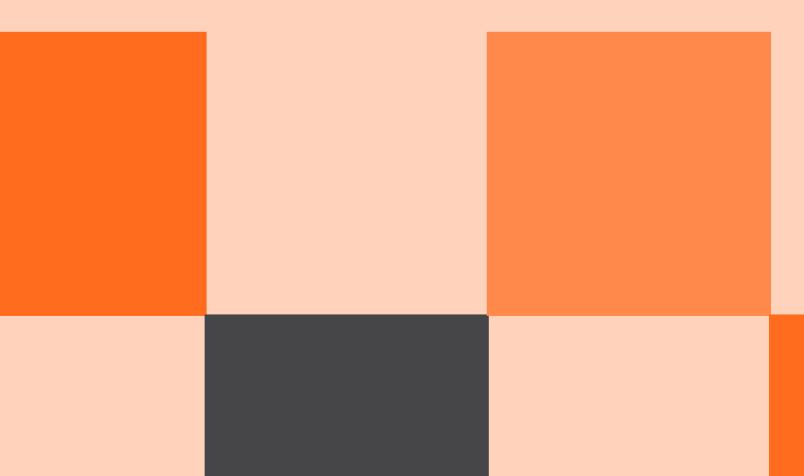
"I feel inspired to take more risks within the classroom"



For up to date information see www.princes-ti.org.uk/events

Contents

The Prince's Teaching	g Institute Yearbook		3
2014/15: Highlights of	our year		4
How we raise standa	rds		8
2015/16: A look ahead	1		10
Schools Leadership F	Programme project summaries	51	14
Associate Departmer	nt project summaries		36
	English	. 38	
	Geography	. 50	
	History	. 53	
	Mathematics	66	
	Science	. 70	
Index			78



The Prince's Teaching Institute Yearbook

This Yearbook contains summaries of the action-based research projects completed in 2014/15 by headteachers and subject leaders as part of our Schools Leadership Programme and Schools Programme Associate Department Scheme.

The projects:

- focus on teaching and learning
- support collaboration
- encourage staff to develop their specialist subject knowledge
- extend and enthuse pupils within and beyond the curriculum

We hope you will find these of interest and that you may take inspiration from the ideas presented.

The Yearbook also looks ahead to some of our plans for the coming 2015/16 academic year.

Full project reports are available to members and can be found in our online Staffroom at www.princes-ti.org.uk/staffroom. Information about the PTI and our upcoming events can be found at www.princes-ti.org.uk.



Schools Leadership Programme project summaries

- 16 Recognising and rewarding talent in order to improve staff recruitment and retention Eastbury Comprehensive School, Essex
- 17 Reducing in-school variations across subject departments Gordon's School, Surrey
- 18 Transition Pathway: Changing the curriculum to improve the progress of Year 7 pupils Tendring Technology College, Essex
- 19 Developing Assessment for Learning (AfL) to improve literacy Writhlington School, Somerset
- 20 Sharpening accountabilities through leadership development Hinchingbrooke School, Cambridgeshire
- 21 To what extent is the School's 'Learner Profile' an integral part of the School's curriculum and extracurricular opportunities? Chelmsford County High School for Girls, Essex
- 22 Encouraging teachers to further their academic subject-based knowledge Durham Johnston Comprehensive School, Durham
- 23 Empowering subject leaders to transform school-based professional development Rainham Mark Grammar School, Kent
- 24 Developing a coherent cycle of continuous professional development linked to performance management William Farr C.E. Comprehensive School, Lincolnshire
- 25 Enriching Languages and Humanities lessons at Key Stage 3 Davenant Foundation School, Loughton, Essex
- 26 Using self-evaluation to drive improvement and planning and enhance professionalism Marsden Heights Community College, Lancashire
- 27 Developing and testing a better way of assuring the quality of lessons and learning the 'Apple' lesson Christleton High School, Chester
- 28 Developing subject-centred leadership to improve teaching quality and raise standards Ysgol Rhiwabon, Wrexham, Wales
- 29 Improving outcomes in Humanities and Languages by accelerated professional development Caistor Yarborough Academy, Lincolnshire
- 30 Lesson Study: Improving the quality of Teaching and Learning through observation and sharing good practice Ark Academy, London
- 31 Reducing in-school variation between subject departments Ivybridge Community College, Devon
- 32 Developing an outstanding lesson observation and faculty review programme to deliver outstanding learning

The John Warner School, Hertfordshire

- 33 Providing extra challenge and depth at GCSE by developing an enrichment curriculum Sale Grammar School, Cheshire
- 34 Redesigning the Key Stage 3 curriculum around a school Learner Profile Westcliff High School for Boys, Essex
- 35 Empowering Subject Leaders to provide inspirational teaching and learning **in their subject** Oakwood Park Grammar School, Kent



Recognising and rewarding talent in **and retention**

Eastbury Comprehensive School, Essex

An 11-18 community secondary school

Aim: To improve staff morale, provide career progression within school and thus reduce staff turnover; to attract young graduates and achieve a high conversion rate into teacher training, all of which should benefit pupils.

Background: Staff were leaving for career progression elsewhere.

Method:

pupils on the

programme

became more confident and

were more

willing to

engage in

lessons

Year 1:

- Internal responsibility posts were advertised for staff to initiate school improvement projects. Three colleagues were successful and the projects instigated included leading a Teaching and Learning Group, improving performance in Science for students with low achievement on entry and establishing Economics within a new options structure.
- Academic mentor posts were advertised to attract graduates to apply with the intention that many of these would go on to teacher training programmes; two were employed to support teaching and learning in Years 11 and 12.
- Continued recruitment of Teach First candidates to provide high quality personnel within the classroom.
- Two outstanding teachers were promoted to Lead Practitioners.

Year 2:

- Additional responsibility posts were advertised; one project concerned developing Computer Science and another was for Special Educational Needs within the classroom.
- Six graduates were employed as literacy mentors. Supported by a member of staff, a Teach First candidate provided a comprehensive pre-teacher training course which led to four of the mentors applying for teacher training posts, with two of them being successful.
- The academic mentors continued to provide support with Year 11, 12 and 13 students. Both academic mentors applied for posts through School Direct.

Year 3: Both of the academic mentors gained places on teacher training courses as part of the Teaching Schools partnership.

Evidence: Literacy data, staff appraisal and retention statistics.

Impact: Staff retention was much improved. With more access to responsibility allowances, the age profile of the staff also changed. However, the school is no longer employing anyone through the Teach First Programme because of the poor retention of candidates.

The literacy mentors improved the reading ages of students by an average of 1 year and 5 months. Teachers commented that pupils on the programme became more confident and were more willing to engage in lessons. This project contributed to Eastbury attaining the Times Educational Supplement Literacy and English Award for 2013 and 2014. Following this success, numeracy mentors were also appointed. Mentoring of Sixth Form and Year 11 students increased motivation levels and ultimately results.

Reflections: These initiatives have proved very positive for both staff and pupils. Our improved staff retention is a result of a number of factors including improved teaching and learning, excellent student behaviour, high quality leadership and the recognition of talent.

Reducing in-school variations across subject departments

Gordon's School, Surrey

An 11-18 coeducational non-selective state boarding school

Aim: To reduce in-school variation between different subject areas in terms of both pupil outcomes and pupil experience.

Background: The Senior Leadership Team had concerns that, although results remained very good, some departments had been left behind by educational change. An audit across departments of teaching, assessment, planning, reporting and wider participation showed little common ground. Reporting home and use of data was outdated.

Method:

Year 1:

New reporting initiatives were introduced, including a new report template to report home half-termly with an aspirational target grade, tri-weekly deep marking moments, termly work sample audits and the use of the pupil diary to record the advice given. A medium term departmental planning template and an outcome-based lesson observation form were introduced. All departments were required to offer a pupil leadership opportunity at a local primary school, enter one local, regional or national competition, lead one trip per subject per year and collect pupil feedback.

Year 2:

The agreed template for tri-weeklies was unpopular with staff and heads of department were allowed to adapt these to meet the specific needs of their subject. Pupils struggled to consistently transfer advice from their books into their diaries and it was agreed that this would only be used at Key Stage 5. A working party of middle and senior leaders drew up a series of protocols for all departments, and this "staff directory", was incorporated into the back of the standard teachers' planner.

Year 3:

A performance-related pay bonus was introduced for all departments that met the school's upper progress targets. Whilst cause and effect in teaching is difficult to prove, this change led to greater focus on progress rather than attainment and also emphasised, for heads of department at least, the importance of all members of the department performing.

Evidence: Exam results, departmental meeting minutes, staff directory, lesson observations.

Impact: There was a significant impact on policy and practice for the future. In August 2014, at GCSE, 21 out of 22 subjects (96%) achieved the school's minimum performance standard; at AS Level, 17 out of 19 subjects (90%); at A Level, 16 out of 20 subjects (80%). These figures were marginally up on the position in 2011. The bigger impact was on 3-year averages. The following table compares 2008-10 against 2012-14:

Three-year average	GCSE A*-A	GCSE 5ACEM	GCSE Ebacc	A Level A*-A	A Level A*-B	A Level A*-C
2008-10	40.9	88.2	55.8	32.8	63.0	83.1
2012-14	43.2	87.9	60.0	37.2	67.2	87.3

Reflections: Ultimately changes were embedded due to flexible persistence and talented staff. However, too many decisions were taken by the Senior Team in isolation from departments and boarding houses, which made winning hearts and minds more difficult. Tying performance management to progress rather than attainment focuses the mind on what really matters and creates headroom for even the highest achieving departments to see scope to be better still.

Contact: Andrew Moss, amoss@gordons.surrey.sch.uk; head@gordons.surrey.sch.uk



There was a significant impact on policy and practice for the future

Transition Pathway: Changing the curriculum to improve the progress of Year 7 pupils

Tendring Technology College, Essex An 11-18 coeducational comprehensive school



Aim: To investigate whether a change in curriculum could produce rapid gains in achievement for middle-ability students. This was implemented in Year 7 targeting 10% of the intake (30 students).

Background: At the time of starting the Transition Pathway there was good support in place for the weakest students and a curriculum that stretched the brightest. It was thought that a new thematic curriculum Pathway linked to the RSA 'Opening Minds' would bring benefits to middle ability students, especially those that were of a quiet nature whose needs may not be quickly identified in a college with over 2,000 pupils.

Method: The 30 selected Year 7 students were taught in two groups of 15 for all their lessons in two newly created study bases. Three highly-skilled subject specialists taught the main part of the curriculum and were supported by a higher level teaching assistant (HLTA). The Pathway students attended mainstream tutor groups to build friendships across the year group. Half-termly newsletters, full written reports and coffee mornings ensured effective communication with parents. At the end of the summer half term these students graduated to the mainstream.

Evidence: Student and parent questionnaires, progress in English and Maths, reading ages, lesson observations.

Impact:

Year 1: Initially parents viewed this as a 'sink' group and it was difficult to gain their confidence. The Pathway students who were recruited were therefore weaker than anticipated and this meant changes had to be made to the thematic nature of the curriculum, with more time spent on securing basic concepts.

Years 2 & 3: The success of the Pathway in the first year, and its growing reputation, ensured that the recruitment to cohorts two and three was successful and that the profile of the students was as originally intended. Alterations to the curriculum included an additional laboratory-based Science lesson and exploring language through MFL. Evaluation of the impact of the Pathway on cohorts one and two once back in the mainstream indicated that for the majority the impact was very positive. The project allowed all staff involved to develop as teachers and as leaders. Reduced class sizes throughout Year 7 provided an opportunity to have new Higher Learning Potential groups in Maths and also allowed smaller lower ability groups in Year 7 mainstream lessons. Creative teaching from within the Pathway emanated outwards into the mainstream. Over the three years the Pathway was visited many times by Ofsted and on every occasion it was praised in the highest terms.

Year 4: The decision was taken not to run the Pathway for a fourth year because it would be unsustainable financially. A new provision was put in place to target low levels of literacy in Key Stage 3, which would have a greater impact on a greater number and wider range of students.

Reflections: As a leader, the creation of the Transition Pathway provided a fantastic opportunity to make creative changes to the curriculum. Leaders need to be constantly looking at their provision and, even if it is successful, ask searching questions and be brave enough to adapt to changing circumstances.

Developing Assessment for Learning (AfL) to improve literacy



Writhlington School, Somerset

An 11-18 coeducational comprehensive school

Aim: The initial aim was to reduce the variation in marking quality across the school with a view to improving the quality of feedback given. It very quickly came to light that to improve outcomes the students' response to feedback also needed to improve in order for them to progress in their learning.

Background: The two most recent Ofsted inspections had highlighted inconsistencies; there was some excellent practice within the school and some that required improvement. The aim of this project was to identify the good practice and use these departments and key staff to disseminate good practice across the curriculum.

Method:

Year 1: Deputy headteachers ran academic departmental reviews supported by the whole Senior Leadership Team (SLT) in terms of lesson observations and evaluations of the department. Summary reports for each subject were produced highlighting strengths and areas for development. Lead teachers for literacy and numeracy were appointed to develop teaching and learning (T&L) across the school with a particular focus on improving AfL by delivering training to disseminate good practice.

Year 2: By the end of Year 2 a common standard practice was in place throughout the school for marking, target setting and reviewing targets. It was visible to students and parents in their books and in reports sent home. It was visible to the SLT through the academic review process. Experienced personnel from outside the school helped to review and give quality assurance to SLT judgements. This was really helpful in securing confidence in the SLT's assessment of practice in the school. Initiatives were implemented for students to respond to marking and feedback from teachers, and they became more aware of their current position and how they could improve.

Year 3: With the introduction of performance-related pay, the school updated its appraisal policy; where an improvement in marking was needed it was recorded and set as a clear target for improvement. An Improving Teaching Policy was introduced whereby all teachers were rated on a 1 to 4 scale in the following areas: planning; teaching; pupil progress; observation/learning walk and then an overall grade. This created a measurable snapshot of the quality of teaching and learning over time which could be compared with exam results. A working group was set up to adapt the over-arching school policy and provide autonomy in subject areas to develop departmental policies.

Evidence: Work scrutiny, subject department reviews, pupil voice, learning walks.

Impact: The review process continued to identify excellent practice and saw an increase in the quality of marking and engagement which is embedded throughout the school. It is clear that staff are committed to improving outcomes by engaging with high quality feedback through marking. The time and energy that has been invested has created a constructive dialogue amongst the vast majority of teachers.

Reflections: The challenges were convincing all of the SLT that the changes were necessary, then the middle leaders and the classroom teachers. There was resistance as the changes clearly meant an increase in workload. Whilst the quality of marking and feedback has improved, it has been difficult to increase student engagement with feedback at the same pace.

The time and energy that has been invested has created a constructive dialogue amongst the vast majority of teachers.

Sharpening accountabilities through leadership development

Hinchingbrooke School, Cambridgeshire An 11-18 comprehensive school with academy status



Aim: To develop leadership which focuses on the quality of teaching and learning, with responsibility for outcomes and a greater impact on raising standards.

there was a significant change of gear throughout the whole organisation **Background:** The school was rated 'Good' by Ofsted in 2011, however the newly appointed principal considered there was a sense of complacency. There was no consistency in the setting of homework or in the marking of books and there were no mechanisms for subject leaders to compare and share their practices with other departments. Many leaders were capable teachers and administrators, but appeared unwilling or ill equipped to challenge underperforming staff.

Method:

Year 1:

- New mission statement published, built around 'inspiring excellence, fulfilling potential'
- Governor committees restructured and governor visits focused on strategic priorities
- New performance management policy and guidelines introduced
- Use of videos and joint observations to establish new benchmarks for classroom practice and promote consistency of judgements. Drop-in observations introduced. Middle leaders expected to observe for the first time. Regular, rigorous line management meetings for middle leaders.
- Core team set up to monitor progress in KS4 and decide interventions.
- New format for a School Development Plan and the introduction of departmental development plans linked to it.

Year 2:

- Two new vice principals were appointed. Heads of year and student support officers took up post for the first time. There was improved and more consistent behaviour management and the beginnings of better buy-in to the culture of the school as a place of work.
- Bespoke Continuing Professional Development was introduced including in-house programmes for teacher improvement.
- Achievement evenings, Easter revision schools and parent forums introduced.

Year 3:

- New assessment and marking policy launched. Homework timetable implemented. New uniform implemented. New performance-related pay policy implemented with moderation of pay recommendations for consistency.
- Quality assurance processes introduced: work scrutiny, learning walks, student voice feedback and data collected centrally from drop-in observations and reported back to staff.
- The school became a strategic partner in the Discovery Teaching School Alliance. Three specialist leaders in education (SLEs) appointed. The school joined the PiXL club (Partners in excellence).

Evidence: Staff surveys, quality assurance data.

Impact: Staff felt more accountable and there was a significant change of gear throughout the whole organisation. The results of the quality assurance processes showed there was a demonstrable improvement in marking and in the quality of teaching in general. The student body was better engaged because teaching was good or better in a larger proportion of lessons.

Reflections: There is no doubt that leadership success is dependent upon team building and the ability to attract the right people with whom we can build a shared vision. The school is undoubtedly better than it was, though there is a long way still to go to achieve the high levels of consistency that are required before the badge of 'Outstanding' can become a realistic prospect.

Contact: Andrew Goulding, Principal, rse@hinchbk.cambs.sch.uk

To what extent is the School's 'Learner Profile' an integral part of the School's curriculum and extracurricular opportunities?



Chelmsford County High School for Girls, Essex An 11-18 girls' selective school

Aim: To review and evaluate the effectiveness of subject leadership, and the extent to which classroom practice and extracurricular opportunities embed the development of the CCHS 'Learner Profile' in the teaching of subjects at KS3 and KS4.

Background: In 2009 the School introduced the IB Diploma. In addition to a broad programme of academic study, the IB aims to develop in every student a number of characteristics which are summarised in the IB Learner Profile. Consequently a CCHS Learner Profile (LP) was created, comprising seven attributes, for the whole school to focus on developing. They aim to make students: Articulate, Creative, Enquiring, Knowledgeable, Principled, Reflective and Resilient.

Method: Research into subject leadership: Each subject leader responded to three questions: What actions have you taken to embed the CCHS LP in your schemes of work across KS3 and 4? How do you monitor this and ensure it features in taught lessons? What plans do you have to move this forward in your subject area? Examples and judgements about how well this is embedded were also required.

Study of evidence provided in formal lesson observation: The lesson observation pro forma was amended to include a section on the LP which was completed by all observers. They recorded the dominant LP characteristics that were developed in the observed lesson.

Student researchers: A team of seven volunteer student researchers was created to carry out their own research involving students in all KS3 and 4 form groups; they devised a research plan, a process and procedures.

A Curriculum Enrichment booklet was published, noting LP elements for all enrichment day activities across Years 7 to 11.

Year 9 researchers devised and analysed questionnaires and presented their findings in school assemblies.

Evidence: Subject leader questionnaires, schemes of work, lesson observation feedback, year reviews, student research.

Impact: LP elements were developed and made explicit across all subject areas and key stages. Teachers have gained greater insight into the impact of their practice in affecting LP characteristics, and schemes of work have been improved accordingly. Students developed greater awareness of the strategies used in the classroom to help them develop the LP characteristics. Student researchers developed their research skills. Of 134 observed lessons from September 2013 to January 2014, being articulate was noted as a particular focus by the observer in 57% of lessons; being creative in 27%, being enquiring in 60%, being knowledgeable in 59%, being principled in 16% and being reflective in 57%.

Reflections: This project has provided opportunities to formally review and evaluate an area of the school's development which remains crucial in enhancing the school's vision for educating the leaders of tomorrow. It has involved senior and middle leaders, but more significantly students, and working with them as researchers has been a delight.

Teachers have gained greater insight into the impact of their practice

Encouraging teachers to further their academic subject-based knowledge



Durham Johnston Comprehensive School, Durham An 11-18 coeducational comprehensive school

Aim: To develop the subject-specific knowledge of the teaching staff to ensure that all students receive a high quality academic education.

This resulted in the strengthening of middle leadership at the school **Background:** The school was categorised as Outstanding by Ofsted in 2011 and consistently achieves strong examination results at A Level and GCSE. The school's intake is diverse, serving both Durham City and a number of former mining villages. It was felt that detailed subject knowledge and stimulating teaching would afford the students, particularly those from deprived backgrounds, access to further education, better employment opportunities and instil greater self confidence. The school was inspected again in February 2015 and was again categorised as being Outstanding.

Method:

Year 1:

A new Continuing Professional Development (CPD) programme and a new school calendar were designed to maximise training opportunities. A target was to further increase results in all areas, with a particular focus upon disadvantaged pupils.

Contact was made with the Art, Geography, History, Mathematics and Music departments at Durham University and with key teachers in partnership schools. In addition, the relevant Local Authority Advisers were contacted.

Years 2 & 3:

A much greater emphasis was given to subject-specific training time for staff and the importance of subject leadership. Eight new staff appointments were made based upon a modified, subject-specific recruitment plan. Increased cultural opportunities were provided for disadvantaged students via Art, Geography, History, Maths and Music.

There was increased subject involvement in PTI training: five departments met, or were working towards, the PTI Mark and middle leaders of Art, History, Maths and Music have delivered training and designed Subject Days for the PTI.

A survey by middle leaders confirmed the disparity of practice between departments. A working group of three middle leaders was convened to design a set of expectations and protocols, which would govern the work of the leadership group in support of middle leaders and their departments. This resulted in the strengthening of middle leadership at the school, a strength identified by Ofsted as part of the school's 2015 inspection.

Evidence: Exam results, inspection, subject-specific student questionnaires, lesson observation and work sampling.

Impact: Subject-specific CPD has proved successful and good subject specialists have been recruited. Key departments have also performed very well academically. The biggest challenge was trying to introduce and sustain a large project whilst avoiding generalisations and maintaining nuance; we wanted to avoid a 'one size fits all' approach.

Reflections: Providing more time for subject specialists to work together is pivotal, and imposing generic, whole-school systems on departments should be avoided. There were difficulties in classifying 'disadvantaged' students; with such a broad term, some of the initial assumptions were, retrospectively, quite inaccurate.

Contact: Andrew O'Sullivan, a.o'sullivan@durhamjohnston.org.uk

Empowering subject leaders to transform school-based professional development

Rainham Mark Grammar School, Kent

An 11-18 coeducational selective grammar school

Aim: To improve the quality of teaching and learning by having middle leaders lead regular subject-specific in-school continuing professional development (CPD). To maintain a consistent focus on successful assessment for learning and to improve school CPD by using students' own research on the quality of learning.

Background: After the 2008 Ofsted inspection, which assessed the school as Good overall with many Outstanding features, it was decided to harness colleagues' latent enthusiasm for their subjects to balance the effects of constant curriculum change and inspection pressure.

Method:

Year 1: The "Blue Sky" database system was implemented to collect and monitor lesson observation grades and CPD feedback. All staff took part in Teacher Learning Communities with an in-depth focus on pedagogy. 75% of staff took part in peer observations to reflect and improve upon current practice. A team of four early-career teachers were trained in the latest research into good learning and developed this with staff within subject areas.

Year 2: Four of the best heads of department were appointed to the Senior Leadership Team to strengthen the leadership of subject-specific training. 80% of staff took part in peer observation. Two departments (English and Science) shared subject-based CPD at curriculum heads' meetings. All members of the English, Geography and Mathematics departments used lesson DVDs to discuss effective subject-based teaching and learning.

Year 3: A new student academic council was established to carry out a teaching and learning research project. The student inquiry, *Agency, voice and participation,* was presented to colleagues and the feedback from teaching colleagues was the most positive ever received. The training students and staff received in research methodology from Canterbury Christchurch University provided students with important additional skills and strengthened our local university links. Over half of the subject leaders led a staff CPD session despite timetabling and time constraints.

Year 4: Student action research projects were extended. An online survey of staff perception on improvements to the school's performance management (PM) system was conducted, including views on the accreditation of staff CPD contributions within performance management.

Evidence: Subject reviews, lesson observations, staff surveys, student research.

Impact: Lessons assessed Good/Outstanding increased over 3 years from 85% to 91% (with 50% Outstanding). In Year 4 Ofsted inspectors rated the school as Outstanding in all areas and praised the "innovative" approach to school-led CPD. 83% of staff agreed that teacher learning communities had supported improvements in practice and implementation of new learning strategies. 93% also agreed that it had been useful to meet regularly with staff from other departments.

Reflections: Giving our teachers responsibility for delivering CPD helped produce the strong professional learning culture that we have now. Our new student academic council has been a great success, with senior students given the opportunity to present their findings to staff. Middle leaders' involvement in our performance management moderation committee also helped us to build trust as it represents our commitment to our self-improving school.



Parents have become more satisfied with the nature and setting of homework tasks

Developing a coherent cycle of continuous professional development linked to performance management



William Farr C.E. Comprehensive School, Lincolnshire An 11-18 coeducational comprehensive school

Aim: To improve the quality of teaching and learning across the school by encouraging more staff to participate in quality continuing professional development (CPD) including bespoke CPD provided by staff for staff.

Background: In the past CPD had been an additional responsibility for an assistant head teacher. The challenge was to improve the quality of teaching across the school and produce quantifiable results through robust processes and procedures.

Method:

Year 1: The profile of CPD was raised by creating a new post of Deputy Head (Staffing and Training), who identified priorities which included extending and analysing the effectiveness of CPD provision, particularly in supporting newly qualified teachers and supporting underperforming teachers to achieve the Teacher Standards. Teacher performance was monitored through a Development Management Programme. A bespoke in-house twilight CPD programme was introduced and a coaching programme launched to share best practice.

Year 2: A pay and appraisal system was introduced to reward high-quality teachers, and local and national CPD opportunities were offered with quantifiable impact. The school prepared to work as an Alliance Partner with a Teaching School and opportunities were developed for staff to reflect and improve on their own practice and pedagogy. 16 staff joined a research and development group to show what 'Outstanding' looks like in the classroom and compiled a resource of video clips from outstanding lessons.

Year 3: As part of training for leadership, four members of staff were co-opted onto the Senior Team and three middle leaders commenced the Embedding Quality Leadership Programme. The twilight CPD programme expanded to include courses for support staff. The whole staff shared Key Stage 5 resources via the school's intranet. A new CPD evaluation process was introduced linked to performance management objectives.

Evidence: Lesson observations, staff questionnaires.

Impact: After the first year there was a 15% increase in the number of lessons graded Outstanding. 77% of staff attended 4 or more twilight sessions and the average feedback score was 4.5/5. By the end of the second year teachers at all levels achieved their Development Management targets, were 'at least Good' in lesson observations and were worthy of salary progression. Eight departments worked with the PTI and gained the PTI mark. As a result of joining the Lincolnshire Teaching Schools Alliance, 7 departments attended subject forums and 8 schools attended the school's twilight programme – 30 courses were offered, delivered by 42 staff.

Reflections: A three year plan is a minimum timeline to bring about whole school improvement. Winning the hearts and minds of staff is fundamental – consultation is key. The best CPD is delivered by staff for staff' and allows for the internal growth of staff. Collaboration with partner schools builds staff confidence, expertise and school reputation.

with partner schools builds staff confidence, expertise and school reputation

Collaboration



Davenant Foundation School Nurturing mind, body & spirit

Enriching Languages and Humanities lessons at Key Stage 3

Davenant Foundation School, Loughton, Essex

An 11-18 coeducational academy

Aim: To increase student motivation in Geography, History and Languages at Key Stage 3 in order to improve the uptake at Key Stage 4.

Background: In 2011/12 student motivation in Geography, History and Modern Foreign Languages (MFL) was limited and uptake for the examination courses at Key Stage 4 was less than hoped for. New subject leaders in MFL and History were being introduced, as well as a more co-ordinated approach between History and Geography.

Method:

Year 1: 2011-2012

- Schemes of work were revised in all subject areas (first taught in September 2012) with more emphasis on enquiry, activity-based learning and the relevance of enrichment activities to learning programmes
- Work was done with less able Year 8/9 boys in French through Arsenal F.C. Double Club
- A Gifted & Talented Residential Weekend for Geographers (Year 9) was introduced
- Visitors were invited to school for History including a theatre group (Suffragettes) and an author who spoke on military awards
- Reorganisation of Key Stage 4 Options took place in order to allow more opportunity for students to take the targeted subjects

Year 2: 2012-2013

- A new Head of Humanities was in place and, with the Head of MFL, attended the 2013 PTI Residential Summer School
- A new French Exchange was launched (to fit with the Spanish Exchange)
- Year 9 MFL schemes of work were updated to include units on trench warfare (French) and the Spanish Civil War (Spanish)
- History schemes of work were revised to have closer links to GCSE requirements, with emphasis on source-based assessment and more in-depth investigation
- A Geography (Year 9) project on North Sea Tidal Surge was conducted with a local university.

Year 3: 2013-2014

- Embedding/repeating of the above initiatives
- Focussed CPD on individualised learning research and self-study
- First World War Centenary Year 9 (whole year group) to Battlefields
- Year 9 were fully involved in a whole-school production to mark the WW1 Centenary
- Visiting speaker a Holocaust survivor spoke at an evening event.

Evidence: Subject take-up, attainment data, attitudinal surveys, lesson observations, student voice.

Impact: Progress was made in these curriculum areas, however this was not fully reflected in the quantitative data collected. From staff and students' comments, it is clear that they see learning and teaching as having developed over the period of four years and new ideas and activities have been embedded for the future. In an analysis of GCSE outcomes, this was confirmed by RAISEonline school evaluation data which regularly shows that significant progress has been made.

Reflections: The programme was responsible for raising morale and positive attitudes within the staff teams – these remain high. However, we should have established regular and routine stakeholder interviews that would have provided continuity of qualitative evidence throughout the time and thus clearly shown how progress was being made.

Contact: Chris Seward, Chris.seward@davenant.org

The programme was responsible for raising morale and positive attitudes within the staff

Using self-evaluation to drive improvement and planning and enhance professionalism



Marsden Heights Community College, Lancashire An 11-16 coeducational comprehensive school

Aim: To develop a new process of self-evaluation, commensurate with driving the College Improvement Plan, and a bespoke set of professional expectations and attributes for school staff.

A higher level of professional dialogue was established **Background:** The school is in an area of significant social deprivation. Marsden Heights Community College was a recently constituted school and had, for three years, occupied two old buildings on a split site arrangement. The move into the new building in Easter 2010 was a fresh start and the leadership recognised a need to make professional expectations substantially more explicit.

Method:

Year 1: Faculty Self Evaluation Forms (SEFs) were reviewed and methods for data gathering to inform self-evaluation were discussed and new guidance produced (lesson observations, student voice, learning walks and data analysis, in line with the new Ofsted Framework). The new Teachers' Standards were reviewed with the aim of translating these into clear, bespoke expectations. Whole college inservice training was undertaken to develop professional attributes in key areas (relationships with colleagues, personal behaviour, attitudes towards students and behaviour towards parents and the wider community). The aim became to develop the school's interpretation of the standards through the ways in which they were applied, rather than in the ways in which they were defined.

Year 2: Revised area procedures, protocols and calendars for self-evaluation were developed, and these were trialled and developed in the Exploration Faculty (History, Geography and RE), Special Educational Needs and the Year 7 competency-based curriculum. The approach was more focused on the needs identified through consultation and collaboration with the area leaders, and a wider range of data gathering and evaluation strategies was used to track progresss.

Year 3: The focus was to develop a cohesive and workable quality assurance system that was robust yet flexible, and could be adapted to (and within) a continuously changing environment. A survey by middle leaders confirmed the disparity of practice between departments. A working group of three middle leaders was convened to design a set of expectations and protocols which would govern the work of the leadership group in support of middle leaders and their departments. Fortnightly line management meetings monitored progress and enabled swift response to departmental needs. Sharing departmental responses and issues promoted cross-departmental discussion about effective pedagogy and best practice.

Evidence: Feedback from external advisors, staff meetings, departmental SEFs, student voice

Impact: Most faculties completed an area SEF in accordance with the Tony Thornely (ASCL) model which provided a very good framework for self-review, linked directly to the Ofsted inspection framework. Staff CPD was better linked to their needs as identified through SEF. A higher level of professional dialogue was established in staff meetings about standards, quality and pedagogy, with better identification of barriers to student progress.

Reflections: As a Leadership Team we have probably improved in terms of our abilities, individually and collectively, to reflect upon how we approach change – particularly in a more strategic way – and define goals through consultation with others and involving key people in the processes at the various stages of development.



Developing and testing a better way of assuring the quality of lessons and learning - the 'Apple' lesson

Christleton High School, Chester

An 11-18 mixed comprehensive school

Aim: The purpose of this study was to gain a deeper understanding of student learning and the relationship between peer teaching, group work and the role of the teacher.

Background: The project was born out of an emerging government agenda promoting subject knowledge. From observation of customer behaviour in a city centre Apple Store, the learning process seemed to occur through enticement and personal contact led by problem solving. The project explored whether schools could re-create and harness this process.

On an international benchmarking trip to Hong Kong and Shenzhen province in 2012, the headteacher visited ten diverse secondary schools from this high OECD PISA ranked area. There was an impression that the despite the high PISA rankings, the schools had a strong interest in developing curriculums that better supported creativity.

Method: 21 School Direct graduates training in four partner schools in the area conducted the research during their school-based study week; the theme was 'Finding and distilling great learning'. They had all completed three weeks of formal observations before the study, making notes on features such as pace, content and relationships. The aim was to use this to find special lessons and then capture them through photographs and informal notes for analysis and discussion.

Evidence: Lesson observations and photographs, Ofsted comments, student questionnaires, teacher self/peer analysis

Impact: Moderated observations across the sample indicated the biggest single barrier to further improvement was teachers' inability or unwillingness to relinquish control and respond to student feedback. Students often learned best from each other when fear of failure was lower and they could express their personal needs more clearly.

Structure, planning and sequence were important to enable deeper learning. Subject expertise was important to separate fun activity from deep and purposeful learning. Didactic teaching could stifle creativity. The teacher's role was to create the right conditions: a good 'penny dropping' moment required challenge, context, prior learning and high expectation. The learners whose 'penny had dropped' seemed to enjoy shared success and learning fulfilment. It was also agreed that students needed to own the discovery but in an 'I got there with your help' context. The teacher's role was described as that of a catalyst.

Reflections: The greatest personal learning I've received from the project was in returning to focused study with metrics, outcomes and a more scholarly approach to understanding and designing improvement. The significant challenges included finding quantitative rather than qualitative research data in education and reassuring colleagues about monitoring.

Within my own school, following the grading of teaching and learning as 'Outstanding' in every lesson observed, I believe it is appropriate to re-direct the observation techniques to the next area of focus, which is ICT.

Subject expertise was important to separate fun activity from deep and purposeful learning

Developing subject-centred leadership to improve teaching quality and raise standards



Ysgol Rhiwabon, Wrexham, Wales

An 11-18 coeducational comprehensive school

Aim: To empower middle leaders to be the central driving force in raising standards.

Background: Some 20% of students come from the most deprived homes in Wales with 23% on free school meals. Under the previous Headteacher and Leadership Team (SLT), the school had identified the need to raise standards of teaching and learning across the curriculum to a consistently high standard. The Estyn report of 2009 had identified this as an area in need of development.

Method:

Year 1: Three subject leaders joined the PTI Schools Programme which was a good foundation to develop good practice across other departments. A Curriculum Leader/Aspiring Curriculum Leader inhouse training programme was put in place and the focus on subject-centred leadership was clearly visible in meeting minutes and senior leadership team discussions.

Staff visits to other schools were established and the school shared its training expertise with cluster schools. The school also developed links and a two-way dialogue with higher education (HE) providers. There was a partnership working with 'Reaching Higher, Reaching Wider' (Bangor University) – a bespoke 'Winter College' approach to raise aspirations of learners furthest removed from HE.

Year 2: Aspiring middle leaders led on whole-school initiatives which were impacting on standards across the school rather than just within their own area. The University of Bangor became involved and led on the teacher/learner community work that was going on.

Year 3: Secondment opportunities onto the school's SLT were introduced and two positions were filled by middle leaders, thus involving them with whole school strategic decision making. Performance management protocols were revised to ensure that there were common targets for improving the quality of teaching and learning with a focus of rigour and subject depth.

Evidence: Exam results, student questionnaires, lesson observations.

Impact: By the end of the second year of the project more students were achieving A/A* grades at GCSE and A Level, and an improved number of students were gaining higher levels of 6 and 7 in Key Stage 3. The depth and quality of subject teaching further improved, with an average of 80% of lessons graded as Good or better.

Student surveys are regularly conducted and reveal an increased enjoyment of particular subjects. Sharing good practice forums became an established feature of the school calendar and proved a useful way to evaluate the extent to which good practice was being shared and used by other colleagues. Staff feedback has also revealed that they feel refreshed and re-energised as a result of the collaboration with Bangor University.

Reflections: Significantly improved results in 2014 came as a result of subject leaders being empowered to take ownership of the issues that were holding their departments back. There is now an additional layer of aspiring senior leaders who have had the opportunity of exposure to greater levels of whole-school strategic working.

Significantly improved results came as a result of subject leaders being empowered to take ownership



Improving outcomes in Humanities and Languages by accelerated professional development

Caistor Yarborough Academy, Lincolnshire

An 11-16 coeducational, non-selective school

Aim: To inspire staff to improve their teaching through engagement with PTI New Teacher Subject Days, engaging with other PTI departments and evidence-based pedagogy changes.

Background: Subject outcomes for History and Modern Foreign Languages were below expectation. The staff were inexperienced teachers, new to the Academy, and were exceptionally keen to attract more students to their subjects and improve outcomes.

Method:

Over the two years the team:

- Collected Average Points Score (APS) data for teachers in the project at the start and at each of the three data points throughout the year.
- Used additional surveys of staff and students to gauge current engagement with MFL and History.
- Visited other PTI schools to gain examples of best practice and draw on the vast experience of other PTI departments.
- Used exemplars from David Kennedy's (Headteacher of The John Warner School) lecture on visible learning and stimulus material from John Hattie's work to mentor the subject teachers.
- Engaged in PTI New Teacher Subject Days and Residential courses for inspiration and further contacts for new teachers.
- Selected suitable topic areas to use for project teaching. Looked at feedback and marking as well as refresher revision throughout the year for the students.
- Trialled a new form of diagnostic feedback for students and also a literacy intervention for marking. A new Feedback Policy was implemented.
- In Year 2 the staff led whole-school CPD on feedback and provided stimulus material for our Teaching and Learning Communities on feedback and marking.
- Checked attitudinal data post-project.
- Mapped impact on APS to gauge rates of progress. Looked at variation across the school for students involved.

Evidence: Staff and student surveys, exam results

Impact: APS data showed a steady improvement in Spanish of just over 1 grade (7.5 points) and in History of just under 1 GCSE grade (4.5 points) over the course of the project. Student surveys showed enjoyment of lessons especially had improved and they had become more independent learners.

History uptake improved, doubling the number of groups taking History GCSE. However Spanish uptake remained the same. Staff feedback from PTI New Teacher Subject Days was very positive.

Reflections: We have learnt that we need to continue to fully engage all staff in current research about best practice. We have also learnt that continual use of data, looking at where and when we are successful and how we might share that best practice is paramount.

The main challenge is finding time for groups to meet; we chose working lunches and also afternoon tea slots. This required commitment to the project which was forthcoming, so thanks also go to the staff.

Student surveys showed enjoyment of lessons especially had improved

Lesson Study: Improving the quality of Teaching and Learning through observation and sharing good practice



Ark Academy, London

A 3-18 coeducational comprehensive academy

Aim: To drive up the quality of teaching and learning to ensure students have a rich and purposeful education that enables them to be successful.

Background: Ark Academy was a brand new school in 2008 when it welcomed its first reception students and in 2010 it received its first cohort of Year 7. From the outset, the aim was to create a school in which there was a staff culture of observation and learning from each other, so that exemplary practice could be shared.

Method: All staff were trained on how to conduct lesson observations and feedback. A weekly observation schedule was introduced and staff used the "self observation" video room. Senior staff attended training in the USA from Doug Lemov (*Teach like a champion*) and training on mentoring using the 'Leveraged Mentoring Approach'. A language teaching programme was created with the Institute of Education aimed at teaching students with English as an additional language. A staff handbook was developed which included 'Building Student Understanding' and 'Literacy' training programmes.

Evidence: Departmental 'Evaluation of Teaching and Learning', the School's Self Evaluation Form, termly reporting system amongst senior staff around teaching quality and CPD, qualitative feedback from staff from CPD sessions, published case studies.

Impact: The quality of teaching in the school remained high across the three years of the lesson study, even as the profile of the staff changed. In 2012-13 the staff consisted mainly of the middle leaders and experienced teachers who had founded the school. By 2014-15 the experience level of staff members was wide ranging, including 12 Newly Qualified Teachers; out of the 152 observations conducted, 80% were rated Good and above.

Academic Year	# of Staff	Lessons Observed	Rated 1	Rated 2+	Rated 3+	Average Grade
2012/13	52	227	27%	82%	97%	1.8
2013/14	59	192	42%	81%	98%	1.7
2014/15	75	152	35%	80%	99%	1.7

Observations: Numbers and Gradings (1=Outstanding, 2=Good)

Reflections: Having a brand new school allowed us to set the agenda in many ways. Empowering staff to research and share their practice is a key driver in improving everyone's classrooms. Of course, mistakes have been made along the way, but these have enabled us to improve our lesson study practice. Indeed, using exemplar lessons when things go wrong has helped to establish policy and inform the practice of others, which has enabled our study to be successful.

Empowering staff to research and share their practice is a key driver in improving everyone's classrooms

Reducing in-school variation between subject departments

Ivybridge Community College, Devon An 11-18 coeducational comprehensive school

Aim: To reduce in-school variation between different subject areas by focusing on effective continuing professional development (CPD).

Background: The College has achieved Outstanding Ofsted reports for the last twenty years but there were still a number of departments showing an in-school variation. This was despite an increase in the quality of teaching and learning, with the percentage of Good or Outstanding lessons observed continuing to rise.

Method: During the three years of the project, highly effective and focused CPD was undertaken across all departments, led by national speakers, who influenced the pedagogy of teaching.

Teachers undertook the reading of various educational literature and some undertook further research of their own. While a group of teachers developed a project looking purely at the application of Kagan Theories of cooperative learning, a regular programme of engagement with the National College Leadership Courses, PTI Courses and the Outstanding Teacher Programme was introduced to further improve teaching and learning and the leadership of departments.

Evidence: Exam results, student voice questionnaires, RAISEonline school evaluation data, learning walks.

Impact: The immediate impact was a noticeable increase in pedagogical discussion both within and across departments. By the third year of the project there were consistently high student outcomes at Key Stage 4 and 5.

RAISEonline school evaluation data showed a higher consistency of outcomes across departments for all subjects and all groups of students. Teaching was identified as 100% Good or Outstanding during either appraisal or learning walks.

Reflections: There has been a clear change in the way CPD is used and this has been invaluable. In addition, the outcomes for the Summer of 2013 and 2014, showed a greater level of consistency of outcomes across all subject areas and for all ability groups.

Highly targeted and focused CPD has provided opportunities for all to hear national speakers in their field and we have ensured that what they have delivered has always been inspirational and aspirational, as well as having a real practical emphasis on Teaching and Learning. In-school variation will always be present in schools and so this is a constant focus of school improvement.



Highly targeted and focused CPD has provided opportunities for all

Developing an outstanding lesson observation and faculty review programme to deliver outstanding learning



The John Warner School, Hertfordshire An 11-18 mixed comprehensive school

Aim: To develop a supportive and effective learning environment that links the numerous teaching and learning initiatives into one coherent and mutually beneficial programme.

Background: The school was designated as Outstanding by Ofsted in January 2011. Within the report, the inspectors concluded that more needed to be done to ensure a higher percentage of Good and Outstanding lessons. The school's comprehensive observation database found 84% of lessons to be Good or better at the start of the project.

Method:

Year 1: Staff at the school had for some time been engaging in learning walks, lesson observations with pre- and post-observation discussions, learning conversations with students and teacher learning communities. The Faculty Review model was introduced as a motor for linking all of these processes together so that teachers were consistently receiving high-quality formative feedback that they could use to refine and improve their performance. Towards the end of the first year, work scrutiny was included to further inform the process and a learning lunch introduced to share the learning from the review more widely across the school.

Year 2: Additional initiatives included: learning walks jointly run between the review team and faculty leaders, Pupil Perception Discussions led by students using data from online questionnaires, a letter written to all students to explain the findings and to outline what the faculty would be doing to improve.

Year 3: It became evident that sustained impact would only be achieved if the faculty had greater ownership of the process and was able to draw its own conclusions. So members of the faculty were provided with the outcomes of parent and student online questionnaires in order to allow them to draw initial conclusions, to spot trends and to identify a core focus for lesson observations which were then carried out with a member of the senior team. The Sixth Form also became a more prominent part of the process.

Evidence: Exam results, lesson observations,

Impact: Over the 3 year project the number of students achieving 5A* at GCSE increased from 58% to 73% and at Key Stage 5 the number achieving A*-B increased from 41% to 51%. Lesson observations showed that Good or better lessons increased from 84% to 89% with Outstanding lessons increasing from 40% to 49%.

100% of staff engaged in action research over the course of the project. In many cases the focus of research was a response to the Faculty Action Plan. 87.5% documented the research they carried out. More than 50% of staff attended at least one learning lunch during the project.

Reflections: We have consistently improved our outcomes and have crucially carried all our staff with us; they have confidence in the judgements and have developed the resilience to be able to respond positively to all feedback. There is a great honesty and drive to improve, and with that an acceptance that we have to listen to our customers. For this reason the devolution of leadership of the process to faculties has been integral.

Contact: David Kennedy, Headteacher: djk@johnwarner.herts.sch.uk; Jonathan Huddleston, Assistant Headteacher, Teaching and Learning, jeh@johnwarner.herts.sch.uk

Providing extra challenge and depth at GCSE by developing an enrichment curriculum

Sale Grammar School, Cheshire

An 11-18 coeducational Academy Trust selective school

Aim: To develop and support inspirational teaching and learning to achieve academic excellence and prepare pupils for the challenges of the 2020s.

Background: The school had a 'traditional' curriculum that met EBacc / national curriculum requirements. There was a desire to develop a love of learning in Year 10 with options beyond the formal Key Stage 4 curriculum, including opportunities for more practical experiences.

Method:

Year 1: After consulting the Senior Leadership Team, governors, staff and pupils, the following enrichment options were offered to Year 10: a Level 2 Project, investigating an area of personal interest, the Duke of Edinburgh Award Scheme, Young Enterprise, Community Service, Mad Psychology, Computer Programming, Cookery, Media, Photography and Introduction to Law.

Year 2: At the end of the first term, the groups were asked to present what they had achieved / learned in their option. Additionally, students were asked to fill in a short questionnaire to evaluate the programme. This allowed staff an opportunity to see how they could improve the delivery of courses and refine them to meet student expectations. The Community Service option ran in terms two and three and was evaluated. Comments were extremely positive both from students and from the community partnerships. Unfortunately staffing allocations were reduced for enrichment and the plan to extend the options to include Year 12 had to be curtailed.

Year 3: The options were continued into Year 11 with the removal of Introduction to Law due to staffing changes. Textiles and GCSE Short Course PE ran as viable groups, but Level 2 Project did not. In December 2014, the decision was made to allocate the two lessons which had been given over to enrichment for GCSE English and Mathematics following the new specifications. As a result, the project came to a natural end.

Evidence: Pupil questionnaires, lesson observations, learning walks.

Impact: Student questionnaires indicated that courses were generally successful and engaging, with imaginative and collaborative projects happening around the school. It is notable that staff were keen to deliver the enrichment options, although they felt that initially they had to overcome negative student perceptions of curriculum time in Key Stage 4 being spent on 'non-examinable' options. However later feedback showed that the objectives of the project had become more widely accepted. Take up at A Level in Psychology showed a small improvement, possibly due to the Year 10 enrichment allowing a 'taster' for a new A Level course.

Reflections: The most important indicator for the project was the student voice. Given the aim of the project, comments from students such as "we enjoyed the teamwork, being able to work independently, finding out new things and learning new skills", ensured that we were meeting the objectives.



courses were generally successful and engaging, with imaginative and collaborative projects happening around the school

Redesigning the Key Stage 3 curriculum around a school Learner Profile

Westcliff High School for Boys, Essex

An 11-18 selective boys' school with a coeducational Sixth Form



Aim: To redesign the Key Stage 3 curriculum around a school Learner Profile

Background: Adopting academy status allowed increased curriculum flexibility to provide a more stimulating curriculum for Key Stage 3 pupils. Establishing a 'Learner Profile' encouraged staff to consider education beyond the confines of their subject area and address variations in performance between subject departments.

Method:

Year 1: A newly appointed Curriculum Development Co-ordinator established a voluntary staff research group to consider the content of the school's Learner Profile and an action plan for piloting this concept and sharing it with staff, pupils and governors. The seven attributes were identified as: being intellectually curious, collaborative and supportive, open to opportunity, globally aware, an effective communicator, a lifelong learner and having personal integrity.

Year 2: The Learner Profile was piloted by two subject departments: Religious Studies and Design and Technology. These departments shared their experience with all the teaching staff during staff development days. The implementation of Learner Profile and curriculum reform were written into the new School Development Plan. All significant changes and developments in school were assessed against their ability to improve the delivery of the seven Learner Profile attributes.

Year 3: All subject departments worked on updating their Key Stage 3 and GCSE schemes of work to ensure they delivered the Learner Profile attributes.

Assemblies, school publications, the prospectus, pupil planners, the website, lesson observation and subject department inspection programmes were all redesigned to reflect these qualities.

Evidence: Literature, lesson observations, subject department inspections, feedback from pupils, parents and staff.

Impact: The Learner Profile now provides an effective means of ensuring consistency within the school. All staff (turnover is 10-15% each year) are provided with a clear guide regarding the school's wider educational aims rather than simply focusing on a narrow set of goals related to their subject. There is now a common thread in the school's schemes of work and a means for staff and pupils to make cross-curricular links through the Learner Profile.

Reflections: Schools are increasingly dynamic organizations, and the busy external educational agenda alongside significant internal changes can all too easily result in a loss of focus and the growth of inconsistency. Therefore, having a clear mission which is understood by all stakeholders is vital. This mission must be fully woven into the school's teaching and learning. The Learner Profile has provided a simple and effective means of achieving this goal. Public examination results matter but the culture of the school matters more. We have made use of additional metrics such as levels of participation, willingness to volunteer, and quality of communication to evaluate our progress as a school.

Empowering Subject Leaders to provide inspirational teaching and learning in their subject

Oakwood Park Grammar School, Kent

An 11-18 selective boys' grammar school with a coeducational Sixth Form

Aim: To put subjects at the centre of the learning community and school improvement by placing subject leaders at the heart of school leadership.

Background: There was a need for subject leaders to 'see the big picture', to develop a 'whole school outlook' and not be restricted by developments just in their subject area. The aim was therefore to create a better balance between 'top down' and 'bottom up' leadership. This would also give subject leaders who aspired to senior leadership development opportunities in that area.

Method:

Year 1: Following an analysis of their perceptions of their role, subject leaders were given more responsibility, including managing their department's budget for external courses and presenting on key whole-school issues such as the introduction of Pre-U qualifications. Subject leaders were also seconded to the Senior Leadership Group (SLG), initially on an informal, sporadic basis.

Year 2: Subject leaders took responsibility for the whole-school Continuing Professional Development (CPD) Programme of ten three-hour twilight sessions. Subject leader briefings on Key Stage 3 review, IGCSE, monitoring and reporting led to subject leaders taking lead roles in those areas and formal secondment to the SLG. Formalised and extended subject leader responsibility for monitoring and leading improvements in teaching and learning through lesson observation, learning walks and subject/cohort reviews was formalised and extended. Subject leaders reported directly to the governors' Curriculum Committee and a bespoke training programme for new leaders to incorporate these changes was introduced.

Year 3: New subject leader job descriptions were written to reflect their growing whole-school influence, and performance management objectives included reference to the changes. CPD was subject-leader led with each department working on action research projects using the PTI template.

Evidence: Staff surveys, lesson observations, learning walks, subject and cohort reviews.

Impact: Subject leaders were surveyed again and 100% felt the objectives of the project had been met, 90% felt the changes were beneficial to all stakeholders and 95% felt their level of job satisfaction had gone up as a result of the changes.

The CPD programme showed the input of subject leaders through the strong focus on teaching and learning across the school, and this was reflected in lesson observations. Several subject leaders took on whole-school roles and sought promotion to senior leadership, and several studied for Master's degrees. The stronger subject leadership led to a higher level subject-based enrichment programme. IGCSE was introduced, with the first examinations in 2015. The introduction of Pre-U led to outstanding results in History, English and Philosophy/Theology.

Reflections: Be flexible and do not rush things - make sure changes are embedded before moving on. Be creative in making opportunities and trust your colleagues not to waste nor abuse new influence. Challenge your colleagues who want the status quo; change can frighten people, so 'know your staff' and encourage/cajole as appropriate. Recommended reading: *Mindset; How You Can Fulfil Your Potential* by Carol Dweck. stronger subject leadership led to a higher level subject-based enrichment programme



Schools Programme Associate Department project summaries

English

- 38 How can we best support our A Level English Literature students through transitions? Robert Clack School, Dagenham
- 39 Developing opportunities for oracy to increase student confidence and improve written and verbal expression Saint George's C of E School, Kent
- 40 Enthusiasm and progress in Key Stage 3 English Holland Park School, London
- 41 Increasing English uptake through extracurricular provision Bexley Grammar School, Bexley
- 42 Inspiring boys in creative writing William Farr Church of England School
- 43 Inspiring pupils to read widely and independently to improve literacy Westcliff High School for Girls, Essex
- 44 Ensuring greater uptake through challenge and variety The Henrietta Barnett School, Barnet
- 45 Using iPads to impact teaching and measure pupil progress Mounts Bay Academy, Cornwall
- 46 To what extent does extracurricular provision improve the retention, challenge and enjoyment of KS5 students? The Heathland School, Hounslow
- 47 Can reading for pleasure help to create better scholars? Maidstone Grammar School for Girls, Kent
- 48 Sharing best practice at A Level Gumley House School, Hounslow
- 49 How can we make poetry more engaging and relevant in the curriculum? Passmores Academy, Essex

Geography

- 50 Challenging and developing perceptions of key global issues Queen Elizabeth's School, Barnet
- 51 Developing a centre for excellence in Geospatial learning King Edward VI Five Ways School, Birmingham
- 52 Promoting greater pupil independence and improving marks in controlled assessments Stewards Academy, Essex

History

- 53 Personalising history: How is history connected to me? Holland Park School, London
- 54 Transition History causation project Hinchingbrooke School, Cambridge
- 55 The impact and effectiveness of a subject-specific website Charlton School, Shropshire
- 56 Using enrichment activities to raise the profile of History Oakwood Park Grammar School, Kent

- 57 Using language for learning effectively within the History curriculum The Crypt School, Gloucester
- 58 Embedding enquiry skills at Key Stage 3-5 The Sweyne Park School, Essex
- 59 The challenges of developing regional subject links Devonport High School for Boys, Devon
- 60 Enthusing non-natural historians in a high achieving school Westcliff High School for Girls, Essex
- 61 Raising expectations and broadening horizons post-16 Tendring Technology College, Essex
- 62 Embedding ICT into learning Bury St Edmunds County Upper School, Suffolk
- 63 Evaluating the impact of an extracurricular History society All Saints Catholic School, Dagenham
- 64 Is History bunk? Student perceptions of History in Key Stage 3 Haybridge High School and Sixth Form, Worcestershire
- 65 Providing pupils with an understanding of how the wider world landscape and its themes relate to their locality Robert Clack School, Dagenham

Mathematics

- 66 Extending students beyond the Mathematics curriculum St Angela's Ursuline School, London
- 67 Investigating the effect of flipped learning and other video learning strategies on mathematical understanding Mounts Bay Academy, Cornwall
- 68 Improving mathematical skills across and beyond the curriculum Gordon's School, Surrey
- 69 Improving pupils' confidence in Mathematics by using more IT-based resources Pimlico Academy, London

Science

- 70 Using CREST awards to enrich Science teaching The Wycombe Grange Pupil Referral Unit (PRU), Buckinghamshire
- 71 Developing effective feedback within Science teaching William Farr Church of England School, Lincoln
- 72 Improving Science provision at Key Stages 1 & 2 by developing extensive outreach activities King Edward VI Five Ways School, Birmingham
- 73 Bridging the gap between GCSE and A Level Sciences The Crypt School, Gloucestershire
- 74 Engaging students in enquiry-based team projects (CREST awards) to inspire a love of science Altrincham Girls' Grammar School, Manchester
- 75 Using new forms of ICT to enhance teaching and learning in Science Harrogate Grammar School, North Yorkshire
- 76 Improving student confidence and curiosity in Science Oakwood Park Grammar School, Kent
- 77 Encouraging extra-curricular Physics The Thomas Hardye School, Dorset

How can we best support our A Level English Literature students through transitions?



Robert Clack School, Dagenham

An 11-18 coeducational comprehensive school

Aim: To increase the number of students studying English Literature at A Level and beyond, and to offer a range of opportunities to support them in developing the skills and expertise to transition to these higher levels.

Background: Numbers taking A Level English Literature were low, and many pupils struggled with the transitions between Key Stage 4 and 5, and KS5 to degree level English.

Method:

Year 1: Schemes of work were planned to help students with the transition to A Level and to develop their skills from GCSE. Weekly focused writing skills sessions were introduced and seminar-style revision sessions were highly successful. Trips were planned to see The Prince's Teaching Institute Annual Lecture and university lectures, and pupils were encouraged to post on existing online blogs and participate in online lectures. A number of displays and example lessons were given to introduce Year 11 students to A Level Literature.

Year 2: University-style teaching was integrated into Year 13, and the number of teachers per class was increased to allow teachers to teach to their specialisms. Classes were taught as lecture and seminar sessions, expecting reading to be completed outside class. A former Year 13 student who is re-sitting the year attended classes and acted as a teaching assistant. This has been highly successful for him and also benefits the class. Initial links were made with universities, and school alumni came in to discuss studying English at university. Students continued to have opportunities to go on trips to the theatre.

Year 3: A lecture series was offered to make use of and develop staff expertise, and a book club was started to promote wider reading among A Level students. Links with universities were consolidated and students attended a trip to Northampton University. Students were encouraged to develop their online blogs and a trial of Google Classroom was planned for the following year.

Evidence: Pupil focus groups, questionnaires and feedback, revision notes from seminars.

Impact: Year 11 students appreciated being able to look ahead to A Level and Year 12 students commented that the transition to Year 13 was now much less daunting. Seminar-style revision sessions were received very positively and students found the new style of teaching useful in bridging the gap to university. There has been a noticeable improvement in independent study skills and more students are now going on to study English at prestigious institutions.

Year	Year 13 student numbers
2011/12	14
2012/13	32
2013/14	48

Reflections: We are really proud of the progress the department has made and we feel that we offer wide-ranging, enriching opportunities that go beyond the classroom and take students into libraries, theatres and universities. Challenges have been gathering solid numerical data effectively, and keeping track of the project as it has been so wide ranging.

Contact: Isabel Fuggle, ifuggle@robert-clack.bardaglea.org.uk; mmullen@robert-clack.bardaglea.org.uk; sbutler@robert-clack.bardaglea.org.uk

Year 12 students commented that the transition to Year 13 was now much less daunting

Developing opportunities for oracy to increase student confidence and improve written and verbal expression

Saint George's C of E School, Kent

An 11-18 coeducational non-selective school in a selective area

Aim: To develop oracy in all pupils, enabling them to access a wider vocabulary and improve their written and spoken communication, and ultimately their academic success.

Background: The ability profile of students is significantly below the national average, and the number of pupils who have English as another language (EAL) (28%) or are entitled to free school meals (17%) is rising.

Method:

Year 1: Schemes of work for Key Stage 3 were rewritten to ensure that speaking and listening were embedded into the learning process and not seen as an 'add on'. The Kagan approach was used in all lessons, allowing pupils to discuss and rehearse their answers before responding to the whole class. This helped with motivation and confidence, and improved the quality of the answers given. Pupils were interviewed in small groups, which they preferred to questionnaires, and showed a good deal of enthusiasm for the teaching method, while allowing staff to reflect on what was not popular. However, the project had limited success – the most able students thrived but those with low literacy remained reticent. EAL students made good progress in speaking and listening but this was not reflected in their reading and writing assignments.

Year 2: An English support assistant was employed for those needing additional help, and advice was sought from EAL and Special Educational Needs departments in order to develop more differentiation for lower ability classes. A wide range of pedagogies was tried, and results showed that pupils benefitted from opportunities to investigate, through talk, their assigned task. The discussions were confident and engaging, but more rewarding was the academic improvement in writing that followed. Academy Week activities were used to engage pupils, and proved a great success.

Year 3: The setting of Year 7 was revised to support the variation in pupils' Maths and English ability, so that pupils could excel where they had strengths. A coherent course from Year 7-11 was planned to allow careful tracking of progress and ensure that all students leave school able to communicate effectively. Academy Week and World Book Day activities were successful, and a subscription to 'Sound Training' was taken in order to make the curriculum accessible to the most vulnerable students.

Evidence: Student interviews, written work.

Impact: The KS3 curriculum now has greater coherence and provides students with the skills they will need for lifelong learning. A greater appreciation has been gained of the part played by speaking and listening in pupils' learning, and students have been enthusiastic. However, lower ability students have not made as great an improvement as those of higher ability.

Reflections: Regular data collection is important, as is frequent interviewing of pupils, which can provide a useful guide in shaping the project's future. Continual monitoring of the department helps to ensure that all students are having the same experience.



A greater appreciation has been gained of the part played by speaking and listening in pupils' learning

Holland Park School

Enthusiasm and progress in Key Stage 3 English

Holland Park School, London

An 11-18 coeducational comprehensive academy

Aim: To address the dip in achievement between Key Stage 2 and 3, especially for boys, and to markedly increase the level of challenge for students at KS3

Background: Students in their first term at Holland Park were achieving one sub level lower than they attained at the end of primary school, and boys in particular were achieving demonstrably lower marks than girls.

Method:

Year 1: Following interviews with students about their work at Key Stage 2, new schemes of work were implemented and taught alongside a control group. This showed that the new strategy was having some impact, although not as much as desired, and the gender gap was still evident.

Year 2: It was clear from evaluating the results of the previous year that students had not been given enough time for extended writing, or received enough feedback from teachers about how to improve their work. Visits to primary schools were also made to inform lesson planning. Schemes of work were planned to allow time for extended writing, teacher feedback and subsequent redrafting by students. To foster engagement and enthusiasm, each topic had a 'launch lesson'. This has better engaged students with topics and they feel more able to evaluate their own work. Journals were used for independent research, class notes and draft work, and students commented that they felt more trusted to complete work independently. However, the gender gap was still evident, with some male students still making limited progress.

Year 3: The autumn term was redesigned to ensure the level of challenge for students entering the school, with a focus on reading. Various events encouraged a love of reading, such as plays put on by staff, interactive acting experiences and a treasure hunt for boys across Hampstead Heath. Termly exams were implemented for KS3, which have provided more accurate and regular assessment, and regular intervention by leading practitioners was implemented to support underperforming groups. Coaching and monitoring for staff has been successful in ensuring high expectations in all classes.

Evidence: Student feedback, exam results.

Impact: Regular assessment has been successful, with students finding it easier to cope in terms of revision and retention of units studied. Students' extended writing ability has improved and the feedback and redrafting process has made them more reflective in their writing. Some progress has been made with gender distinctions and the gap between male and female students is becoming less pronounced. Engagement has certainly improved with the various events run by the department, but this is yet to lead to the desired level of improvement in examination data.

Reflections: The project has crystallised the importance of high expectations for maintaining quality of students' work. The challenge has been maintaining a focus on our new strategies in the build-up to exams and maintaining perspective that this investment will ultimately help their future performance and their commitment to learning English as a subject.

Students' extended writing ability has improved and the process has made them more reflective in their writing

Increasing English uptake through extracurricular provision



Bexley Grammar School, Bexley

An 11-18 coeducational grammar school

Aim: To increase the number of students taking English at KS5 and continuing on to university.

Background: While numbers of those studying A Level Literature were steady at between 70 and 80 (as well as 60 students who study English as part of the IB), only around 10% of these pupils were going on to study the subject at university. This was frustrating, as results were excellent and the department was enthusiastic and dynamic.

Method:

Year 1: A 'We Love English' group was created for students who were interested in studying English at university and attendance was regularly at 50%-70%. All staff contributed to extracurricular events, including curriculum and beyond the curriculum lectures, and pupil questionnaires were used to adapt Key Stage 4 provision for the following year.

Year 2: Links were established with the University of Kent and activities were broadened to all students, not just KS5. Lectures held for Year 11 students on World Book Day were very well received and an English Conference was run with a focus on journalism and creative writing in response to the number of students taking Joint Honours with English at university or pursuing careers in journalism. 94% of students judged this 'very useful' or 'useful'.

Year 3: The uptake of IB English increased from 68 to 80 and visiting lecturers, including Professor A C Grayling, were hosted at the school with high attendance. A 'Broadening Horizons Information Afternoon' was held in which former students with English degrees spoke about the different directions their degrees had taken them. 80% of attendees judged this 'very useful'.

Year 4: A KS4 English group was led by Year 12 English prefects who organised a spoken word workshop and a trip to the Tate Britain to explore the relationship between visual art and literature. The success of the club meant that planning for the following year could begin. Staff led further events and one student made it to the national final of the Poetry by Heart competition in Cambridge. KS5 lectures continued to widen students' perspective and enjoyment of English – 82% rated the lectures at more than 7/10 in terms of interest and enjoyment.

Evidence: Attendance data, baseline data, student questionnaires.

Impact: The 'Broadening Horizons' conference has helped overcome the perception that English degrees don't lead to defined career paths or well paid jobs. The school's decision one year into the project to offer only IB at KS5 threatened to undermine the project, but in the coming years the department will teach 200-250 students English at KS5, so the provisions already in place will hopefully see more students enjoying the subject beyond KS4 and going on to study it at university.

Reflections: At times we tried to offer too much. Doing a few things well, on a consistent basis with proper evaluation of results is far more rewarding for staff in terms of the outcome, and also much more useful for the students.

Helped overcome the perception that English degrees don't lead to defined career paths or well paid jobs

Inspiring boys in creative writing

William Farr C.E. Comprehensive School, Lincolnshire An 11-18 coeducational comprehensive school



Aim: To inspire and enthuse a greater number of students to undertake creative writing; particularly boys.

Background: Students at William Farr are well behaved and engage well in lessons. The students like to rely on teacher input and we are working hard to inspire them to think and work independently. One focus for the school is raising the achievement of boys, particularly in English, and challenging the perception of English as a "girls' subject".

Method:

Year 1: The usual English topics were put on hold for a creative writing week for Years 7-10, themed around 'Writing legends' - Year 9 focused on graphic novels, which boys particularly enjoyed. Links were made with Waterstones and authors were invited to speak. The best pieces were selected to be published, and 42% of these had been written by boys. 97% of students reported that they had enjoyed the week.

Year 2: This year the event's length was doubled, allocating more time for the lessons and allowing students to access workshops. Different authors were invited into school each day to run workshops and their feedback was very positive. The theme was 'Dreams and nightmares'. A successful poetry slam was held with 29 separate entries from Year 8 students, and the evening was extremely well attended by friends and family. Again, nearly half the material selected for publication was by boys.

Year 3: The two-week focus was maintained and the theme this year was 'The English Revolution' – topical with the general election. Due to exam pressures, the sessions were unfortunately limited to Years 7-9. A full and engaging timetable allowed students access to more events, again with different authors every day, and there was very positive feedback from students. The school won the regional Poetry By Heart competition and steps have been made towards establishing a smaller creative writing group to run throughout the year. Discussions with Writing East Midlands have begun about creating a potential Writer in Residence, and discussions with feeder schools have taken place regarding involving Year 5 and 6 students.

Evidence: Student, staff and author feedback, pieces of writing produced by students.

Impact: The annual event has been extremely popular and the quality of work very high. Students have been more engaged in reading, with copies of visiting authors' books flying off the shelves. Pupils have had the chance to showcase their work and staff have enjoyed the chance to move away from the curriculum and are keen to retain the event in future years. Student feedback has focused on the enjoyment of the freedom to write independently and the opportunities to hear visiting authors.

Reflections: Challenges have been in organising the event as it has grown in scope, and publication of pupils' work has proven expensive and challenging. Without the school's generosity in covering visiting authors' expenses it would not have been possible. Links with universities and feeder schools could be explored further.

Students have been more engaged in reading, with copies of visiting authors' books flying off the

shelves

Inspiring pupils to read widely and independently to improve literacy

Westcliff High School for Girls, Essex

An 11-18 girls' grammar school

Aim: To stimulate and engage Key Stage 3 pupils through a library programme, and to allow more room for self assessment, peer assessment, reading and reflection time in the curriculum.

Background: The number of students with English as another language (EAL) was increasing year on year, and it was recognised that students needed support with literacy across the school, not just from within the English department.

Method:

Year 1: There was a focus on EAL pupils, with support sessions run on a carousel basis so that they did not miss the same lesson every time. Research was conducted with a local primary school to better understand the transition pupils have to make and staff had specialised training in order to increase their knowledge of strategies to support and advance EAL language development.

Year 2: The focus shifted to all KS3 pupils, in order to have a wider benefit. A new library programme was implemented with one lesson per fortnight allocated. A working party for whole-school literacy was set up and literacy resources were made available for all staff to incorporate into planning. A KS3 book club was launched and attended by staff from across the school, and a sponsored read raised £2,800 for charity. Other initiatives included a spelling bee and the launch of a Catch Me reading scheme which was embraced by staff and students.

Year 3: The library programme was adapted to reduce the number of assessed tasks and allow more time for reading and reflection. This adapted programme was piloted with Year 7 and 8 classes and pupils and staff evaluated the programme on a termly basis to allow it to be tailored further. Students raised over £3,400 for charity in the sponsored read, reflecting their increased enthusiasm for reading.

Evidence: Baseline assessments, student voice, pupil tracking, reading and writing assessments, teacher feedback.

Impact: Pupils have more opportunities to enjoy reading and to reflect on what they have read with peers and library staff. There is more flexibility for staff to ensure they can monitor pupil progress and encourage them to become more aware of their own learning. Pupils have been encouraged to use more ambitious spelling, punctuation and vocabulary choices, and staff and pupils feel a sense of ownership over the programme and over promoting literacy. Pupils have enjoyed the independence that the programme has given them, the chance to discuss ideas with peers and the creativity of the tasks assigned.

Reflections: As a department we have learnt that reluctant readers benefit from a structured programme which includes inventive and enjoyable activities. Working with their peers inspires many to read more widely and to challenge themselves with reading choices. All staff are more aware of EAL learners and that using literacy across the curriculum needs to be a whole-school initiative which can easily be incorporated through collaborative working.



Pupils have enjoyed the independence that the programme has given them

Ensuring greater uptake through challenge and variety



The Henrietta Barnett School, Barnet An 11-18 girls' grammar school

Aim: To raise the profile of English within the school through a more exciting, dynamic and challenging experience of studying English.

Background: Mathematics and Science tend to be favoured by pupils, meaning that many very able students were dropping English after GCSE. The department wanted to enthuse them to continue to A Level and university.

Method:

Students across Key Stage 3 and 4 answered questionnaires over the three years of the project about their enjoyment of the curriculum and extracurricular activities, and what they felt they had learnt.

As a result of these questionnaires, the department established a creative writing club and entered students into persuasive writing and poetry competitions. Catch-up sessions were introduced for struggling students, who were invited personally to attend. A theatre visit was begun for each year group and teachers went on training courses to reinvigorate their teaching.

Extension sessions were made more exciting with visits from academics, and partnerships with other schools allowed students to meet authors and receive prizes. Fundraising for the library was very proactive, and culminated in an evening with author Zadie Smith who addressed students on what can be achieved by reading and taking an English degree.

Evidence: Student questionnaires, university application data, KS5 uptake data

Impact: Questionnaires showed that students have a richer experience of studying English and they are generally more positive about the subject. There is now a more sustainable programme of extracurricular activity at all key stages. There has been a steady increase in the numbers going on to study English-related degrees, from an average of two at the beginning of the project to six by the third year.

Reflections: It is worth spending time in the classroom enthusing students about what to read and sharing personal recommendations, as well as enlisting older students to help run clubs for younger year groups. I would recommend introducing internal and external competition elements and getting interesting people into school to reinvigorate staff and students. Establishing partnerships with other schools and universities is important, as is staff training.

students have a richer experience of studying English and they are generally more positive about the subject

Using iPads to impact teaching and measure pupil progress

Mounts Bay Academy, Cornwall

An 11-16 coeducational academy

Aim: To use iPads effectively for student progression and as a means to communicate the aims and objectives of schemes of work with students and parents.

Method:

Year 1: Current affairs website *The Day* was introduced to students via iPads, and in tutor times students engaged in wider reading and discussed the news quiz to answer collaboratively. English teachers used articles as preparation for IGCSE reading comprehension and as a basis for IGCSE coursework.

Year 2: The paperless classroom software Showbie was introduced to the department, allowing teachers to keep track of students' progress as they redrafted their work. To create a reading culture within the school, students were given access to Accelerated Reader and Star Reading Tests on their iPads. Students' success was celebrated via the academy newsletter and in regular reports to English teachers and form tutors. The data was used in parent/teacher meetings to encourage further reading at home as part of the Accelerated Reader programme.

Year 3: Success in the Accelerated Reader programme was rewarded through 'vivo' points, which gave students access to various rewards on their iPads. The iMLS library software was made available, allowing students to order library books and submit book reviews.

Evidence: Library data, Accelerated Reader growth reports.

Impact: Reading success rates on Accelerated Reader quizzes is now 61%, a growth on last year, with one student's reading age rising from 11 to 15 years and 6 months. IGCSE results are currently at 80% A* -C. Use of the library's fiction section has increased dramatically as students in Key Stage 3 are timetabled for weekly sessions, and there are now over 500 fiction items on loan. Using iTunes U has made collaborative planning more effective, and means that students do not miss out on lessons when absent as they can follow online postings and access class resources. There is a 'buzz' about the new online reward system, but it is still too early to measure its impact.

Reflections: A challenge has been rolling out the use of apps to help us plan and teach using iPads, rather than just using them as a means of researching topics. Staff take-up could be improved on but those who do use the apps are vociferous in their praise. It was challenging to get staff to actively engage with the data produced by growth reports and reading age reports, and students need to be carefully monitored to check they are accessing the right books for their reading age. When it works, it works brilliantly and results are impressive. It will be interesting to see whether Years 9, 10 and 11 will still use the library when they are not part of the Accelerated Reader programme.



To what extent does extracurricular provision improve the retention, challenge and enjoyment of KS5 students?

The Heathland School, Hounslow

An 11-18 coeducational comprehensive school

Aim: To raise the status of English, and the Arts in general, in the school and to encourage students to pursue their passions.

Background: The Heathland School specialises in Science, and a large proportion of students are interested in medical professions in particular. Some pupils that are talented in the Arts do not choose to pursue their interests into Sixth Form and beyond. Although English is a popular subject, the department wishes to make studying English at A level more appealing and exciting.

Method:

Year 1: New Shakespeare resources were cascaded throughout the department and pupils in transition from Year 12 to Year 13 studied The Tempest and King Lear as additional texts at the end of the summer term. Attempts to set up a Shakespeare Summer School for primary pupils, to be led by these transition students, failed to gather enough interest, so the students took their production of The Tempest to three feeder primary schools and to the Shakespeare Schools Festival.

Years 2-3: Students performed King Lear at the Shakespeare Schools Festival and at school, and a Sixth Form book club was established. Lectures were held featuring guest speakers and trips for A Level students boomed, including going to see Malala Yousafzai speak. The student steering group organised a day of events for the school's first Women of the World Day, inspired by a very successful trip to the WOW Festival on the Southbank.

Evidence: Attendance, recruitment and retention statistics, staff and student feedback.

Impact: Students found studying the additional texts rewarding, and a number of them were interested in taking this study further into Year 13. The book club was successful, with 5 regular members and up to 12 attendees at some sessions, as well as attracting staff from a range of departments. 75% of students surveyed agreed or strongly agreed that the book club had made them enjoy reading more. Students were inspired by exciting visits, and there has been an increase in the numbers going on to study English-related subjects at university. Attendance at lectures and revision conferences improved, and although there are no noticeable increases in retention, the students are more focused and results have improved.

Reflections: This project has allowed me to offer fantastic opportunities to our Sixth Form. I have seen a noticeable shift in terms of the status of English within the culture of the school and the department feels that there is more of a 'buzz' around English. There is a sense that KS5 English is blossoming at the Heathland, with many English teachers requesting to teach more AS and A Level. Data collection could have been better, but the feedback from students and staff has been really pleasing.

I have seen a noticeable shift in terms of the status of English within the culture of the school



Can reading for pleasure help to create better scholars?

Maidstone Grammar School for Girls, Kent

An 11-18 selective girls' school

for Girls

Non sibi sed omnibus

Aim: To encourage a habit of reading for pleasure among Key Stage 3 students with the hope that this will lead to more scholarly and independent learning habits at Key Stage 4 and 5.

Background: Students in Key Stage 4 and 5 were enthusiastic but often lacked independent reading skills and were reluctant to read beyond the curriculum, sometimes struggling to read core GCSE and A Level texts. We also aimed to increase the numbers of students applying to read English Literature at the top universities.

Method:

Year 1: Reading was given more space in the curriculum to enhance its status and comprehension and reading for meaning was given more prominence from across the curriculum. Book boxes were made available for all Year 8 literacy lessons, and 40 titles were carefully curated to feature a range of classic and contemporary texts that showcased good quality writing and explored meaningful themes. For one lesson every fortnight, students had to read a book from the box. By limiting their reading choices their reading could be monitored and they would have more opportunities to discuss the books they had read with peers and teachers.

Year 2: Qualitative data was collected at the beginning and end of the year for a focus group of Year 8 students to measure changes in reading habits and scholarship. All Year 8 students completed an online survey which assessed the texts they had read, their attitudes to reading at the start and end of the year, the variety of genres they had tried, and their comments about the programme.

Year 3: The department had become really committed to the project due to its influence on students' reading habits. The reading lesson was moved to the library to allow students to use library software to review, rate and recommend books to others. This requires students to start being critical and evaluative about their reading.

Evidence: Online student surveys, focus groups.

Impact: Reading habits have improved, with 66% reading more books and, significantly, 75% trying different genres. Students' enthusiasm was evident in online surveys, with 78% of them saying that they would like a Year 9 book box. Students have also requested time to share their responses to books.

Reflections: When looking at the new specifications for KS4-5 English, and the focus on closed text exams and unseen sources, we are confident that we are giving them the skills they will need to become able scholars and readers in the future.

committed to

the project due to its

influence on

students'

reading

habits

Sharing best practice at A Level

Gumley House School, Hounslow An 11-18 Catholic girls' academy



Aim: To encourage teachers to explore, develop and share their own specialist subject knowledge and to measure the impact of this on student enthusiasm for English at A Level and beyond.

Background: A Level numbers had been dropping across the school generally, and English uptake at AS and retention into A2 had been decreasing. The department also wanted to try to develop in students a more independent and proactive approach to learning.

Method:

They enjoyed

the lectures

and stretched

and felt challenged

Year 1: A borough-wide collaborative network of English departments was created, and Gumley House hosted meetings to discuss joint targets, ways to approach the curriculum and possible collaborative opportunities.

Year 2: This year was about maintaining links with other schools and deepening collaboration. The first annual teacher/student conference was held to give students access to a range of expertise. This included an external speaker, Q&A sessions with former pupils who had studied English at university and workshops planned by teachers. 157 students from across the network attended. Teaching resources were shared and meetings held to support newly qualified teachers (NQTs) teaching AS Level English for the first time. Mock university interviews were held in the spring term.

Year 3: Teacher meetings across the network continued and ongoing NQT mentoring was planned. Teachers from schools within the network volunteered to run workshops at the annual teacher/student conference, which was attended by 109 students.

Year 4: It had become increasingly difficult to maintain the network with other schools, so the focus switched to teaching practice within the school and exposing students to the range of teaching and learning strategies that had been developed over the previous three years. Collaborative approaches to lesson planning continued, as did mentoring for a new teacher, who achieved very positive results. Students were given opportunities to attend several external conferences, exhibitions and performances. They were also encouraged to stretch themselves by delivering lectures/seminars to their peers, which have proved extremely popular.

Evidence: A Level results analysis, student evaluations and feedback, English Conference programmes, lecture handouts.

Impact: Data from student feedback showed that they enjoyed the lectures and felt challenged and stretched by both lectures and workshops. They have particularly enjoyed hearing from former students about their experiences studying English at university. In both AS and A2 there is an upward trend in results, and at AS the intake is on an upward trend.

A2 results	2010-11	2011-12	2012-13	2013-14
%A*-A	12%	19%	23%	28%
%A*-C	85%	90%	100%	100%

Reflections: We are particularly interested in continuing to develop the Sixth Form talks and perhaps expanding these to include year 11s to encourage them to take English at A level. There have also been suggestions that parents who are experts in their field would be willing to come in to deliver talks, both within the discipline of English literature and on other topics.

Contact: Kathryn Nedeljkovic, knedeljkovic@gumley.hounslow.sch.uk

How can we make poetry more engaging and relevant in the curriculum?



Passmores Academy, Essex

An 11-16 coeducational academy

Aim: To raise the profile of poetry in the school and to create a 'Resident Poet'.

Background: Poetry was stigmatised among students as being boring, negative and inaccessible, so the project aimed to show pupils the relevance of poetry in their lives from a range of sources.

Method:

Year 1: An annual poetry competition was begun and received many entries from both students and staff. Students' views on poetry and on poetry schemes of work across the key stages were collected. A poetry club was started, focusing on understanding, and those that attended were seen to do better in their GCSE through developments in their confidence when writing and sharing their analysis of poetry.

Year 2: The poetry club was established to help develop analytical skills, and pupils felt more confident in the poetry elements of their exams and coursework than in previous years. The higher profile of poetry saw students discussing and enjoying poetry in class. A published poet visited the school and conducted workshops with Year 7 students. There were then performances of her and students' work, and a Q&A session. The year group was then well prepared for a newly developed scheme of work with some interesting and challenging poems. Assessments for this unit demonstrated students' confidence in writing their own poetry and writing about other people's work.

Year 3: The poetry club was expanded to all year groups and members were truly developing a love and understanding of poetry. Students of all abilities were encouraged to attend and work together, and to take more responsibility for leading the discussion and ideas. Older pupils are taking on the role of Poet Laureate and a number of them have entered national poetry competitions. The best work from competitions and classes is shared on a poetry webpage. A visiting poet worked with Year 10, and for the first time a number of Year 11 students produced their own poetry for their creative writing coursework. From internal moderation, this work is potentially A* standard.

Evidence: Feedback questionnaires and discussions with staff and students.

Impact: Poetry is now seen as a more engaging topic and is not met with the usual groans. Boys are engaging with poetry in the same way as girls. Staff have enjoyed working on new schemes of work for KS3 and development has started on new GCSE schemes of work using only 'modern' poetry to make the topic appear more relevant to students.

School poetry competitions see a large turnout of entries, mostly of very good quality, and students' progress in lessons and assessment has been good, with some interesting interpretations of difficult texts.

Reflections: My initial concerns were unfounded and staff were open to change. Students have welcomed challenges to their understanding and interpretation. The project has shown that poetry can be seen as relevant to students today, and that we can find new ways of teaching it.

My initial concerns were unfounded and staff were open to change

Challenging and developing perceptions of key global issues





Queen Elizabeth's School, Barnet An 11-18 boys' grammar school

Aim: To make students more aware of life in different parts of the UK and the world, and to develop a greater sense of interest in the world outside of school.

Background: Boys at the school did not empathise with people living in environments that were unfamiliar to them and wildly different to their lives in London. A number of students were so focused on doing well at school or getting into a good university that they did not develop an interest in the world around them – something of great importance to being a good geographer.

Method:

Year 1: Links were explored with other schools in contrasting contexts and several (in Ghana, Zimbabwe, Lesotho, Kenya and Tanzania, and also initially Tendring Technology College through the PTI) were contacted to explain the aims of the project and see if a lasting partnership would be feasible. Teachers at each school identified and shared opportunities for key global issues to be taught and for the perceptions of students to be analysed. Each term work was exchanged between schools and students compared their views to those in other countries. Pen-pal letters were exchanged and students in all of the schools joined extra-curricular clubs.

Year 2: By this stage it was clear that one school (in Ghana) was equally enthusiastic about the project; new projects were created and shared between the two schools, and a visit was arranged for a teacher from Ghana to visit Queen Elizabeth's. Funding came through the British Council's Connecting Classrooms programme. The talk he gave really opened pupils' eyes to understanding arguments from other points of view. A Facebook group was set up for students to maintain links themselves, and pupils are in charge of updating a noticeboard with the latest work, photos and information from each school. An African-style theatre company also visited the school to demonstrate more about African culture.

Evidence: Student questionnaires, uptake at GCSE and A Level.

Impact: Results of student questionnaires showed that the projects and links had helped to develop a greater sense of interest in the rest of the world and an increased awareness of global issues. It also made them more likely to be active global citizens. They were inspired by the idea of a potential visit to Ghana and enthusiastic about developing further links; knowing their work was being shared with students in Ghana motivated them to produce a better quality of work and to enjoy it more.

The numbers studying GCSE and A Level Geography have both increased. Provisional GCSE numbers are 130 for 2015 (100 in 2014) and at A Level they have increased from 21, to 30, to 32 in the past 3 years.

Reflections: Challenges have been involving more schools in the links, and also enthusing and fully involving the whole department. It is hard to transfer your own passion to other staff members, and perhaps their involvement needs to be secured through target setting and performance review.

helped to develop a greater sense of interest in the rest of the world and an increased awareness of global issues

Developing a centre for excellence in Geospatial learning

King Edward VI Five Ways School, Birmingham An 11-18 selective coeducational academy converter

Aim: To extend teacher support using new geographical technologies, especially GIS (Geographic Information Systems), and to assess the effectiveness of training over time.

Background: The department was already a major provider of support to Geography teachers, with around 250 educators receiving training at over 20 events each year.

Method: The range and amount of support offered to educators such as workshops on how to use GIS has increased, especially regionally and within universities. The department has continued its partnership with the Gapminder Foundation, with one of the founders visiting the school on a number of occasions to trial and develop teaching resources. The school has provided webinars on the use of Gapminder's statistical software in the classroom to educators across the world.

The school has become an ESRI UK School Centre of Excellence, and coupled with a successful bid for a Goldsmith's Company Teacher's Grant, this has allowed the school to develop its teacher training support. This has allowed visits to California and Virginia to observe and develop good practice.

GIS Day activities for Sixth Formers have gone from strength to strength and have attracted more schools and interest. Guest speakers have included world-renowned academics and industry professionals from organisations like Ordnance Survey and West Midlands police. The talks have been a positive experience for the students attending.

Geographical Association Branch talks have been very successful, and increased uptake from other schools has been particularly encouraging. Highlights have been talks about the BBC's Africa series and desertification, and a visit by the Opal Weather Roadshow.

Evidence: Feedback from schools

Impact: From 2012-2015 the department has maintained and developed the range of support provided. Numbers have been maintained from year to year, which in the current economic climate can be viewed as a success. Teachers' feedback has shown that they are more confident with using GIS within their Geography classes, especially with the new curriculum changes.

Feedback from other schools has shown that the talks have been incredibly valuable in allowing students and teachers to engage deeply with contemporary research. Schools have also commented that the support has been valuable where financial and academic constraints have prevented them from organising their own trips and activities.

Reflections: The majority of support and training has been carried out outside of school hours or in planning, preparation and assessment time; if it had only been during school time, very little would have been provided. Assessing the effectiveness of training has been more difficult than expected because of poor response rates to questionnaires. Electronic surveys through sites such as Survey Monkey have proved more effective, and when support is provided it is paramount that agreements are made in advance to provide follow-up feedback.



the talks have been incredibly valuable in allowing students and teachers to engage deeply with contemporary research

Promoting greater pupil independence and improving marks in controlled assessments

Stewards Academy, Essex

An 11-16 coeducational academy



Aim: To allow pupils of all abilities to achieve a greater understanding of GCSE Geography through fieldwork, and for them to attain the highest marks possible for their controlled assessment.

Background: It was felt that pupils should take much greater responsibility for planning and developing their own controlled assessments, designing at least one of their own methods.

Method:

Year 1: Pupils designed personal questionnaires and attitudinal surveys to gather data for their controlled assessment. The impact was highly positive, and a deeper understanding of their study allowed pupils to gain confidence in detailed interpretation of the data. In 2013/14 91% of pupils achieved at least one grade above their target GCSE grade in their controlled assessment.

Year 2: There was a more careful focus on the quality of research being conducted by higher ability pupils, who were encouraged to develop high quality, unique questionnaires to critically evaluate landuse changes. Focusing on the quality of data collection, rather than the number of techniques, allowed pupils to deepen their understanding of the study and show their own personal research more clearly. To help pupils improve their evaluations, they analysed old pieces of controlled assessment against the marking criteria to gain a clearer understanding of the features of level 3 (the highest level) evaluations.

Evidence: Student questionnaires, controlled assessment results.

Impact: Focusing pupils' attention on the marking criteria during the planning stages of controlled assessment has helped pupils gain a much deeper and clearer understanding of how they can achieve the best grades possible.

Average controlled assessment marks have improved: In 2013 the average mark was 44/60 (73%), in 2014 it was 46/60 (77%) and in 2015 it was 48/60 (80%). This is equivalent to an 'A' grade for all pupils, a very good achievement considering the broad mix of abilities within the teaching groups. Much of this increase is due to pupils producing their own research materials, which has allowed them to achieve level 3 marks for their 'methodology' and 'interpretation of results' criteria.

The impact of the focus on quality research and interpretation for higher ability pupils has been evident, as those sitting the higher exam paper in 2015 achieved an average assessment mark of 51/60 (85%).

Reflections: This project has re-affirmed the importance of the high professional standards and high expectations which a subject leader should have of both their teaching colleagues and pupils. Without high expectations, academic success is hard to achieve in any school, let alone one which serves an area of recognised deprivation and disadvantage. Nevertheless, our pupils have created controlled assessments which are academically rigorous and investigative. I feel the main success of this project stems from setting our ambitions high for all pupils, regardless of their GCSE target grades. I feel our low and middle ability pupils have all performed very well and our higher ability pupils have also been allowed to flourish.

our pupils have created controlled assessments which are academically rigorous and investigative

Holland Park School

Personalising history: How is history connected to me?

Holland Park School, London

An 11-18 coeducational comprehensive academy with a much higher than average proportion of students from minority ethnic backgrounds.

Aim: To encourage students to 'personalise history' in order to broaden their conception of history, making it more meaningful, relevant and integral to their lives.

Background: This project was combined with the Head of Department's MSc Teaching and Learning research at the University of Oxford. Her previous study had revealed a clear message from students - that increased focus on aspects of their own personal, cultural, family and local histories would be meaningful and relevant to them.

Method:

Year 1: Students, parents and teachers were interviewed and surveyed about their views of the potential benefits and challenges of students researching their identities. A new scheme of work was designed and trialled with some Year 7 and 8 groups, and the outcomes were evaluated. The department liaised with the makers of *Who do you think you are?* and *Making History.*

Year 2: The scheme of work was developed further with a specific focus on guiding students' independent research and clarifying assessment criteria. It was trialled with all Year 7 and 8 groups; the opinions of students, parents and teachers were investigated and the outcomes of the scheme of work were evaluated.

Year 3: The scheme of work was developed to make it more accessible, and to give students the option to research either their family/cultural history and/or local history, and to provide opportunities for formal written assessment and exam-style questions.

Evidence: Questionnaires and interviews, student projects, student engagement and enthusiasm.

Impact: Most students and parents recognised that investigating their own family stories could develop students' understanding of their personal identities and those of others. This was valued by students, who often revealed a complexity of perceptions regarding the plurality of their cultural identities. Parents and students revealed that the project had helped students to better understand one another's cultural identities, promoting greater respect and tolerance of differences. Some also commented that the research had helped them feel a greater sense of belonging.

Students particularly felt that they could benefit from gaining a broader conception of history, involving not only mainstream content focused on major events and people, but also non-mainstream content focused on events and people significant to their own lives. However, there were tensions between these aims and the perceived purpose of school history (especially exam preparation), so teachers may need to consider how to sell a personal history topic through a focus on historical research skills rather than content.

Reflections: This kind of historical enquiry has the potential to be relevant and meaningful and can inspire students to continue History at the end of Key Stage 3. However, the design and teaching of such an enquiry needs careful consideration of potential sensitivities which might arise from family history, making an alternative focus on local history imperative. There are also practical obstacles to consider in terms of historical research and finding evidence on family stories.

the project had helped students to better understand one another's cultural identities, promoting greater respect and tolerance of differences

Transition History causation project

Hinchingbrooke School, Cambridge A large 11-18 coeducational comprehensive school



Aim: To facilitate pupils' transition to secondary school through building links with primary schools and developing skills in the key concept area of causation.

Background: Links with primary schools were being forged and there was a desire to work collaboratively with primary staff to develop a taught transition unit which would introduce pupils to a subject they may not have been taught discretely before. It was hoped that this early exposure to rigorous History teaching could have a long term effect on the future progress of students.

Method: The impending 100th Anniversary of the First World War led to the decision to use this as the main topic for the transition unit.

Year 1: Letters were sent to potential primary partners to outline the project, and a meeting was organised. Unfortunately, working in depth with more than one school was not viable because of time and interest issues, but Godmanchester Primary School volunteered to be the main project partner and a joint scheme of work was developed.

Year 2: Godmanchester and Hinchingbrooke staff worked together to deliver the joint scheme of work to Year 6 pupils. A focus group of 30 pupils was surveyed, alongside a control group who had not experienced the transition unit. The scheme of work was reviewed and updated for use the following year.

Year 3: The progress and opinions of the focus groups were monitored over the course of Year 7, and the whole of Year 7 was surveyed to see whether there were different opinions among those who had experienced the transition work. Plans were made to extend transition visits to other partner primary schools the following year, with the hope that previous transition group pupils would act as history ambassadors.

Evidence: Discussion groups, questionnaires, classroom observations and assessment data.

Impact: The Year 6 questionnaire showed that the Godmanchester focus group developed noticeably more positive opinions about History compared to the control group, and their achievement levels did not drop in the transition to secondary school. The Year 7 questionnaire showed that 73% of the focus group had increased their interest in History, and 63% had found it easier to settle into Hinchingbrooke History lessons as a result of the transition unit. Current data suggests that a majority of focus group pupils are making expected or better than expected progress, though it is not possible to exclude other variables from this. Anecdotal feedback from staff and pupils has been overwhelmingly positive and primary staff have commented that they have learnt useful skills and techniques for teaching History.

Reflections: The transition unit has been a pleasure and a success in terms of promoting positive attitudes towards History, and it has fostered good relationships between staff and pupils across the schools involved. There have also been informal opportunities for the professional development of primary and secondary school staff through peer planning, review and observation.

their achievement levels did not drop in the transition to secondary school

The impact and effectiveness of a subject-specific website

Charlton School, Shropshire An 11-16 coeducational comprehensive school

Aim: To develop a departmental website that will allow pupils to access information and resources, and to interact with one another to provide peer mentoring.

Background: The number of students taking History at GCSE at the school is nearly twice the national average, and in such a large department it can be difficult to provide tailored support to all students.

Method:

Year 1: The foundations and structure of the website were completed by the Head of Department, working with a borough IT advisor. Staff worked together to create a significant amount of resources to share online, and the site was advertised and used as a point of communication with parents.

Year 2: The Key Stage 4 section of the website was completed to support GCSE pupils, and resources were designed to engage students with a variety of learning styles and abilities. Pupils and parents were surveyed about their use of the website, and demand was indicated for revision guides and exam information rather than a 'chat room' feature. Staff agreed that making these materials available to pupils at home was beneficial.

Year 3: All sections of the website were up and running and it was being used effectively by staff and pupils. Content was continually updated to reflect the new national curriculum and having the material online saved the department £400-£500 that would usually be spent printing and binding revision guides. Pupil and parent feedback was collected to help with future developments and the site was monitored daily, revealing that KS4 pupils and parents made the most use of the site.

Evidence: Pupil and parent questionnaires, website data.

Impact: As exams approached, the website was getting over 150 hits per day, and being able to see which revision pages were accessed allowed staff see where most pupils needed help. There is now better revision and more effective communication with pupils and parents.

Reflections: I believe that this development has greatly supported staff in the delivery of Key Stage 4 History. Pupils often comment on their own use of the resources available, and it has promoted a sense of responsibility and ownership of work within the pupils.



There is now better revision and more effective communication with pupils and parents

Using enrichment activities to raise the profile of History



Oakwood Park Grammar School, Kent

An 11-18 selective boys' grammar school with a coeducational Sixth Form

Aim: To improve the enthusiasm and confidence of Year 13 History students and to raise the numbers applying to study History at university.

Background: It was decided to introduce the Pre-U qualification as it constrained the breadth of topics less than A Levels. The Pre-U was initially demanding as there are no set text books and students are expected to read a wide range of material. Pupils needed a new confidence to study in this way, and it was hypothesised that providing a wide range of historical enrichment would help them gain this confidence when faced with a wide variety of sources.

Method:

Year 1: Enrichment activities and trips were organised and a History Society was created to raise the profile of History in the community. Year 12-13 students ran workshops at a local primary school. This was followed by a local History Day run by Year 12 students and attended by the Mayor, local primary schools, governors and parents. To increase the uptake at university, 15 students attended a session with PhD historians at University College London.

Year 2: An Ancient History Club was created and the History Society continued to be run by A Level students. More university visits were planned and a day of enrichment activities dedicated to History was organised for each year group, with Sixth Form students acting as peer helpers.

Year 3: A Churchill-themed public speaking competition provided opportunities for stretch and challenge and as part of their research students visited Churchill College and Queens' College at the University of Cambridge. Links were made with a school in Ghana, and 50 students visited the school with resources they had prepared to lead sessions on the slave trade.

Year 4: Students participated in a visit to Ypres and a debating event was organised with two other local schools. It was attended by undergraduates from Christchurch University, Canterbury.

Evidence: Enrichment materials, student feedback, History uptake data and university applications.

Impact: Links with other organisations were successfully developed and enrichment activities developed students' interest in and commitment to History. The number of students taking an Extended Project Qualification in History has risen from 2 in Year 1 to 10 in Year 4, and Pre-U students are getting more experience of how to conduct historical research from university visits. Many of the enrichment activities have been staffed by non-history specialists, who have commented on how much they have learnt.

Academic Year	Pupil take-up of History Year 11	Pupil take-up of History Year 13
2012/13	64 (out of 150)	20
2013/14	88	30
2014/15	91	37

Reflections: Without the support of the senior leadership, it would have been very difficult to provide the depth and breadth of enrichment we have. Attributing improvements in exam results to enrichment is a challenge, as there are so many variables at play.

Contact: Abbie Hern, ahern@opgs.org

Using language for learning effectively within the History curriculum

The Crypt School, Gloucester

An 11-18 boys' grammar school with a coeducational Sixth Form

Aim: To increase the effective use of subject-specific and analytical/evaluative language within students' History work.

Background: The project had a literacy focus following a recommendation in feedback from Ofsted, which gave a glowing report on the school's practice.

Method:

Year 1: The use of spelling tests allowed students in Key Stage 3 to understand the importance of spelling, punctuation and grammar marks in History. It was found that some students seem resentful or under pressure when faced with mistakes and seem embarrassed to ask for support.

Year 2: Students showed a greater depth of analysis within their written work and regularly tried to introduce complex sentence structures. Use of the PEEL formula (Project to Enhance Effective Learning) has allowed students to develop their essays, but aspects of pupils' extended writing could be overly generic and not supported with specific examples.

Year 3: A standardised approach was taken to literacy techniques and additional marks were awarded for the use of subject-specific words in formal assessments.

Evidence: Key Stage 4 data was used to identify the levels of success and failure of the literacy strategies.

Impact: Students have a greater understanding of the impact that subject-specific words have on their overall grades, and the application of subject-specific words during lessons has improved. However, there is still some confusion about how the use and meaning of words can change within different subjects, for example the word 'source' within History and Geography. Similarly students find it difficult to understand that the meaning of key words may have changed over time and might use the modern definition of a word which may be topic specific.

A History Club has been established to promote the effective application of historical skills and this is mentored by Sixth Form History students. However, it has been difficult to maintain numbers because of the number of clubs running at the school. Sixth Form mentoring in Key Stage 3 lessons has improved pupils' understanding of topics, and students are far more confident in asking the mentors to check their spellings. KS4 students were able to achieve high spelling, punctuation and grammar marks in their assessments, which is indicative of their improved literacy levels.

Reflections: Glossary games and spelling tests were effective with KS3, but KS4-5 students sometimes found these activities demeaning. KS4-5 students were far more willing to buy into quick-fire activities that reinforced key words and their application, and these have become an invaluable tool to enable students to recall a greater depth of detail about the subject.



Embedding enquiry skills at Key Stage 3-5

The Sweyne Park School, Essex



An 11-18 coeducational comprehensive school (Sixth Form opened in 2014)

Aim: To develop independent research and enquiry skills across the key stages to prepare students for controlled assessment and historical enquiry at GCSE and beyond.

Background: The original aim of the project was to examine how pupils' perceptions of history and their prior learning at primary school affected their motivation and achievement. However, the opening of a new Sixth Form presented a unique opportunity to create and implement a curriculum from scratch, resulting in a change of direction to develop and embed core research and enquiry skills across KS4 and 5.

Method:

Various

departments

in the school

also adopted

this approach

Year 1: Pupils' perceptions of history were explored in the context of GCSE uptake and departmental meetings focused on research and enquiry skills. A collaborative Year 6 and 9 pilot project focused on chronology and historical significance. Primary schools were surveyed revealing a vast range of topics studied. Baseline tests for all new Year 7 pupils, explored subject enjoyment and historical understanding.

Year 2: A pupil programme to improve internet research was planned with the ICT department. Liaison work with three feeder primary schools revealed inconsistencies in the teaching of content and skills. The 'flipped classroom' approach, where students research key content before the lesson, was trialled to improve independent learning with Year 11. Gifted and talented Year 9 students worked on a project with a primary feeder school. Feedback from previous Year 9 surveys led to a revamp of the information given to pupils selecting their GCSEs, making explicit the skills and career prospects linked to History.

Year 3: With the opening of the Sixth Form, the project's focus shifted towards developing research and enquiry skills across KS4-5. Research and preparation activities as part of the flipped classroom model were written into the brand new schemes of work and lesson materials. The flipped classroom model was also incorporated into the GCSE controlled assessment scheme of work.

Evidence: Student surveys, primary school surveys, baseline test results, GCSE and A-Level uptake statistics.

Impact: The flipped classroom approach led to higher levels of motivation in lessons, a greater range of sources used for research and better quality questions asked in class. Various departments in the school also adopted this approach. Questionnaires have given the department an improved understanding of pupils' perceptions of history and staff have been able to adapt aspects of the curriculum in response. The profile and popularity of the subject in the school has grown and the uptake at GCSE and A-Level remains high:

Uptake	2013	2014	2015
GCSE	107	137	135
A Level	-	45	67

Reflections: Time is always the greatest challenge in teaching. Scaling down and using a focus primary school helped the research to progress. We have been very pleased with the high uptake at GCSE and A-Level; the issues explored as part of this project have allowed us to reflect on our practice and adapt the delivery of our subject across the key stages.

The challenges of developing regional subject links

Devonport High School for Boys, Devon

An 11-18 boys' grammar school

Aim: The original aim of the project had been to support the development of Ancient History GCSE in schools in Devon and Cornwall. However, because there was insufficient interest in Ancient History in the region, the focus of the project changed to developing interschool links through Holocaust education.

Background: Ancient History had become exceptionally popular at Devonport, and as there was significant expertise within the department, the school seemed to be in a good position to promote the development of the course throughout the region.

Method:

Years 1-2: Planning meetings were held at school and a professional development course on Ancient History was planned and held in London through the PTI.

Year 3: Contact was made with universities but attempts to forge significant links with partner schools were largely unsuccessful. Most schools were concerned with the challenges connected with the introduction of new syllabuses at GCSE and A Level, and did not have time to learn the whole new body of knowledge required to teach Ancient History. It was therefore decided to change the focus to developing links with partner organisations and schools through Holocaust education.

The Head of History attended an advanced Holocaust education course in Israel and kept a detailed blog which was shared with staff and students. On returning he gave lectures, first to the Sixth Form and then to others in the school. The way that the Holocaust is taught was revamped, and a coordinated approach with the English and Religious Studies departments was planned. A day of professional development in conjunction with the Holocaust Education Trust was also planned.

Impact: Trying to build partnerships around Ancient History proved too difficult, but dealing with an established topic that colleagues feel passionately about has been much more rewarding and successful. Being able to share information immediately while in Israel, and being able to provide more controversial and interesting points of view engaged colleagues with the topic.

Reflections: I understand the reasons why people might think that offering a different History GCSE might be a burden, but I passionately believe that this is a body of knowledge that should be disseminated far more widely and that the students who take the subject will gain a great deal, both in terms of knowledge and skills. The material is fascinating and at Devonport the take-up at GCSE and A Level is excellent.

Essentially this was a project about building partnerships and the Holocaust is a topic that really inspires teachers to expand their subject knowledge as well as the pedagogy involved in teaching it effectively. The work that I have done on the Holocaust would indicate that building partnerships can be done successfully so that students get a richer, more rewarding experience. The advice I would give is to check that there are willing partners out there before embarking on such a project.



building partnerships can be done successfully so that students get a richer, more rewarding experience

Enthusing non-natural historians in a high achieving school

Westcliff High School for Girls, Essex An 11-18 girls' grammar school



Aim: To enthuse students in History activities beyond the curriculum and to increase the numbers continuing with History at university level.

Background: The department was already very successful, with high uptake at GCSE and A Level, but there was a desire to enthuse pupils who were less natural historians.

Method:

Year 1: A more formal programme of extracurricular activities was planned, including a History Club where students generated the ideas explored (e.g. a Henry VIII lonely hearts column; disgusting jobs from Medieval times, Victorian food *Come Dine With Me*). Other enrichment activities included lunchtime 'History in Breadth' sessions, which were regularly attended by 6-14 students, and an essay writing competition intended to help students who were applying to Oxbridge gain greater confidence and extended vocabulary.

Year 2: The bank of resources for students developed further with an expanding DVD library and a History lending library which were both well used. Enrichment activities continued and the History in Breadth sessions were altered to include information currently in the news to make them more relevant and help students prepare for university applications and interviews. 15 students attended regularly and feedback was very positive. Staff attended continuing professional development (CPD) to prepare for the new curriculum. Subject uptake at GCSE and A Level remained high and staff helped pupils increase their awareness of choices involving History at university.

Year 3: History in Breadth sessions were broadened to include pupils from Year 10 onwards. Links were made with local primary schools in the hope that Year 12 students could deliver History lessons linked to the Key Stage 2 curriculum, though the primary schools were not able to facilitate this. However, primary pupils visited the school for History taster sessions. Primary schools were also liaised with regarding their CPD needs, and Westcliff staff delivered training in History networking sessions. Links were also forged with universities to allow A Level students to attend lectures.

Evidence: Student feedback.

Impact: The department remains one of the strongest in the school, with extremely high GCSE and A Level uptake. Over half of students studying A2 History go on to study History-related degrees, and apart from the core subjects, History has the largest number of students choosing to continue beyond compulsory study.

Reflections: We have learned that students are willing to embrace new learning experiences when they are offered. The challenges have been the time pressure on both staff and students, which has limited the impact in places.

Over half of students studying A2 History go on to study Historyrelated degrees

Raising expectations and broadening horizons post-16

Tendring Technology College, Essex

An 11-18 coeducational comprehensive academy, split over two sites

Aim: To support student achievement through encouraging student passion and engagement in History beyond the A Level syllabus, and to raise students' university aspirations.

Background: The History department is a successful one with excellent uptake and better than national average GCSE and A Level results. However, many A Level students were not engaging with the subject outside of their studies. Only 25% of A Level History students were going on to study History at university and only 10% were going to study History at a Russell Group university.

Method:

Year 1: The programme of History visits was broadened across Key Stages 3 and 5 and preparations were made to launch a History Society. Approaches were made to further education institutions to organise visits and speakers.

Year 2: The History Society was successfully launched in the Sixth Form and broadened into a Humanities Society. The History visits programme was extended further. A register of alumni was begun in order to create an alumni network.

Year 3: The student-led Humanities Society struggled because of the impact of exams, as students prioritised their revision. Staff delivered lectures on subjects of their choice, though student turnout was low. New visits were organised, including a trip to Fitzwilliam College, University of Cambridge, and workshops on studying History at university were run by former students. Questionnaires showed that these activities raised the aspirations of students to apply to top universities.

Year 4: The Humanities Society was ended because of a lack of interest from students, but the department continued to devise new trips. The link with Fitzwilliam College grew stronger and collaboration included guidance on new A Level specifications and course structure. An inaugural literary event in association with the Frinton Literary Festival was hugely successful with 100 students and 30 staff attending.

Evidence: University applications, trips and activities.

Impact: The aspirations of students have been raised, as university applications show:

- 2012 first successful applicant to Cambridge
- 2013 unsuccessful applicant to Cambridge; two students to Russell Group universitites
- 2014 two unsuccessful applicants to Oxbridge; one student to Russell Group university
- 2015 three applicants to Oxbridge, two unsuccessful, one conditional; four students with conditional offers to Russell Group universities

Reflections: A big barrier to the success of the Humanities Society is the nature of a split-site school where getting students to work across the key stages is challenging. The focus on the Key Stage 4-5 campus is hugely exam-centric, which means students find it difficult balancing extra-curricular activities with their academic work.



The aspirations of students have been raised, as university applications show

Embedding ICT into learning

Bury St Edmunds County Upper School, Suffolk

A 13-18 coeducational comprehensive school within a 4-19 all-through trust



Aim: To create an effective Virtual Learning Environment (VLE) for students studying History, giving them access to course information, homework, learning activities and an online forum.

Background: Access to ICT facilities in the school was limited, and there was very little evidence that any effective use of ICT was taking place to enhance learning in the History Faculty.

Method:

Year 1: The main successes were with the Sixth Form, where feedback showed students were regularly using online tools, though more training was needed for staff. It was clear that progress was being held up as students were not being encouraged to use online learning across the school, so training was also offered to staff in other departments.

Year 2: Students' usage of the online learning site increased significantly and funding was gained to purchase iPads. Staff were eager to get involved with the use of ICT in different ways, so rather than just building up a bank of information on the learning site, more training was provided to develop the skills of staff to use ICT in a way that would fit intended learning outcomes.

Year 3: Staff gained confidence in using ICT and increasingly began to use iPads with their classes. While they have proved more useful as a research tool than as an aid to learning, video making and quizzes have been utilised to facilitate learning.

Evidence: Student and staff surveys.

Impact: Over 72% of students surveyed agreed that the use of ICT in History has been helpful to them as learners. Their comments showed that they found it a useful resource to contextualise learning and provide support beyond the classroom. By the third year, over 94% of students had used iPads in lessons, and over 94% of students were aware of the faculty's learning sites, compared with only 77% in 2013. The biggest impact has been with staff, who now see the benefits of using ICT to bring up to date methods of learning into their classrooms. 100% of teachers in the department said that the increased use of ICT has been beneficial to them.

Reflections: When it comes to using ICT, colleagues do need to see the benefits of programmes modelled for them in order to visualise and then actualise their own use of it. The clear challenge is that for the use of ICT to be successful, it should be widespread and heavily supported. It takes time to develop a resource bank and preliminary interactive activities, and beyond that it would take financial support and more expertise to develop ICT into an effective learning tool.

Evaluating the impact of an extracurricular History society

All Saints Catholic School, Dagenham

An 11-18 coeducational Catholic school

Aim: To create a History Society to enable students to develop a deeper and broader engagement with History.

Background: The school's Art department had succeeding in fostering an ethos where students saw themselves as 'artists', willing to immerse themselves in the subject both in and out of lessons. There was a desire to develop this ethos in the History department, to build pupils' 'cultural capital' and encourage more to pursue History at A Level and university in a school where there was not a deep tradition of going on to further study.

Method:

Year 1: The History Society was established, and ran a variety of films, historical discussions, events and lectures. Approximately 10% of the Sixth Form attended at least one event, including several who didn't study History, and activities were well publicised via Twitter, posters and governors' reports. Questionnaires and a focus group were used to inform the following year.

Year 2: The Society ran a theatre trip and activities that focused on university preparation. Despite efforts to broaden its reach, membership was almost exclusively from Year 13. Plans to expand into Key Stage 4 were not fulfilled. Student questionnaires explained why pupil involvement was lower than hoped.

Year 3: The society met intermittently, and events like the theatre trip were still organised. To try and build a sustainable group for the future, an event aimed at Year 10-11 pupils was planned with the hope that involvement in extracurricular History could be continued into A Level. A lecture on black history was planned through links with another PTI Schools Programme member, and the event was well attended by around 30 Year 10-11 students. These formed the basis for a black history group that would undertake a research project in the following year. The views of current and former pupils, who were in most cases now at university, on extracurricular history provision were taken.

Evidence: Focus group discussions, questionnaires, destination data for school leavers, pupil results.

Impact: Although less successful in its third year, the History Society has established itself as part of the school's extracurricular provision. Feedback from pupils, including those now at university, has been very positive in terms of their understanding and perceptions of History. Some commented that the Society provided a first experience of an academic university society, and that they have developed negotiating and debating skills. The profile of the subject has been raised through involvement of other staff in History lectures and through links with other schools.

Reflections: Extracurricular societies flourish better when there is a whole-school approach that values learning outside the curriculum. Barriers to participation were a feeling that there wasn't time to participate due to work pressures, and the lack of a tradition of engagement in History activities lower down in the school. Getting students involved in leadership positions in a society is crucial to ensuring its vibrancy and sustainability.



The profile of the subject has been raised

Is History bunk? Student perceptions of History in Key Stage 3



Haybridge High School and Sixth Form, Worcestershire An 11-18 coeducational academy

Aim: To determine what impact Key Stage 3 schemes of work had on students' perceptions of the value of History relative to other subjects.

Background: The department had adopted a competency-based scheme of work for Years 7-8, which seemed to make the subject more enjoyable and accessible while still providing stretch and challenge. The research sought to determine the validity of this hypothesis.

By the end of Year 9, cohort A ranked History as the 2nd most enjoyable subject

Method:

Year 1: A questionnaire was designed for students to complete online at the beginning and end of the year to record their perceptions about aspects of the subject, including its value, its difficulty and the skills they anticipated developing. Data from cohort A (Year 7) informed a report about students' perceptions of the subject on entering secondary school.

Year 2: Data from cohorts A (Year 8) and B (Year 7) were analysed.

Year 3: Data from cohorts B (Year 8) and C (Year 7) were analysed, and cohort A (Year 9) were asked additionally whether they were likely to continue with the subject into KS4.

Evidence: Student questionnaires.

Impact: At the start of Year 7, all cohorts perceived History as difficult, boring and unimportant, but they anticipated gaining research skills through its study. Over the three years, there was a marked deterioration in the anticipated level of enjoyment for those entering the school.

The Year 7 scheme of work did not affect the perceived importance or usefulness of the subject, but cohorts A and B found History relatively more interesting, easy and fun. Cohort C found it more difficult, as a literary-based traditional approach was adopted for them, and while many still found History interesting, a significant number found it boring. The number of students in cohort C who did not anticipate future success in History was double that of A or B.

In Year 8 the aim was to stretch and challenge students in terms of content and skills; for cohorts A and B the subject was seen as more difficult and there was a small drop in terms of how many found History 'interesting', with fewer students anticipating enjoyment or success in the next year and some students describing History as 'boring'.

By the end of Year 9, cohort A ranked History as the 2nd most enjoyable subject (8th at the start of Year 7). 'Interesting' and 'fascinating' remained the most popular words to describe History, and 'challenging' replaced 'boring' as the third most popular.

Reflections: Most significantly, for Year 7 students, challenging content and skills can be made so accessible through the teaching method that students find the subject easy. However, the growing disenchantment of Year 6 students with History and Humanities is a concern. Happily, this research has also given us the opportunity to evaluate the impact of schemes of work in Year 7 and to consider some remedial action to re-engage cohort C in Year 8.

For the full report visit www.princes-ti.org.uk/staffroom

Providing pupils with an understanding of how the wider world landscape and its themes relate to their locality

Robert Clack School, Dagenham

An 11-18 coeducational comprehensive school

Aim: To give students a deeper understanding of the area they live in, and how it relates to key events in history.

Background: The History department draws staff from all around the UK, not all come from the local area. Consequently knowledge of the area is very limited. The development of high quality resources and schemes of work to incorporate local knowledge would help maintain links with the local area and enable new teachers to engage successfully with local history.

Method:

Year 1: The department reviewed schemes of work to identify areas where local history could be introduced. It was decided to focus on Year 9, particularly in regards to World War I. Links were made with a local museum to gather information about local individuals who were present at Ypres. Students completed a case study on a WW1 soldier who had worked in the area, and a trip to Ypres was organised.

Year 2: There was a continued use of WWI resources and the use of local history was extended into other year groups. The local history topic areas were expanded, including the history of Barking Abbey (to understand the Reformation) and the sinking of the Titanic (brought into focus by a local survivor, Eva Hart). Many students already knew her name because a local pub is named after her.

Year 3: The aims of this year were to refine and develop the local history units which had already been implemented, and to extend the local history units into earlier time periods, beyond the 20th century. It was also proposed to arrange a trip to the Museum of London Docklands to understand the broad issues of slavery and empire in a local context, and also to examine why the area has such great ethnic diversity.

Evidence: Schemes of work.

Impact: The focus on local history has enriched students' understanding; their focus on the Ypres trip, for example, shifted from the trenches and battlefields to the individuals involved. Teachers have really focused on introducing local history elements, and the importance of this is consistently emphasised at departmental meetings. There is excitement among the department about a new scheme of work that will focus on the vibrant history of immigration in the borough, to help tackle the issues of problems with local far-right groups.

Reflections: We see teaching historical skills to Key Stage 3 students as a huge priority, and there continues to be focused innovation in our teaching at this level. The ethos of the department will always be focused on delivering the best outcomes for our students. The focus on local history sits well with our constant determination to ensure that history is loved by all students and relevant to all.

The focus on local history has enriched students' understanding



Extending students beyond the Mathematics curriculum

St Angela's Ursuline School, London

An 11-16 comprehensive girls' Catholic school with a coeducational Sixth Form



Aim: To raise pupils' interest and aspiration in Mathematics and to share and develop subject knowledge amongst teachers. To encourage more students to study Mathematics at A Level and beyond.

Background: The Mathematics department was achieving high results at Key Stage 4, and maintaining a 98% pass rate at Key Stage 5. The number of students that progressed from KS4 to study A Level Maths had always been respectable, however the number of students studying A Level Further Maths had always been very low.

Method:

Year 1: A Level Mathematics students volunteered their time to help students in KS3 lessons. Students who did not particularly enjoy Mathematics but enjoyed reading were encouraged to read books from the Mathematics book list. Teachers took students out on mathematical trips and UK Mathematics Trust challenges. A Level teachers did a test in the new modules they were teaching, both at the start of the year and the end of the year, and results were compared. Teachers attended continuing professional development (CPD) sessions, and this was measured through CPD evaluations on BlueSky.

Year 2: Various resources were used at Numeracy Club and students were taken on trips from Year 7 through to Year 13. Teachers attended specific CPD sessions, based on targets identified from observations.

Year 3: Students were enthused throughout the year via mathematical riddles, puzzles and jokes that had been incorporated into lessons. Teachers attended CPD sessions specifically targeted at showing them how to teach topics and they were given exercises and exam questions to complete and explain, in order to embed the teaching and learning.

Evidence: Student and staff feedback, exam results.

Impact: In 2013, 56 students sat AS-Level Mathematics, and in 2014 this rose to 71 students. Another significant increase was the number of students who studied Further Mathematics: 13 in 2012/2013 and 26 in 2013/2014. The increase was attributed to the significant number of extracurricular trips organised for Year 10-11 students in 2011-2013. Surveys showed students enjoyed Mathematics and wished to take it at A Level; however they were not always able to meet the entry requirements (Grade B at GCSE).

Teachers met regularly and were motivated to plan and deliver lessons in a collaborative fashion. The use of exams at the start, and then again at the end of the year, reflected each teacher's growth in mathematical confidence. A review of the Mathematics department, conducted by the Senior Leadership Team, included lesson observations, all of which were graded as Outstanding or Good with Outstanding features. Students' views were positive, reiterating that "teaching in Maths is excellent".

Reflections: It would be beneficial to create a club that inspires students from an early age and then to track their involvement in any mathematical trips, competitions, A Levels and university options. This would be a better indicator of how effectively the students have been enthused.

Teachers met regularly and were motivated to plan and deliver lessons in a collaborative fashion

Investigating the effect of flipped learning and other video learning strategies on mathematical understanding

Mounts Bay Academy, Cornwall

An 11-16 coeducational academy

Aim: To investigate the effect of using videos on learning Mathematics.

Background: Every student was issued with an iPad for use in school and at home. In a 'flipped' classroom an introduction to a topic was in the form of an online video set as homework before the lesson, with lesson time then devoted to using the skills learned.

Method:

Year 1: 300 videos on key mathematical topics were collected as a resource on the school's Virtual Learning Environment (VLE). A baseline survey of students' use of online videos in their learning was conducted. Videos were used in various ways:

- for flipped learning
- as part of revision schedules
- to review homework
- to provide personalized feedback on mock exam papers
- for personal study for students to research topics that interested them
- in lessons

Year 2: Surveys showed that, broadly, students felt using these videos had a positive impact. The online database was expanded to include 500 videos and they were published on two department blogs. Following training during the year, all Mathematics teachers used videos with their classes. The department also ran training for all staff at Mount's Bay on the use of videos and online technologies, in particular blogs.

Year 3: The use of videos and podcasts in lessons became more widespread across the school as an additional tool for promoting learning. It became clear that, when introducing topics, there were some times when the use of videos was more appropriate than others. As far as homework was concerned, flipped homework was set at the start of a topic and "conventional" homework set towards the end of a topic to assess understanding.

Evidence: Pupil surveys.

Impact: Approximately 20% of students were surveyed each year. It is notable that in 2015 over 80% of students felt the use of ICT had a positive or very positive effect on learning. 78% of students felt watching videos before the lesson had a positive or very positive effect on learning. Over 80% felt watching videos during a lesson or as part of a revision lesson had a positive or very positive effect. 65% felt watching a video that talked through a past paper was positive or very positive although 18% had not used this resource. This compared favourably to 2012 when the majority of students had not used videos either in lessons or outside lessons on an individual basis.

Reflections: From an outside perspective it is easy for the general public to believe that online videos can replace teachers. We have seen this to the extent that the popular press has promoted Khan Academy in the last few years. This project has shown that there is indeed a place for teachers; however, videos used independently by students have a place as a powerful additional tool to advance learning.



over 80% of students felt the use of ICT had a positive or very positive effect on learning

Improving mathematical skills across and beyond the curriculum

Gordon's School, Surrey

An 11-18 coeducational non-selective state boarding school



Aim: To coordinate the teaching of mathematical skills in other subjects across Gordon's School. To forge stronger links with local primary schools. To enthuse and extend Gordon's pupils beyond the Mathematics curriculum.

Background: Gordon's had an Outstanding Ofsted inspection in the autumn term of 2014 and has an excellent record of academic success in Mathematics.

Method:

Year 1: A cross-curricular 'Numeracy Map' was produced and a 'Basic Numeracy Guide' for students was published in their pupil diary together with a 'Numeracy Consistency Guide' for staff. A successful Primary Team Maths Competition was hosted including all four local primary schools. To increase the number of students entering the UK Mathematical Challenges, pupils from Set 2 in Years 7, 8 and 10 were entered. A team of four Year 10 pupils entered the Team Mathematics Competition organized by the Further Mathematics Support Programme and four Sixth Form students entered the UK Senior Team Maths Challenge.

Year 2: The Mathematics department contributed to 'Fairtrade Fortnight', a whole-school event for Year 9 pupils. Mathematics lessons were used to analyse the sales of 'Geobars' (a fair-trade chocolate bar) and the impact that this had on the economies of countries in the developing world. During Enrichment Week, the Mathematics department collaborated with the Business Studies department on a project for Year 9 pupils to set up a business selling 'subs' (sandwiches). The most able pupils in Year 10 were entered early for their GCSE examination so that they could then study the OCR Additional Mathematics course in Year 11. Pupils took part in national and inter-school Maths Challenge competitions and some Sixth Formers attended preparation sessions for the STEP exam at the University of Surrey.

Year 3: Training was given to staff to help improve basic 'functional Mathematics skills' across the school. The department assisted in teaching statistical methods to Year 13 Geography students. Mathematics problem solving sessions were arranged with Year 5 and 6 pupils from local primary schools, run by students from Gordon's. Weekly Mathematics challenges were introduced, targeting mainly Key Stage 3 pupils.

Evidence: Attendance at activities, exam results, feedback from other subject leaders at Gordon's and from primary schools.

Impact: The number of pupils involved in the UKMT Maths Challenges rose from 140 to over 260. Students from all year groups were entered into 10 different local and national Mathematics competitions each year.

The first cohort of pupils who took their OCR Additional Mathematics examination achieved good results. (33% A grade, 73% A-C, 93% pass rate). The feedback from the Gordon's Head of Geography and his A2 students was very positive. Primary school pupils enjoyed the problem solving session and the feedback from their headteacher was very complimentary.

Reflections: The project evolved significantly from its initial embryonic start. In hindsight, the range of aims in the first year of the project was probably too broad and as a result the focus shifted throughout the three years on which one should take priority. However, the main aims of our project were achieved.

Contact: Gary Knight, gknight@gordons.surrey.sch.uk

Improving pupils' confidence in Mathematics by using more IT-based resources

PIMLICO ACADEMY

Pimlico Academy, London

An 11-18 coeducational academy

Aim: To improve the mathematical confidence and understanding of students through the use of webbased pre-teaching which enables teachers to deliver a deeper, knowledge-rich curriculum.

Background: In September 2011, the Pimlico Maths department's GCSE A*-C results were hovering between 60–70% and the department was keen to improve on this. Teaching in the department tended to be more traditional and schemes of work were just lists of objectives. The department had undergone a significant restructure and task-based roles had been created (e.g. intervention, assessment, teaching and learning, gifted and talented).

Method:

Year 1: The schemes of work were linked with rich task resources. Significant improvements were made to the assessment model to expose learners to more demanding types of questions. Informal feedback from Year 11 students about these resources was positive.

Year 2: MathsWatch via the website mathswatch.co.uk was introduced to all students as a resource to support their studies in their own time.

Extracurricular enrichment included:

- introduction of TTRockStars for lower sets to focus on numeracy
- hosting both the Year 10 Maths Feast and Year 8/9 Team Maths Challenge
- several trips for Post-16 students
- a lecture by author and broadcaster Alex Bellos to our most able students

Year 3: It was felt that the majority of students were confident in lessons and the focus became further challenge, incorporating more group work and investigative tasks to support the introduction of the new GCSE. The decision was also made to adopt the Maths Mastery curriculum in Year 7. A wider spectrum of extra-curricular activities was offered including chess club and Countdown competitions, which created a lovely buzz about the subject around the school.

Evidence: Lesson observation feedback, student and teacher surveys, MyMaths/Maths Watch logs

Impact: The increase in opportunities for students to learn independently was evident during the run up to exams, where students were seen using resources to inform their revision and identify their weaknesses. Year 13 students became less reliant on teacher-led intervention and observations of the department demonstrated more use of enrichment tasks in lessons. This had a direct impact on observation grades, which in the first year were a mixture of grade 2s and 3s, while by the third year the highest proportion of 1s and 2s were awarded.

Reflections: Having recognised at the end of the first year of the project that the aim of using webbased teaching was too narrow to engage all students, this project focussed more on improving confidence and enrichment to ensure students gained deeper understanding of the subject. We have had several challenges, the biggest being the huge turnover of staff which made it difficult to sustain projects. Towards the end of the second year, it was felt that we needed to return to the traditional structure of the department to continue its development, which created a lack of clarity of roles for a period of time. Year 13 students became less reliant on teacher-led intervention

Using CREST awards to enrich Science teaching



The Wycombe Grange Pupil Referral Unit (PRU), Buckinghamshire A complex provision for vulnerable and challenging 11-19 year olds

Aim: To use the British Science Association CREST Award scheme to enrich the experience of students and encourage inter-school collaboration.

Background: Most students admitted to TWG in Years 10 & 11 are highly disaffected learners, many with extreme and challenging behaviour, and with very reduced prospects of achieving nationally accredited qualifications by the end of Key Stage 4.

Method:

Year 1: All students were initially given an Energy for Learning Indicator (EFLI) questionnaire measuring their motivation and attitudes in four areas: Sharing, Caring, Discipline and Determination. Links were created with St Michael's Roman Catholic School and pupils carried out a collaborative project 'Radiation Relocation', which was taken to the Regional CREST 'Big Bang' at the Science Museum, London, where the team were awarded Bronze CREST Awards.

Year 2: All interested students were offered the opportunity to carry out CREST projects if their timetable allocation allowed. A good trial run of the collaborative project modelling real scientific practice with Special Educational Needs schools took place. Several students gained Bronze CREST Awards.

Year 3: The embedding of CREST at TWG continued successfully despite tremendous difficulties - timetabling, groupings, locations and changing staff. Two students gained Silver CREST. Three top students were given the opportunity to attend the Royal Society Summer Exhibition.

Year 4: Collaboration with mainstream schools continued. A group of students attended a lecture in the form of a Science show, with interactive demonstrations, videos and activities on the theme of Propulsion.

Evidence: Motivated School's Energy for Learning checklist data, exam results, CREST assessment.

Impact: Despite the challenges, all students participating gained Bronze CREST Awards and two pupils gained Silver Awards. There were significant positive, measurable changes in their attitude towards Science and improvement in their self-esteem. For most students all Energies (EFLI data) increased significantly, often between 15 to 30%. The EFLI graphs were very visual and allowed students to see how well they had progressed. All CREST students went on to gain creditable externally assessed exam results despite originally being on course for complete failure. There was also a big impact on new staff, who developed a keen interest in the effect that the CREST Award scheme had on their students. Schools involved either directly or as observers also planned to offer CREST Awards in their schools.

Reflections: Personally I have learned a great deal from this project. Firstly, that you always have to be open to young people's ideas. It took one student about six weeks to finally find a topic that she was interested in - volcanoes! The amount of effort involved in reaching that point was unbelievable, but off she went - researching viscosity and types of volcanoes in her lessons, and she carried out some amazingly organised and patient experimentation.

The Motivated School – Energy for Learning Indicator is an exceptionally accurate way of quantifying intangible parameters which are otherwise subjective measurements made by teachers.

There were significant positive, measurable changes in their attitude towards Science and improvement in their selfesteem

Developing effective feedback within Science teaching

William Farr Church of England School, Lincoln An 11-18 coeducational comprehensive school

Aim: To set up a common approach, which could be shared with partner secondary schools, of using feedback to students more effectively within the Science department,

Background: Lesson observations conducted in 2011/2012 indicated that students knew their target grades but could not articulate effective ways of progressing to the next level. John West-Burnham had spoken at an inset day about recent education research showing that effective feedback had the biggest impact on students' progress.

Method:

Year 1: The whole department focused on feedback as part of their development management. The need to set meaningful (SMART) targets was emphasised. Student questionnaires on the impact of feedback were completed each year. After this first year there was significant progress, with 100% of students questioned able to comment on the level they were at and where they should be. Some students were able to give insightful strategies to allow them to progress to the next level. The quality of feedback was good but there was a need to make the quality consistent for all students, regardless of age or ability.

Year 2: Great progress was made in the area of dialogue marking. The adoption of this policy across all key stages was fast and sustained. A range of techniques was trialled and used at KS3 in particular. KS4 and KS5 saw a more uniform approach and students responded well, after a slow start.

Year 3: A working party was set up and a common format of feedback sheets was developed. This also included an option for parents to comment on the targets set. The time and rigour of the system caused some difficulties with staff who taught many year groups. There was also concern with the comments coming back from parents; teachers felt vulnerable and open to intimidation. This was addressed by redesigning the feedback cards and developing an agreed bank of stock phrases. The development of the feedback project was also the subject of a continuing professional development twilight event where teachers from three different local secondary schools attended.

Evidence: Lesson observations, student and staff surveys, feedback from other schools.

Impact: The CPD event was well received by visiting schools: interest 4, relevance 4, quality of material 5 and style of delivery 5 (5 = very good 1 = Poor). The most significant improvement indicated by student feedback over 3 years was an increase from 72% to 82% of students who said they set targets based on feedback given by their teachers. As the assessment and feedback increased, teaching within the department also improved - in 2012 the quality of teaching was 1.9 (1 = Outstanding. 2 = Good), in 2014 it was rated as 1.4.

Reflections: Students are more aware of their learning and how to move forward. Not every student is as articulate at describing this, but they all get the opportunity to reflect, formulate and discuss their own progress.



there was significant progress with 100% of students questioned able to comment on the level they were at and where they should be

Improving Science provision at Key Stages 1 & 2 by developing extensive outreach activities



King Edward VI Five Ways School, Birmingham An 11-18 selective coeducational academy converter

Aim: To develop a range of science activities for primary school pupils and provide training opportunities for primary school teachers.

Background: KEFW School has Science specialist status and an intake from over 50 primary schools. However, some of the very able primary pupils in Birmingham did not consider a grammar school as an option. The KEFW intake of Pupil Premium funded (PP) pupils was 6% and a challenging new target intake was set at 20% PP.

Method:

The Science department developed a programme of outreach activities with 5 local primary schools with events such as Science Week; 500 primary school pupils and their teachers attended 18 different science-based sessions including rocket building, liquid nitrogen demonstrations and microscope workshops.

Phiz lab (previously the Physics Factory), part funded by the Ogden Trust and KEFW, developed into one of the major school-based outreach centres nationally. Outreach sessions were delivered in primary schools and at KEFW for pupils on topics such as space, sound, light and forces. A Potions Day was organised as well as presentations for pupils and staff on topics such as the Magic of Science and the solar system.

The Pupil Leadership Group, which involved over 70 Sixth Form students, delivered an extensive range of activities each year in Saturday masterclasses and summer activity weeks. After-school science clubs were introduced in a number of primary schools.

The annual Festival of Science for KEFW pupils and visiting primary schools included a Rocket Day, a Year 7 Science Fair and 20 bookable activities. Visiting speakers included Alice Roberts giving her presentation on 'The incredible unlikeliness of being' and 'Space - so what?' by Anu Ojha, Director of the National Space Academy.

Evidence: Staff and pupil feedback.

Impact: Over 7,000 pupils and 300 staff from over 100 schools attended science-based sessions in the final year of the project, and feedback was very positive. 96% of pupils found the sessions very enjoyable and 100% enjoyable; 100% said they had learnt something new. 100% of staff said they had done more practical work than they would normally do and 97% thought the sessions were more challenging than their normal lessons. The ambitious target of 20% PP for September 2015 was met and received national recognition from the Sutton Trust and *The Times* and *The Guardian* newspapers.

Reflections: This has been a very positive experience for me, as Head of Department when I started the project, and in my new role as Assistant Head with responsibility for widening accessibility. Whilst Science was always the focus for the outreach that I developed, as the team of people involved increased, the scope of the projects also increased. The enthusiasm and enjoyment from all involved has been a delight to see; people willing to give up their own free time for the benefit of others and to share the love of a subject.

as the team

Bridging the gap between GCSE and A Level Sciences

The Crypt School, Gloucester

An 11-18 boys' grammar school with a coeducational Sixth Form

Aim: To increase the number of students studying A2 Science subjects and also to increase the number of students applying for Science courses at university.

Background: Some students had found it difficult to move from GCSE to AS study and there was a significant drop-out rate between AS and A2 Science courses.

Method:

Year 1: Initially support sessions were offered to students who had not performed well on the first AS unit test. However, this support was then extended to all AS students and the take-up for these sessions was very high. GCSE students were also stretched and challenged more to provide the springboard needed to progress successfully to A Level studies.

Year 2: It was decided to hold a summer school for Year 11 pupils to allow students to experience some lessons in all of the subjects that they had chosen for Sixth Form study. This helped students to confirm that they had made the correct choice of A Levels and to prepare them for the year ahead. Summer work was also published on the school's website for those students who were unable to attend the summer school.

Year 3: The final year of the project saw a whole-school support programme at GCSE and at A Level. This was deemed even more necessary by the fact that GCSE examinations are now terminal assessments, carried out at the end of Year 11. The support sessions were put in from January and were also put into the exam period itself to offer pupils a top up. The summer school continued into its third year.

Evidence: Student feedback, exam results.

Impact: Assessment of the impact of the project focused on Biology:

Year	Number of A2 Biology students
2008/9	15
2009/10	16
2010/11	21
20011/12	20
2012/13	33
2013/14	32

The number of students going on to study Biology-related subjects at University also increased in the last year a number of students went to Oxford and Cambridge to study. A direct impact was also seen in the AS results achieved by the department which in the last year of the project were some of the best the department has had.

Reflections: We need to make sure that students are getting excellent careers advice and support in choosing their A Level subjects. We intend to encourage former students to come back into school to inspire the next generation.



A direct impact was also seen in the AS results achieved by the department

Engaging students in enquiry-based team projects (CREST awards) to inspire a love of science



Altrincham Girls' Grammar School, Manchester An 11-18 girls' grammar school.

Aim: To encourage teams of students from Years 10-12 to think about the problems of the future by engaging in enquiry-based learning around science and sustainability. To engender a greater awareness of the careers available in science and technology, and develop communication skills.

Background: AGGS was a part of the Schools Universities Partnership Initiative (SUPI) project organised through Research Councils UK, and played a lead role working with the University of Manchester. Many students in the Sixth Form were taking Sciences, but their career aspirations were frequently within medicine.

Method:

The projects went well

beyond

classroom

teaching and

ignited a real

passion for science

Year 1: A Science and Sustainability project (2011-12) was run before the SUPI project was set up and was used as a case study for school-researcher links.

Year 2: The SUPI project started and a researcher from the University of Manchester spoke to Year 9 pupils about flight. The project was introduced to students in Y9 and Y10 via assemblies, an introductory letter was issued to their parents and initial applications were received.

Year 3: The project was introduced to Year 12 via assemblies and teams assigned. A project launch lecture for students and parents was held in mid-September, addressed by Professor Roger Ford from the University of Salford on the subject of water. Launch afternoons were held for teams with activities on team building, success and research skills. Approximately 120 students joined the project initially, and a teacher mentor was assigned to each of the teams, which met weekly. Students selected three topics for their first investigation and were invited to produce posters outlining the problems and environmental challenges posed; these were judged for the CREST Silver Award. These projects were also presented to parents at a celebration evening. A SUPI Science and Sustainability event was held at the University of Manchester with a lecture by Professor Ian Cotton. Two other schools also took part and students displayed their posters to visiting researchers.

70 students continued with the CREST Gold award which was managed by the Greater Manchester STEM Centre.

Evidence: CREST reports; feedback from staff, students judges and parents; Year 10 surveys.

Impact: The projects went well beyond classroom teaching and ignited a real passion for science; over 50% felt much more knowledgeable about science and pupils became confident in answering probing unscripted questions in depth. The Year 10 survey showed that over 50% felt their skills and confidence had improved significantly. Over 75% had enjoyed working with older students and over 75% commented that the project had prompted them to read more widely.

Reflections: Ensure the students that sign up for projects such as these are not over-committing – we circulated lists of participants to teachers and allowed them to comment. Several girls who were struggling with their GCSE coursework were discouraged from participating at their teachers' request.

For the full report visit www.princes-ti.org.uk/staffroom

Using new forms of ICT to enhance teaching and learning in Science

Harrogate Grammar School, North Yorkshire An 11-18 coeducational comprehensive school.

Aim: To investigate the use of iPads to enhance teaching and learning in Science.

Background: HGS decided to launch a 1:1 scheme for iPads in summer 2012. In 2014, Biology, Chemistry and Physics had their highest ever numbers of Sixth Form students with a significant number of students choosing to study Sciences or Science-related subjects at university.

Method:

Year 1: Uses for the iPad in lessons ranged from sharing resources electronically with students via Showbie, making animations of scientific processes, taking photographs of practical procedures, making presentations to explain a scientific process and using the internet to research ideas. Apps like Socrative were used to help with assessment for learning (AFL) as they allowed staff to pose questions to the whole class to gauge understanding. Students were surveyed about their use of the iTunesU revision courses.

Year 2: A new Virtual Learning Environment (VLE) called Firefly was introduced in summer 2013. This was used to share PowerPoints and worksheets with Sixth Form students and to link to useful videos and other resources on the internet. User statistics from the site made it clear that students were accessing these resources to support their learning in Science. Resources for new Year 7 schemes of work were also added.

Year 3: Staff set up shared accounts with classes using the Brainscape flashcard app to build a bank of revision cards written by the students. The app allowed the teacher to monitor progress and usage, and the feedback from students was very positive. Data logging equipment was updated to allow existing and additional sensors to be utilised with the iPad. Kahoot also proved to be a popular revision and AFL tool as it introduced a competitive element between students and allowed teachers to check progress easily.

New AS Level courses were developed based around the resources available via Kerboodle.

Evidence: Student surveys, VLE user statistics, exam results.

Impact: The feedback on the iTunesU revision courses was very positive. Statistics from the school iTunesU administrator showed that there were over 400 downloads in the 6 weeks before exams in May 2015 for all three courses. The real strengths of the iPad scheme were particularly evident when students were revising. Showbie was used predominantly to share resources with students which meant that photocopying bills were cut considerably.

Results in 2014, particularly for AS students, were some of the best ever by the faculty.

Reflections: It is very difficult to measure the specific impact of the introduction of iPads because student cohorts vary so much year on year, and many other factors affect results. However, in the last three years the iPad has become an integral part of teaching and learning in the Science faculty (and across the school).

The Harrogate Grammar School website has some information for schools who wish to set up 1:1 iPad schemes: http://www.harrogategrammar.co.uk/school/ipads-for-learning/



The real

strengths of the iPad

scheme were particularly

evident when

students were

revising

Improving student confidence and curiosity in Science



Oakwood Park Grammar School, Kent

An 11-18 selective boys' grammar school with a coeducational Sixth Form

Aim: To improve pupil engagement in Science and increase the uptake of Science A Level subjects.

Background: Students at OPGS were achieving good results in their GCSEs, however uptake at A Level was not as high as it should have been, particularly in Chemistry. Student surveys showed that Key Stage 4 students were bored with content-driven lessons and the lack of practical work. Teaching was graded as at least Good across the department, but there was little integration between Biology, Chemistry and Physics.

Method:

Year 1: A Level students held mentoring sessions with A/B borderline students in Year 11 in order to raise attainment. Heads of subject completed regular learning walks, giving feedback and suggesting areas for improvement. Teachers became more welcoming of lesson observations and the department started to share good practice.

Year 2: In 2013 OPGS moved from Edexcel GCSE to Cambridge IGCSE. Although the course was more challenging, it was felt it prepared the students better for AS Level Science. At Key Stage 3 a new project-based programme of study was created. This new programme focused on skills (practical, literacy and numeracy), rather than being content driven, allowing students to become confident and resilient young scientists who had a love of learning and a thirst for knowledge. An exciting timetable of enrichment activities was also designed, allowing students to experience many aspects of science outside the classroom.

Year 3: Year 9-10 high achieving students were given extension activities allowing them to work beyond the Key Stage 4 curriculum. Homework menus were created and files are kept by each student, allowing teachers to review progress of independent learning throughout the year.

A weekly Key Stage 3 Science Club was held allowing students to take part in regular competitions. Enrichment days, activities and trips were extremely successful with all members of the department becoming involved. The Science department completed an action research project 'Improving Year 11 engagement' and trialled several new active learning strategies.

Evidence: Learning walks, work scrutiny, student progress tracking.

Impact: Progress across Key Stage 3 was at least Good for all students. Year 10 progress was at least Good for most students and intervention strategies were put in place for 'at risk' and 'marginal gains' students. Year 11 student surveys showed that active learning had a positive impact and predictions for 2015 GCSE results were extremely encouraging.

Reflections: There is still work to be done to improve the uptake of Sciences at A Level and we will be continuing to encourage our high achieving students to extend their knowledge through independent projects set on a regular basis.

Teaching and learning have been transformed across the Science department. Teachers from Biology, Chemistry and Physics work together on department initiatives. Key Stage 3 has been an overwhelming success and there is a 'buzz' in the department when Year 7 and Year 8 lessons are being taught.

student surveys showed that active learning had a positive impact

Encouraging extra-curricular Physics

The Thomas Hardye School, Dorset

A 13-18 coeducational comprehensive school

Aim: To encourage further participation in Physics outside lessons to give students the skills to enable them to participate in future advances in STEM related projects.

Background: In 2015 the school was judged to be Outstanding by Ofsted. It is exceptional in that it has a large number (approx. 9) of Physics teachers. About 120 students study AS Level Physics, but they tended to be restricted to learning exactly what was on the exam specification.

Method:

Year 1: An essay competition was introduced at the end of Year 12 to encourage students to engage with physics concepts which were not necessarily part of the curriculum. This required students to develop their research skills, take more responsibility for independent learning and present their information in a professional fashion, including Harvard referencing. All of the department's Physics teachers were involved in producing the list of essay titles and shared in essay assessment. Prizes were awarded for the winning essays, which were judged by Professor Hugh Griffiths from UCL.

Year 2: The Biology and Chemistry departments introduced similar non-curriculum based projects such as posters, investigations and presentations. In addition to the end of year activity, Physics and Biology teachers offered a number of their lessons in a lecture format. This involved a Science teacher delivering a lecture to between 80 and 130 students. There were also talks and presentations from guest speakers.

Year 3: The main focus for this year was sharing the good practice available to students at The Thomas Hardye School with neighbouring schools. This was facilitated by introducing Trevor Plant, Teaching and Learning Coach for the Stimulating Physics Network. This involved three events at The Thomas Hardye School: 'Changes to the KS3 Physics curriculum', 'Physics starters to promote thinking' and 'A Level Physics from September: The endorsed practicals'. These sessions were very popular and included teachers from several Dorset schools.

Evidence: Participant feedback, exam results, university applications.

Impact: Over the project there was a slight increase in the number of students attaining grade A* in Physics and this is expected to improve even more. The number of students studying Physics at university increased from 3 in 2012 to an expected 15 in 2015. Teachers travelled reasonable distances to attend the supportive events and all the feedback provided was positive.

Reflections: Students can become very passionate about a subject when they are not constrained by the limits set by the specification. They have developed the skills necessary to conduct research that is typically reserved for undergraduate students. The main challenge posed by this project, inevitably, is time constraints. This is particularly relevant in a rural area where travelling implications are involved. The Institute of Physics provides excellent online support for delivering A Level Physics - http:// tap.iop.org/



The number of students studying Physics at university increased from 3 in 2012 to an expected 15 in 2015

Index

All Saints Catholic School, Dagenham, p.63 Evaluating the impact of an extracurricular History society Altrincham Girls' Grammar School, Manchester, p.74 Engaging students in enquiry-based team projects (CREST awards) to inspire a love of science Ark Academy, London, p.30 Lesson Study: Improving the quality of Teaching and Learning through observation and sharing good practice Bexley Grammar School, Bexley, p.41 Increasing English uptake through extracurricular provision Bury St Edmunds County Upper School, Suffolk, p.62 Embedding ICT into learning Caistor Yarborough Academy, Lincolnshire, p.29 Improving outcomes in Humanities and Languages by accelerated professional development Charlton School, Shropshire, p.55 The impact and effectiveness of a subject-specific website Chelmsford County High School for Girls, Essex, p.21 To what extent is the School's 'Learner Profile' an integral part of the School's curriculum and extracurricular opportunities? Christleton High School, Chester, p.27 Developing and testing a better way of assuring the quality of lessons and learning - the 'Apple' lesson Davenant Foundation School, Loughton, Essex, p.25 Enriching Languages and Humanities lessons at Key Stage 3 Devonport High School for Boys, Devon, p.59 The challenges of developing regional subject links Durham Johnston Comprehensive School, Durham, p.22 Encouraging teachers to further their academic subject-based knowledge Eastbury Comprehensive School, Essex, p.16 Recognising and rewarding talent in order to improve staff recruitment and retention Gordon's School, Surrey, p.17, p.68 Reducing in-school variations across subject departments Improving mathematical skills across and beyond the curriculum Gumley House School, Hounslow, p.48 Sharing best practice at A Level Harrogate Grammar School, North Yorkshire, p.75 Using new forms of ICT to enhance teaching and learning in Science Havbridge High School and Sixth Form, Worcestershire, p.64 Is History bunk? Student perceptions of History in Key Stage 3 Hinchingbrooke School, Cambridgeshire, p.20, p.54 Sharpening accountabilities through leadership development Transition History causation project Holland Park School, London, p.40, p.53 Enthusiasm and progress in Key Stage 3 English Personalising history: How is history connected to me? Ivvbridge Community College, Devon, p.31 Reducing in-school variation between subject departments King Edward VI Five Ways School, Birmingham, p.51, p.72 Developing a centre for excellence in Geospatial learning Improving Science provision at Key Stages 1 & 2 by developing extensive outreach activities Maidstone Grammar School for Girls, Kent, p.47 Can reading for pleasure help to create better scholars? Marsden Heights Community College, Lancashire, p.26 Using self-evaluation to drive improvement and planning and enhance professionalism Mounts Bay Academy, Cornwall, p.45, p.67 Using iPads to impact teaching and measure pupil progress Investigating the effect of flipped learning and other video learning strategies on mathematical understanding Oakwood Park Grammar School, Kent, p.35, p.56, p.76 Empowering Subject Leaders to provide inspirational teaching and learning in their subject Using enrichment activities to raise the profile of History Improving student confidence and curiosity in Science Passmores Academy, Essex, p.49 How can we make poetry more engaging and relevant in the curriculum?

Pimlico Academy, London, p.69 Improving pupils' confidence in Mathematics by using more IT-based resources Queen Elizabeth's School, Barnet, p.50 Challenging and developing perceptions of key global issues Rainham Mark Grammar School, Kent, p.23 Empowering subject leaders to transform school-based professional development Robert Clack School, Dagenham, p.38, p.65 How can we best support our A Level English Literature students through transitions? Providing pupils with an understanding of how the wider world landscape and its themes relate to their locality Saint George's C of E School, Kent, p.39 Developing opportunities for oracy to increase student confidence and improve written and verbal expression Sale Grammar School, Cheshire, p.33 Providing extra challenge and depth at GCSE by developing an enrichment curriculum Stewards Academy, Essex, p.52 Promoting greater pupil independence and improving marks in controlled assessments St Angela's Ursuline School, London, p.66 Extending students beyond the Mathematics curriculum Tendring Technology College, Essex, p.18, p.61 Transition Pathway: Changing the curriculum to improve the progress of Year 7 pupils Raising expectations and broadening horizons post-16 The Crypt School, Gloucester, p.57, p.73 Using language for learning effectively within the History curriculum Bridging the gap between GCSE and A Level Sciences The Heathland School, Hounslow, p.46 To what extent does extracurricular provision improve the retention, challenge and enjoyment of KS5 students? The Henrietta Barnett School, Barnet, p.44 Ensuring greater uptake through challenge and variety The John Warner School, Hertfordshire, p.32 Developing an outstanding lesson observation and faculty review programme to deliver outstanding learning The Sweyne Park School, Essex, p.58 Embedding enquiry skills at Key Stage 3-5 The Thomas Hardye School, Dorset, p.77 Encouraging extra-curricular Physics The Wycombe Grange Pupil Referral Unit (PRU), Buckinghamshire, p.70 Using CREST awards to enrich Science teaching Westcliff High School for Boys, Essex, p.34 Redesigning the Key Stage 3 curriculum around a school Learner Profile Westcliff High School for Girls, Essex, p.43, p.60 Inspiring pupils to read widely and independently to improve literacy Enthusing non-natural historians in a high achieving school William Farr C.E. Comprehensive School, Lincolnshire, p.24, p.42, p.71 Developing a coherent cycle of continuous professional development linked to performance management Inspiring boys in creative writing Developing effective feedback within Science teaching Writhlington School, Somerset, p.19 Developing Assessment for Learning (AfL) to improve literacy Ysgol Rhiwabon, Wrexham, Wales, p.28 Developing subject-centred leadership to improve teaching quality and raise standards

Acknowledgements

This Yearbook was produced by The Prince's Teaching Institute with the help of Barbara Pomeroy, James Sabben-Clare, Angela Clark, Alice Arkwright and Amy Baxter. Design by Angela Clark and Robina Newman; photographs copyright Ben Ealovega, North London Collegiate School, Royal Collection Trust / Her Majesty Queen Elizabeth II 2015 (Dr David Starkey), Maymana Arefin (Geography fieldwork), Jarek Tuszynski (weathering), Nedim Chaabene (Cuba) and Heinrich Klaffs (Jazz workshop).



www.princes-ti.org.uk

Tel: 020 3174 3106 Fax: 020 7824 8370 info@princes-ti.org.uk

The PTI is constituted as a registered charity (1116224) and a company limited by guarantee (5910443) The Prince's Teaching Institute, 40 Grosvenor Gardens, London SW1W 0EB



