raising your game
Using the sport specialism to raise achievement in English, Mathematics and Science
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Thank you to the following for their contribution:

Mini-spotlight
Aireville School, Specialist Sports College
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Cavendish School
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Coseley School
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Henry Cort Community College
High Ridge School Specialist Sports College
Holgate School
Houghton Kepier Sports College
Kirkby Stephen Grammar School Sports College
Ladybridge School
Mounts Bay School and Community Sports College
Rising Brook High School
Saints Peter and Paul Catholic College
St James Catholic High School
Tibshelf Community School
Wisewood School and Community Sports College

Case studies
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Buckingham School
Corpus Christi Catholic Sports College
Leon School and Sports College
Park House School and Sports College
Thornleigh Salesian College
Toynbee Community Sports College

Special thank you
Sue Kearney, Consultant

Author
Annette Montague, Head of Specialism Impact, Youth Sport Trust
For the last ten years, Sports Colleges across the country have been working individually and collaboratively, through the Youth Sport Trust, to develop and raise the sporting, academic and personal achievements of our students. At the heart of what we try to do is the core belief that developing the sporting opportunities available to our young people, and raising their sporting skills, can improve their sense of wellbeing, self-esteem, leadership qualities and, vitally, their academic outcomes.

We continue to meet each new challenge given to us and to constantly raise the bar in trying to achieve more. Given the greater range of initiatives and projects we contribute to, particularly in supporting and promoting young peoples’ health and wellbeing, it is important that we do not lose our focus on developing our pedagogy and maintaining a sharp focus on raising academic outcomes for every student.

This publication highlights some of the innovative and creative work going on in sports colleges across the country to develop pedagogy, to further improve teaching and learning in PE, and to develop and strengthen the impact of the specialism in the core subjects and across the curriculum.

Some of the work described is highly innovative, other work takes ideas and approaches that many colleges may already use, but adds a new creative twist and takes it to another level that will heighten its impact. All of it makes really interesting reading and offers ideas and experiences that are accessible and can be readily taken into all our colleges.

What characterises these schools and the work they have described is a determination to constantly improve teaching and learning and to ensure that they do not miss any opportunity to do so. They are excited about what they are achieving and are generously wanting to collaborate and share their valuable experience with us all. The work described is not over complex, rather it has a feeling of ‘we could try that’. I hope we will. It is be an important contribution to helping Sports Colleges to continue to personalise the students learning experience.

Thanks to all of the contributing Sports Colleges for your commitment to this work and for taking the time to write it up and share it with us, with the valuable support of the Youth Sport Trust.

Vanessa Wiseman
Headteacher, Langdon School
and Youth Sport Trust Director
The Specialist Schools Programme is an initiative launched by the Government in 1993 designed to support schools increase the provision, take-up and learning in specialist subjects and to use this specialism to raise whole school standards. In September 2006 more than 80% of maintained secondary schools had achieved specialist school designation.

The first Sports Colleges were designated in 1997. These schools are expected to raise standards of achievement in physical education (PE) and sport, use this to drive up whole school standards and to be a regional focal point for promoting excellence in PE and community sport. In order to retain their specialist school status, Sports Colleges must have evidence that their specialist subjects are strong and that the sports specialism is impacting across the school and raising achievement.

In 2005 the Youth Sport Trust recognised that how Sports Colleges used their specialism to raise achievement in the core subjects of English, Mathematics and Science was going to be a critical factor in whole school improvement and re-designation as a specialist school. In November 2005 a programme was launched to celebrate and share effective existing work and to support those wanting to develop practice in this area.

There are many reasons for focusing whole school improvement initiatives on core subjects. The skills, knowledge and qualifications that core subjects develop are important to young people and, in addition to building important life skills, core subject qualifications are highly valued by employers, and higher and further education institutions. Improving the performance of core subjects in a school can therefore directly benefit the life chances of young people.

Schools also recognise that, as core subjects are studied by the majority of young people, the performance of these subjects makes a large contribution to overall school standards. Improving one core subject area is likely to have a greater effect on the ethos and achievement across the whole school than other subject areas.

Further incentives to ensure that standards in core subjects are as high as possible come from external agencies. The examination results of English, Maths and Science are included in school performance indicators that are a matter of public record. These indicators are used in the external monitoring of a school, for example by the Office for Standards in Education (Ofsted), and to make judgements about a school’s suitability for inclusion in other national initiatives, such as the High Performing Specialist Schools Programme.

This publication reflects some of the work of the core subjects programme and the lessons that have been learnt by the Youth Sport Trust and the participating schools. It is designed to complement other resources, events and networking opportunities. The schools showcased are from a wide range of regional, academic and social contexts and all are Sports Colleges or Academies with a focus on Sport. Some have been carrying out work in this area for many years and some have only just begun their journey of using the specialism across other subjects.

Researchers and educators have long held the view that good PE experiences and associated motor learning in children have positive effects on cognitive development and classroom or academic performance (Institute of Youth Sport, PE, cognitive development and academic performance, 2001, p1). The aim of the Youth Sport Trust core subjects programme is to understand what aspects of high quality PE and sport enable young people to achieve and how these can be transferred into core subjects.

The core subjects programme highlights that if sport and PE is of a high quality in a school, there are a number of ways it can be used to raise achievement in other subjects, including the core subjects. These include:

- using the motivational and relevant contexts of sport
- using the positive personal values of sport to raise achievement
- building on and benefiting from generic skills developed in PE and sport
- building on successful pedagogical approaches used in PE.

The publication looks at how schools have used strategies from each of these overlapping themes, combining short spotlights on interesting projects with detailed case studies that include thorough evaluation of the impact of the work. The aim is to provide ideas, encouragement and motivation to effectively develop similar work in any school.

We hope that it provides food for thought and, for schools or academies with a sports specialism, offers ideas and strategies that, if implemented, will enable you to answer the question:

**How has the specialism impacted on core subjects?**
Using the motivational and relevant context of sport
1

Context

A popular way for schools to approach the issue of using the specialism to have a whole school effect is by encouraging departments to incorporate the context of sport into lessons or topics.

It is generally accepted that teaching ideas and topics in real life and motivational contexts can improve student engagement and learning. Sporting contexts are familiar and interesting to many young people and can be brought into the teaching of concepts in many other subjects.

Key:
- E work focussing on English
- M work focussing on Mathematics
- Sc work focussing on Science

Science departments are

Using sport contexts in a variety of topic areas to increase interest and engagement and to make concepts less abstract, for example:
- forces and movement in physics
- materials and drug testing in chemistry
- anatomy and physiology in biology.

St James Catholic High School is using the context of sport to support learning in science. Students were filmed in PE lessons participating in sports such as trampolining and swimming. This was done with a science teacher present to ensure appropriate material was obtained that would emphasise relevant concepts. The film clips were incorporated into lessons in ‘forces’ topic areas.

The students really enjoyed seeing themselves on interactive whiteboards and teachers felt that this led to a much higher level of engagement and achievement.

Mathematics departments are

Using sports facilities, pitches and spaces to develop geometry skills.

Many schools are encouraging their students to physically investigate sporting areas of the school. This can be used to develop skills such as measuring, calculating perimeters and circumferences, drawing to scale and calculating proportions (including ratios and fractions).

Carisbrooke High School incorporated a maths aspect to a residential outdoor activities trip.

GCSE C/D borderline students were invited to take part in an activity weekend which would link maths and PE through various challenge-based activities. The maths activities were chosen to link to physical activities and the facilities of the site, using key skills and concepts that are important to achieve grade C and above at GCSE level. The maths covered included bearings and scale drawings, speed, distance and time graphs, trigonometry and data handling skills.

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Henry Cort Community College used video analysis software normally used in PE lessons to support the work they were doing in maths around the interpretation of distance/time graphs.

The software was used to capture and analyse attempts made by the students in the group at taking basketball shots. The curriculum leader for maths stated that delivering the graph interpretation skills work in a relevant context meant that motivation levels increased dramatically in the students and their associated discursive work revealed a higher level of understanding than groups tend to show after using a more ‘traditional’ approach. He also claimed to have enjoyed delivering the section of work far more than usual!
English departments are increasing the use of sport-related non-fiction books, for example biographies of sports personalities and books that describe how to increase performance in specific sports. Some schools are working in partnership with local libraries in order to achieve this and have set up reward systems to encourage students to read and prepare reviews. The reviews can be web-based audio or video clips instead of a written report. A number of schools describe this as being a particularly successful way of encouraging boys to read more.

Books are not the only media form used by schools in this way. Some schools are deliberately increasing the use of sport-themed magazines or studying how sport is reported in national and local papers.

Derby Moor Community Sports School used a sports-themed film to produce some non-fiction writing in preparation for Key Stage 3 examinations in English.

The school has a number of local links that it used to arrange for the whole of Year 9 to attend a local cinema and watch the film ‘Goal’. The students experienced a number of activities back at school around the film, including producing a film review. ‘Film education’ provided the school with an interactive CD based on the film and this was used by students to create a poster campaign.

The school reported a higher level of engagement and motivation in the students, particularly the boys, and teachers enjoyed presenting work in a different teaching style with new stimulus materials.

Using sporting experiences matches to provide a stimulus for creative writing or for developing skills in writing for a particular audience at a much earlier stage than is usual. This type of work has been so successful in some schools that media-specific skill development, for example commentary and reporting, is now introduced at a much earlier stage.

Cavendish School designed a sports commentary module to use sport as a tool to promote English literature and language in a more enjoyable way. Students chose a sporting clip from a selection and a role from match commentator, newspaper reporter or post match pundit. They developed and practised their work, then reported ‘live’ to the rest of the class or presented their prepared text.

Tibshelf Community School developed a ‘Living Literacy’ project to develop literacy skills in Year 9 students.

All Year 9 students had a day visit to an outdoor activity centre where they tried rock climbing, archery and canoeing and developed their ‘forest skills’. All students were engaged in some type of writing activity after the trip but 60 students were particularly targeted from the cohort to use this experience to improve their self-esteem and confidence in writing.

These students worked with a performance poet over a period of a few lessons and produced a range of work that included poems that used the outdoor activity as a stimulus. The poems were displayed around the school and read out at a special assembly.

Questionnaires revealed that 87% of students stated they felt more positive about the way they wrote after the project and 87% stated that they felt more positive about themselves and their sense of worth. One teacher commented ‘this has taken poetry in this school to a new level’.

Using young people’s knowledge or performance in sport as a basis for developing and assessing speaking and listening skills.

Schools that proactively try to find a context that each young person can speak passionately and knowledgeably about find that they perform higher in assessments. Sport is such a context for many young people.

Chasetown High School is using PE teachers to improve the speaking skill assessment scores in English of a targeted group of boys.

The English staff identified a number of boys whose speaking skill assessments were lower than expected. They felt that assessing these skills when they were discussing sporting issues would demonstrate a more accurate score of their true speaking ability. A member of the PE staff was used to lead the sessions as the English staff were not confident that they had the depth of knowledge on the chosen topic to make the experience credible for the students. The PE teacher attended a number of liaison sessions to ensure he was familiar with the required assessment criteria.
This is a relatively straightforward way to make a difference to the experience of young people in core subject study. Individual subject teachers, particularly those with a personal interest in sport, can come up with many ways of using the context of sport to illustrate examples or provide source material in current schemes of work. This requires low amounts of effort from the school because it can be achieved by core subject staff planning on their own, sometimes supported by a director of specialism or similar person. However, the projects are more effective if genuine joint planning and collaboration between departments has taken place.

The following examples have required some element of cross-department planning:

**Kirkby Stephen Grammar School Sports College** (above) developed cross-curricular work with maths and science around cricket.

A booklet of ‘extended study’ was produced for Year 7 maths and Year 8 science to improve learning in the subjects, to develop a culture of using questioning in PE and to improve the understanding of cricket. The booklet was completed in science and maths lessons and PE staff explicitly reinforced the knowledge and understanding by asking specific questions and delivering agreed plenary sessions during PE lessons.

Staff have been impressed with the effect this has had on the profile of cricket in the school and claim that the increase in engagement in core subjects is proved by a significant decrease in minor disruptive incidents reported in maths and science lessons.

**Archbishop Beck Catholic Sports College** developed a project around their school sports day.

The English, maths, science, PE and languages departments worked together to plan a number of activities based around the sports day. Although the final tasks were specific to each subject, because this was felt to be the most effective in raising attainment in the subjects, the joint planning meant that each department was aware of what was going on in other areas and could reinforce when appropriate. It also meant that tasks had the benefit of ideas from other departments at the initial planning stages.

In English, students interviewed staff and students about the build up to the day. Specific tasks relating to levels 6+ were integrated into the task. In science, students produced ‘mind maps’ showing all the science topics they had covered in the year and how they related to the day. In maths, students used data from the data to calculate a range of statistics and predict results for the following year.

The school achieved its best ever KS3 results in the year this was trialled. Although it is not possible to say that this project had an effect on this, staff felt strongly that it was an effective way of bringing revision of key topics alive just before the examinations. It has also resulted in a greater desire for the departments to collaborate in the future and plans are in place to do something similar around a swimming gala or football season.
Great Baddow High School (above) added an extra hour of maths for Year 7 students into their timetables every week for a year.

The scheme of work for this lesson is jointly planned, and sometimes jointly delivered, by staff from the maths and PE departments. For example, the maths teachers planned a lesson around collecting data from students doing physical activities outdoors and the PE teachers shared their skills and expertise in the relevant aspects of student management for this type of activity.

The impact of the programme on standards and achievement in maths is being regularly evaluated with the completion of assessed tasks each term. A group of students who represent each of the classes in the year group are an important part of the planning and review process. Their views are collected and they feed into interim evaluation strategies that record the progress of the programme. All students involved in the project complete attitudinal surveys and an external consultant monitors the evidence and advises on future developments.

At the end of the first term both staff and students are reporting a higher level of engagement in maths lessons by students.

Bebington High Sports College developed a mini project in English and maths that would be transferable to any major sporting event.

Teachers from the English and maths departments worked with the director of specialism to use the 2006 FIFA World Cup to engage Year 8 students. The pilot class designed shirts for an England v Brazil final and played in a six-a-side game that simulated this. The game was videoed and edited by students.

The edited game was then used by students to write commentary and produce match reports. These included statistics such as the number of passes made, shots on goal and average weight.

Teachers from both subjects reported a significantly higher level of engagement, particularly in the boys that played in the match. One boy with particularly low attainment produced exceptional work for him and contributed in both the maths and English lessons to an extent that had never been seen before.

The initial success of projects designed to incorporate sport contexts into other subjects, is often felt at the student level. Young people show greater engagement, motivation and enjoyment and therefore tend to achieve higher.

Longer term gains are often also made at the level of departments. The relationships and understanding that develop as a result of pilot projects can lead to less duplication of topics in the future and more explicit reinforcement of common concepts between curriculum areas. Implementing projects such as these almost always also leads to a sharing between departments of resources and teaching strategies.
Using the positive values of sport
If these qualities are present, young people are more likely to feel secure in taking risks and attempting work that is perceived as boring or difficult. It is often a fear of failure that stops young people, particularly at KS4, putting in the effort required to do tasks or understand challenging topics.

The overall personal development of students is a high priority for many Sports Colleges. Programmes of physical activity are often in place to achieve this as much as for any sporting or physical skill progression. Many Sports Colleges believe it is these personal characteristics that are the most important for lifelong achievement and success. This emphasis is clear in their vision and mission statements.

It is important that schools do not expect that participating in sporting activity achieves these aims and so will lead to improved school performance automatically. It is necessary to explicitly develop the values, and build on them in a measurable way, to be sure that the strategies are having this effect.

**Values**

Sport and PE can build personal attributes that are important for the holistic development of young people. These include:

- confidence
- ambition
- good behaviour
- health and wellbeing
- appreciation of ethics and fair play
- self-esteem
- high aspirations
- understanding and respect for rules
- good relationships with others
- ability to cope with winning and losing experiences.

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The Health, Wellbeing and Achievement Week was a resounding success. In one week we were able to achieve outcomes that we had found difficult to achieve in the previous couple of years, primarily due to the intensive nature of the week and the need for staff to work towards definite timeframes. In this respect, through whole group and individual meetings with subject leaders, I was given opportunities to challenge their thinking and to support them in considering ways to incorporate the specialism into the daily work of their teams.

As a direct consequence of the focus week, a number of subjects have re-evaluated aspects of their provision, e.g. the maths department are now only setting KS3 and KS4 coursework that is related to PE, sport and health. In essence, many staff are now clearer on the potential benefits of utilising the specialism in their work and they are more aware of the resources and support that are available to enable them to bring their ideas to fruition. I think the launch pad has been established!

Director of Specialism
Sometimes **additional interventions** are necessary to reinforce messages.

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**Aireville School, Specialist Sports College**

ran a two-day ‘Higher Ambitions’ conference for Year 11 students.

The conference covered aspects of revision techniques and sports-related careers advice. It was designed to raise ambition and aspiration at an important time for the students. Each day was held at a different sport-related venue and external people were used, where appropriate and available, to give the days an extra ‘special’ feel.

The school had identified that there was a degree of apathy towards the examinations in the Year 11 cohort. Mock exams had revealed a high level of underachievement which was expected to continue into the summer. The conference showed the students that they were valued by the school. Staff felt that it led to a re-engagement with school for most of them and the building of very positive relationships between students and staff.

Year 11 attendance in the time prior to the conference was about 84%. Attendance throughout the conference period was 95% and the last few weeks of term were described as having ‘excellent behaviour and attendance’ by the year head.

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**Houghton Kepier Sports College** (right) organised a Health, Wellbeing and Achievement Week.

This comprised a programme of sport-related topics delivered in every subject area with a wrap-around set of activities (for example self defence classes, fun circuits, fitness training, mini-MOT tests and Expochef performances). The objective was to raise awareness about the links between health, wellbeing and achievement in order to aid transition into Year 10 and raise aspirations about this time in the student’s school career.

> The Health, Wellbeing and Achievement Week was a great success. The learners really enjoyed themselves whilst at the same time considered important issues such as how health and wellbeing can influence achievement in all aspects of day to day life. Many of the staff also found the week enjoyable and challenging and I am sure that they have seen some benefits from planning around this particular theme.

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In the student survey 71% believed that the week had given them increased confidence in their ability to do well at school.

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**Headteacher**

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*Values*
And it is not just through sport that the personal attributes can be built.

**High Ridge School Specialist Sports College** (above) identified that instilling self-belief and confidence in their Year 11 cohort was key to them achieving their potential in a difficult year.

Data indicated that the cohort approaching exams in 2006 could be expected to achieve about 38% 5+ A*- C GCSE grades. However internal predictions revealed that 13% was more likely and a number of key core (and other) staffing issues meant that the school was very anxious about the examination performance of the small cohort.

The school pulled out all the stops to make the young people feel special and able to achieve their best. Strategies included:

- PSHE lessons were focused on confidence building, dealing with anxieties, inter-personal skills and organisational skills
- A large mentoring programme was implemented using a wide range of adults
- A target and reward system was set up designed to result in regular success and praise
- Inclusion support staff focused on encouraging 100% attendance of the target group, acting promptly on any absence or lateness
- Coaching talks on revision, study and relaxation techniques were given
- Yoga classes were run
- Breakfast clubs were provided to ensure students had a good start to the day where teaching and support staff would feed the mind and boost morale, and catering staff would nourish the body
- Former students came to talk to students about their successes to encourage them
- ‘Dine and discuss’ evenings were held with parents to paint a picture of what 5+ A*- C success could translate to in later life and the ways in which they could support their specific child’s learning and achievement
- E-mail was used between students and staff for prompt responses to questions and issues around revision or exam practice
- Revision and study guides were purchased and students were encouraged and rewarded for using BBC Bitesize and SAM learning
- Saturday and after-school lessons were given and the school was kept open during the holidays and at weekends so that students could continue with supported independent study and have access to the school’s resources
- Students attended revision events organised by awarding bodies and the school arranged for regional chief examiners to work with students on site
- Study leave was abolished and booster activities and ‘top-up’ learning sessions were run.

And the result? Not 13%, not even 38%, but a resounding 43% 5+ A*- C GCSE grades!
In addition, some Sports Colleges are locking into positive sporting language to boost confidence and encourage young people to reach their potential in examinations. Some young people are comfortable challenging themselves in terms of physical or sporting performance but reluctant to do the same for their academic performance. Using more familiar terminology and sporting analogies can be seen as less threatening and therefore having a lower risk by some young people. This can result in these young people engaging more fully with efforts made to maximise performance such as target setting and monitoring progress.

“With the Olympics and your GCSEs in mind, I hope you will ‘Go for Gold’ and enjoy that feeling of success that medal winners get. In sport, only a few achieve medals but in GCSEs, everyone can be a winner if you follow the right advice and do your ‘personal best’ for the rest of the year.”

Headteacher
Skills
Building on generic skills developed in PE and sport
Sport and PE can develop skills that are relevant in other areas of the curriculum. These include:

- observation skills
- analytical skills
- evaluation skills
- leadership and teamwork skills
- communication skills
- emotional/interpersonal and intrapersonal intelligence
- motor skills.

Some of these skills are necessary for performance in other subjects. For example: working on the motor skills of some young people leads to an improvement in their handwriting which allows them to demonstrate more clearly their skills in other areas.

Other skills from the list are relevant in other subjects but often better developed in PE. It is not unusual for young people to regularly demonstrate high levels of leadership, communication skills and emotional intelligence in PE lessons but in very few other areas of the curriculum.

Explicitly developing and building on these skills in a wider range of circumstances at school means that young people understand and value their ability in these areas. It can mean that they become able to relate their use to other areas of the curriculum and to circumstances in real life, including in employment, where they are important. Also, allowing students to demonstrate skills developed in one subject in another can lead to a higher level of confidence in subjects that a young person may not have experienced much success in previously.

Many subject communities are currently trying to encourage the development and demonstration of an increasing range of skills and abilities in lessons. They are also trying to emphasise the links and overlaps between subject areas. The recent changes to KS4 science with its reduction in content and emphasis on developing and assessing a range of skills is a good example of this.

This section looks at how schools have developed some of these types of skills in a co-ordinated way across subjects and built on them to raise achievement.
Holgate School created a collaborative project with the overall aim of raising attainment in two subject areas by linking aspects of the course content of GCSE PE and GCSE English into one assessment.

The target group was 20 underachieving Year 10 boys. Within English lessons they were identified as having performed in a post-unatisfactory manner in drama-focused activity. Speaking and listening skills were also poor in comparison to other areas. In PE, a general lack of skill in analysis was evident and it was hard to monitor consistency of assessment at times due to a lack of written material. Many of the students were good performers, but were not comfortable with observing others and giving feedback.

The PE component of the project was intended to enhance the delivery of Skill Area D (Evidence of the Ability to Analyse and Improve their Own and Others’ Performance) while the English component would address the Drama Focused Activity for aspects of the Speaking and Listening Skill. These areas were chosen because each department felt they could use the skills and best practice of the other, thus creating a sense that they were equal partners in the process. The English department would help PE to develop a common vocabulary for analysis, an area they felt their students lacked confidence and skill in, and PE would provide stimulus materials created by students during PE lessons, which students consequently had ownership of, to create relevant, challenging and stimulating opportunities for students in both subjects.

In PE, students collected video evidence of specific skill performance and analysed these with the use of video analysis software in order to identify strengths, weaknesses and strategies for improvement. PE staff introduced and used a bank of analytical words and phrases jointly prepared and used in both components of the project. Students created a PowerPoint presentation for assessment evidence.

In English, students analysed examples of sports commentary, noting the key elements. They assumed the role of a TV anchor/commentator and applied the vocabulary that they were familiar with from PE to analyse footage of a football match taken in PE.

The teacher assessment for English Speaking and Listening showed better performance against peers who were not involved in the project. Staff also felt that it had raised standards of delivery of GCSE PE by encouraging them to try innovative ideas.
Using successful pedagogy from PE
It is clear that changing practice by this method can have a long term, sustainable effect on whole school achievement and provides a powerful motivator for schools to incorporate learning between departments, as well as within departments, as part of their continuing professional development systems.

Some of the pedagogies that characterise high quality teaching in PE lessons include:

• appropriate use of mentoring and coaching techniques
• high amount of group and team work opportunities
• high quality demonstrations
• high amount of practical learning opportunities
• high use of competitive situations
• high use of games-based activities for developing skills
• non-threatening use of target setting and monitoring progress.

All of these strategies are appropriate in classrooms of other subjects and are transferable into core subject teaching styles. Many of them are styles of working that are now being actively encouraged as there is an external pressure to make lessons more interesting and to reduce the traditional ‘chalk and talk’ approach. It is now generally accepted that individuals differ in the ways they prefer to learn. A vocabulary has developed around ‘learning styles’, although opinions vary about the definitive number of learning styles that may (or may not) exist and what schools and teachers should be doing about them. What most teachers agree on is that increasing the variety of activities and teaching approaches used in lessons is likely to maximise achievement for groups of young people.

This section looks at how schools have started the process of sharing good practice in PE departments to develop the use of different pedagogies in core subject courses, departments and across the whole school.

Increasing the range of teaching styles that are used by individuals is not an easy thing to do. This is long term change and should be seen as such. It should also be acknowledged that providing a different learning experience for students is not always as readily accepted and embraced as might be expected, even if it is a vastly improved one and seems to better fit their needs.

In addition to the general challenge of supporting teachers to try new approaches, there is a potential issue with PE departments being seen as leading these changes. The perceived differences in accountability and curriculum can be seen as being so great that core subject departments can feel that there is no relevant practice to learn from. Therefore, the way in which schools set up projects and systems to encourage the sharing of good practice between PE and core departments needs to be well managed.

Many, if not all, of the examples previously highlighted in this publication require some element of discussion between individuals or individual consideration about ways to best deliver aspects of projects. This usually results in a change in teaching approach during and after the projects, even if this was not initially intended. Very often, being involved in cross-curricular pilot projects develops better relationships which in turn leads to some level of informal sharing of practice and ideas. This should be acknowledged and embraced as an additional important element of any small scale project.
Wisewood School and Community Sports College developed a system of teaching and learning co-ordinators (TLCs), implemented to promote the sharing of good practice, enhance teaching and learning and improve KS3 and KS4 results. The post of TLC was open to all teaching staff and was associated with extra funding. Initially, five staff were appointed from the core subject areas, PE and geography. These TLCs worked together during a period of ‘training’, sharing successful pedagogies. They then distributed flyers explaining the scheme, asking for teachers to volunteer to work closely with a TLC to improve a particular area of their teaching. TLCs then met informally with staff who had volunteered to discuss what they wanted from the experience and how coaching was to be given. These staff formulated a mini-action plan which involved lesson observations and ongoing discussions.

The school believes that the scheme has been a great success. TLCs are described as being energetic, motivating and approachable; they are not seen as the best teachers in the school. In the first year, 24 staff were coached. They have shown even greater motivation to improve learning in their classrooms and achieving higher results since the experience.

Ladybridge School (above) identified that the whole school had a need to increase the number of lessons that used elements of kinaesthetic learning. Learning walks carried out by senior staff together with a learning style audit of students contributed to this view. The school held a staff training day, led by the PE department, where teachers directly experienced a variety of ways to approach the teaching of some GCSE PE concepts. This was a powerful way of showing the benefit of including kinaesthetic elements into lessons. Even a group of adults became difficult to motivate and manage when asked to learn something from a text book with no additional strategies and support! After the training day teachers were encouraged to develop their kinaesthetic teaching repertoire and try out new ideas. Successful examples were collected and shared in a central file.

Lesson observations now reveal a higher number of activities being used in lessons and students with higher engagement and improved achievement. Staff also feel more confident in using the strategies in lessons.
Saints Peter and Paul Catholic College used the principles of the Nike Girls in Sport project to encourage positive attitudes in maths.

Student views about maths were collected by a series of informal interviews and questionnaires across all Key Stages. The two main findings were that:

- each lesson was very much the same and there was a lot of learning from books
- the maths area was ‘not a nice area to be in’ due to a poor environment.

These were similar findings to those of the PE department at the start of the Nike project.

A group of 20 Year 10 students were chosen to be student consultants for the work and after a series of meetings with PE and maths staff two project areas emerged:

The learning environment of the department was enhanced by student consultants creating displays and murals. These were planned in conjunction with maths staff and painted at lunchtimes.

The **effect**: A significant reduction in damage report sheets in the maths area reporting incidents of graffiti and equipment damage. Teachers report that students seem to have more ownership and respect for the environment and a more positive attitude to learning.

Maths was taken ‘out and about’. To enrich student learning the consultants suggested using local areas to learn about maths so an advanced skills teacher in maths developed an orienteering course, with the help of the local authority ranger service, that incorporated maths questions. This activity was trialled by 48 Year 7 students.

The **effect**: Out of the 48 students, 45 stated that they enjoyed this type of learning and felt it helped their understanding in maths. Until the orienteering course, all of the students had said that they did not know how maths was relevant to their everyday life. Teachers involved in the activity report that they are more motivated to attempt ‘different’ approaches to teaching maths and this enthusiasm has led to a joint project with science.

Berry Hill School and Specialist Sports College incorporated core subjects assessments into the programme of study in the BTEC First Diploma in Sport.

Students at Berry Hill studying for BTEC Diplomas spend a minimum of ten days out of school on work-based projects. In the past, such students have struggled with achieving expected levels in other subjects, core subjects in particular. Completing coursework is a particular issue for them.

The school organised a set of activities, based on sporting activities, that could be completed during one week and would cover one module of GNVQ Science and the creative writing component of English GCSE. Rock climbing was used as the theme for the science investigation and paintball was the stimulus for the English work. It was necessary for a high level of cross-departmental collaboration to understand assessment criteria and the resulting sharing of ideas for delivery meant that the activities were presented in a very different way than they would have had they been in traditional classes.

All students involved completed all work set which was unusual for this group of students. In student surveys 95% stated that the practical nature of the science investigation helped them complete the work and 85% stated that they thought their work had improved through participating in the project. In English 100% of students stated that the practical experience helped them complete the work and 100% stated that they thought their work had improved through being part of the project.

One student had particularly excelled through adopting this approach. He was predicted a grade E in English, as this was the level of his coursework grades prior to the project. The work completed in the project was at a grade C standard.

Teachers report that students seem to have more ownership and respect for the environment and a more positive attitude to learning.
**Coseley School** (right) developed the use of video clips in lessons through setting up an online video database: Coseley TV.

The PE department had been using video clips of students to analyse and improve performance in some sports and dance for some time. Students enjoyed watching themselves and were able to analyse movement to a much higher level of complexity and accuracy through this method. As staff and students became familiar with the equipment, they started recording sporting events such as matches and other extra-curricular clubs. This edited footage was played around the school in areas such as corridors and the dining room. Staff noticed that the noise level in the dining room dropped and the corridors started to get blocked as young people watched themselves and their peers performing in sporting activities.

The students were so keen to see themselves on the screen they led the demand for other subjects to use the technology and benefit from the knock-on increased motivation, confidence and self-esteem. Other subjects started to use the technology, supported by the PE ICT technician and a bank of video clips showing students engaged and learning in a variety of subjects was developed.

The school then got involved with a commercial company, with backing from the DfES Innovations Unit, to design an internet site to hold all the clips which could then be easily searched for at any time. The resulting Coseley TV site can be used in school by teachers and accessed by students and parents from home. Comments can be made on the clips which is centrally filtered to ensure appropriate content.

Using video clips of students in lessons has increased students' self-confidence and led to their greater involvement in school. Using the system is simple and so has been embraced by some other subjects and has contributed to an increase in the range of teaching styles used. There is much anecdotal evidence of raised achievement when using video clips of actual students in starter or revision activities. Whole school achievement is improving year on year and both students and staff are convinced that Coseley TV has made a significant contribution to this.

The site is now being developed for use by feeder primary schools and other local partners such as the youth club and it is expected that this development will lead to an enhanced perception of the community towards the school and perceptions of the young people towards their community.

**Capital City Academy** developed a joint teaching approach in science and PE that linked concepts between the two subjects.

PE and science staff jointly planned an approach to bring more ‘science’ into PE and more ‘PE’ into science. A pilot group of students in top sets for both science and PE were identified to trial the lessons and assess the impact.

In PE, students were introduced to Newton’s Laws of Motion and given a range of equipment to investigate how throwing accuracy could be achieved. The science department used the same equipment to investigate how many variables there might be in achieving accuracy when a body travels through the air.

After the block of work PE staff reported hearing students speaking fluently about variables and being able to apply physics laws to their learning about movement. Science staff saw an increase in engagement with physics concepts, particularly in girls. All students raised their National Curriculum levels, mostly above what would have been expected in both subjects. Staff are convinced that this joint approach improved scientific understanding and performance in PE. They are keen to focus on how to build on the meta cognition aspects that were developed as a result of this work. Students have stated that they enjoyed the work, felt it contributed to their understanding in both curriculum subjects and have had their minds changed about how they learn in PE and science.

Schools with the greatest success in using this area of specialism-related school improvement occur when a number of critical factors are in place. There needs to be credibility and skill on the side of the PE department, and willingness and readiness on the side of the relevant core subject.

The best examples of impact are seen under the following conditions:
- High quality teaching and learning in PE department
- High level of ‘coaching’ skills in PE department
- Few, or no, recruitment issues in core subject department
- Core subject standards rising or at least stable
- Core subject staff willing to try new approaches
- Time allocated for joint planning and sharing practice
- Senior leadership prepared to take the risk of teachers trying something very different.
Case studies
This chapter describes seven examples where schools have implemented specialism-related strategies to raise achievement. The case studies are a ‘warts and all’ description of the work undertaken and its impact. You will notice that all examples use aspects from more than one of the earlier themes, both in terms of planned intent and actual outcome.

Aspects of each case study that relate to earlier chapters are identified by the following symbols:

- **C** Using the **context** of sport (as discussed in chapter one)
- **V** Using the positive **values** of sport (as discussed in chapter two)
- **S** Using the **skills** developed in physical education and sport (as discussed in chapter three)
- **P** Using successful **pedagogical** approaches from PE (as discussed in chapter four).
School context

- The prior attainment of Brierton students at KS2 is more or less at national average.
- Brierton students are drawn from some of the most deprived wards in the country, where adult higher educational experience and higher social class households are significantly lower than the national average. This is reflected in the low aspirations some of the parents have for their children’s education, especially post-16. The school is in the bottom quarter of most deprived schools.
- The number of students eligible for free school meals is well above the national average and is rising. This may partly be a result of the falling rolls in this school, which therefore picks up those students who do not achieve their first or second choices of school and also students excluded from elsewhere.
- The vast majority of students are white British, with tiny numbers of any other ethnic group and no asylum seekers or travellers. The mobility of students is lower than the average nationally.
- The school has an autistic unit of ten children who are fully integrated into school life, whilst provided with support and refuge when needed.

Project aims

- Staff wanted to:
  – improve the preparation of students for examinations
  – teach students how to prepare for examinations
  – share good practice of teaching exam preparation.
- The solution was a three-week intervention programme immediately before the SAT exams for all 224 students in Year 9.
- This solution was selected because the timetable could be collapsed and students could concentrate on just a few subjects, in a way that would be impractical at KS4.
- Departments would see the benefit of well researched and targeted intervention and apply the principles to KS4.
- Students would learn how to prepare for examinations before they started the KS4 courses and module examinations.

Details of the project

- Each day was structured as follows
  – Lesson 1: Sporting activity of students’ choice
  – Lesson 2: Healthy breakfast/celebration assembly
  – Lessons 3–6: One session in each of English, maths, science and ICT.
- A sporting activity each day was compulsory. Students requested the activities they wanted, including swimming, basketball, table tennis, football, trampolining, fitness suite and badminton.
- Lining up for the healthy breakfast was compulsory and the choices included a variety of cereals, toast and fruit juices.
- The celebration assembly took the form of a sports dinner: the children had breakfast cleared away and then certificates were given out. Assemblies were positive and aimed to give the students confidence that preparing for examinations is good.
- A team of eight experienced teachers ran the project, including two from each subject. Each subject also had an experienced teaching assistant in support.
- Students were grouped across all subjects related to the healthy lifestyle aspect of the project, e.g. five points for drinking water, ten points for eating some fruit. A target of 280 points resulted in the student participating in the end-of-year visit as a reward.
- The atmosphere is very focussed.
- Learning assistant

Building capacity and sustainability

- The intervention was started with students in Year 9 so that they know how to revise before they start their KS4 modules.
- Subjects that have been involved in KS3 intervention have applied the principles to KS4 and written programmes as they knew it would have impact.
- Teachers with different styles were teamed up so that they could share ideas, plan together and adopt a wider variety of teaching and learning styles.
- Intervention plans for students who are below target are now asked for on a termly basis.

Plans for future development

- Reminder intervention days before modular examinations will also now be held.
- A refresher course to show students just how much work they can and should do will be run, taking the form of a one-week residential for targeted Year 11 students to improve their English and maths grades.
- Certificates for good work were awarded in each lesson and presented during assemblies.

The pupils felt special.
Learning assistant
**Evidence from two teaching assistants**

One teaching assistant was attached to the lower ability group; one had specialist skill in science. Both had two years experience and were involved in the pilot project.

**Summary judgement**

**overwhelmingly positive**

**What they liked best:**
- the learning in the intervention lessons was more focussed on exam preparation than what they experience in normal timetabled lessons across the school
- the atmosphere was very focused
- the student booklets were very well written
- resources for each lesson were well planned and prepared
- they felt that the small space in the mobiles resulted in better concentration by the students
- the students responded because they felt 'special'
- many of the students 'ate a huge breakfast' and frequently drank water and ate the fruit during lessons.

**What they felt could be improved:**
- there were too many certificates awarded each day and they did not like having to sit through the presentations in the assemblies
- they were not sure that all students would have enjoyed/benefited from the sport every day although those interviewed had no complaints because they had been doing a sport of their choice.

**Evidence from Year 9 students**

**Summary judgement**

**very positive**

**What they liked best:**
- the 'relaxed atmosphere' and more 'trusting' approach of the teachers
- the work books that allowed them to work at their own pace and gave them more 'independence'
- there was far more concentration in these lessons than in some of their normal lessons as everyone was very clear about the importance
- the 'day went so fast!
- they liked being taught in ability groups
- they did not miss their lessons in other subjects nor did they think that three weeks was too long and they appreciated the need to focus on their SAT subjects
- they liked collecting the points each day.

**What they felt could be improved:**
- having sufficient ICT equipment to enable every student to have access to computers in all ICT sessions has helped with including ICT in the programme
- the focus of much of the teaching across all subjects was on language development and particularly on the comprehension of exam questions. This consistency of approach and reinforcement was significantly positive
- having a designated physical area recognised as the Year 9 intervention base for the three weeks created a 'protected' secure locality in the school, acting rather like a 'primary school yard'
- potential disruption for the rest of the school had forced a greater discipline on the collection and completion of coursework, programmes of study and assessment tasks in other years, particularly Years 10 and 11
- the importance of the intervention programme was being recognised across the school particularly by Year 10 who had benefited so much in the previous year, and in Year 8 where students were already beginning to talk about SATs.

**Staff admitted to a greater awareness of ‘healthy lifestyles’ and the impact on learning.**

The school received a letter from the DfES congratulating them for being among the top performing schools for sustained improvement in the aggregate of pupils achieving level 5+ in core subjects. The school believes this work was the major contributor to achieving this result.

**Evidence from teaching staff**

**Summary judgement**

**cautiously positive**

**What they felt worked well:**
- the funding from the Youth Sport Trust helped to provide more time to plan resulting in a better quality of student work and intervention programme (although all knew and were happy that they would need to do it next year without the time to plan)
- being able to group by ability across the four subjects resulted in a revision programme written specifically to meet student needs
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SATs results
• The school calculated the conversion percentages from each fine level at KS2 up to level 5+ and level 6+ for the mock SAT, just before the intervention began. Specific groups of students were highlighted as concerns from this data and whilst Brierton adopts the policy that every child should be given the opportunity to improve, departments focussed on addressing the weaker conversions.

• The same analysis was completed for the conversion rate from KS2 to KS3. It showed that there was a significant improvement in the conversion rates and very big improvements in areas that had been highlighted.

• In English the conversion from a level 4a up to a level 5 had been a serious concern. This statistic rose by a dramatic 30% and an additional 5% achieved a level 6. The percentage of students moving from a 5c up to a level 6 was also a concern and as a result of the intervention this more than doubled.

• In maths the conversion from a 4c up to a level 5 was a concern. At 46% this statistic increased dramatically to 79% and the conversion from 4c up to level 6 increased from 8% up to 22%.

• Science conversions from 5c up to both level 5 and level 6 were a concern after the SAT mock. After the SAT examination these conversions had risen from 50% at level 5 and 0% at level 6 up to 90% at level 5 and 47% at level 6.

KS4 results
• English, maths and science were running the intervention programme at KS3 for the second time. After seeing the positive results of the first KS3 intervention, these subjects ran their own workshops for KS4. As a result, for the first time ever, the core subjects have the top internal residuals at KS4 in the school.

What will be reviewed next time?
• The criteria for awarding certificates.
• The timing and objectives of the assembly.
• Some teachers reported that the three weeks is too intense and more demanding than a normal timetable. (The majority of staff across the school had a lighter timetable during the intervention programme).

• English staff felt that one-hour lessons were too short and would have preferred longer. This view was not supported by other subjects.
• There was a strain on ICT resources.
• The staff displaced from the intervention base for three weeks experienced most disruption but were positive about the benefits of the programme.

Project funding
• The money from the Youth Sport Trust was used to provide planning time, explaining very carefully to staff that they would not be given the time again. Staff are currently planning the next programme in departmental management time.

• The breakfast, fruit and trip was financed through the Sports College funding and this will be continued.

Top tips
• Get the staff on board before you start; show them what you want to achieve and why.
• Ask the students what sports they want to choose from.
• Make doing the sport compulsory.
• Make lining up for breakfast compulsory (then the majority will choose something).
• Analyse data and set departments targets based around conversions.
• Give departments time to plan in the first year but warn them they won’t have time in any subsequent year.
• Choose staff and teaching assistants wisely and aim to team up very different teaching styles so that they have to plan together.
• Set up the timetable so that teachers do not miss their other critical classes.
• Use the senior leadership team to cover in the intervention so that teachers can teach their critical classes.

Case studies
Brierton Community School

“I don’t know if it’s the breakfast or sport but I can get up really easily. I am just awake in the morning.”
Student
Buckingham School

School context

- Buckingham School is a secondary modern school for boys and girls aged 11-18 years, serving the town of Buckingham and the surrounding villages. It was designated as a Sports College in July 2004. With 1,100 students on roll it is large in comparison to other schools nationally. The significant rurality of the area presents challenges, particularly with participation in extra-curricular activities and restrictions on flexible use of time.

- Approximately 40% of the highest attaining students are streamed off through a selective process to the neighbouring grammar school. The fluctuating attainment on entry is below national averages. Students are from mixed socio-economic backgrounds and FSM levels are low. However, despite relative economic wealth, many families have no traditional experience of education beyond 16, a further challenge as the school strives to retain students into the sixth form. Buckingham School is an inclusive school and supports its students well; SEN figures are above average.

Details of the project

- The project combined maths, sport, leadership, a healthy tea and transport home – all factors that staff thought would attract students to stay at school.

- A target group of 28 Year 9 students were initially identified. The maths department continually identify when students are ‘off target’. The ‘target’ is set with the student based on a discussion with the subject teacher about where they would like to be at the end of Year 9. The target is not linked to school performance targets – they are aspirational for the student, based on previous data available from year to year. Each time a student is ‘off target’, their level appears ‘red’ on an assessment spreadsheet. One red raises the need for the teacher to speak to the student, a ‘double red’ would mean a phone call home or meeting with parents. This project aimed to target students who had displayed a ‘double red’ or more, and needed some intervention.

- Invitations to join the intervention group were declined by the majority of students in the initial ‘double red’ group for Year 9. The final target group consisted of 13 Year 9 students: five girls and eight boys. However, this did provide staff with a control group.

- The maths sessions took place after school. The students were taught maths as a group for one hour followed by one hour of football coaching by a Milton Keynes Dons professional coach. Between the Easter break and the end of term there were nine lessons in total – every Thursday after school. The project was originally planned to last for six weeks but was extended as students asked if they could continue until the end of term.

- The maths content was written by the Maths Curriculum Manager, who also delivered the sessions. The topic chosen was algebra. This was based on analysis of the practice SATs paper which indicated that the main area of concern for the students was the algebra section.

- The session content had a sporting theme where possible, e.g. simplifying expressions was done using students in sports bibs. Students had to rearrange a line of students in three different colour sets of bibs so that they expressed themselves in an algebraic equation. The Milton Keynes Dons coach also came to the maths sessions.

- The maths sessions next time.

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Staff views

- The Milton Keynes Dons Coach felt the maths was well tutored and that students were very enthusiastic about the project and the coaching. He also gained more knowledge of maths not learned during his own school days and wants to become more involved in the maths sessions next time.

- The Curriculum Manager for Maths was disappointed that some of the students who needed most help dropped out or never came. He liked experimenting with outdoor maths activities and felt that the students gained confidence in maths in general. Involving the leaders in the planning of sessions has meant that he has changed the way he teaches the topics.

- Overall attitudes to the project were positive and staff are planning to repeat the project next year, extending it to other year groups and to the other core subjects.
I was pleased with the commitment of most of the cohort and the inspiration the leaders offered.

Curriculum Manager for Maths

Key successes

- Interestingly, the students who took up the places on the project in the end were the students of lower ability.

- Students sat a mock SATs paper at the beginning of the project and then sat it again (only the algebra topic) at the end. Staff tracked the number of students who tried level 5 and 6 questions in addition to finding out their result.

<table>
<thead>
<tr>
<th>Level 5 questions score</th>
<th>Baseline test</th>
<th>End test result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Score (%)</td>
<td>Result (%)</td>
</tr>
<tr>
<td>Student C</td>
<td>54</td>
<td>70</td>
</tr>
<tr>
<td>Student G</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
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<td>36</td>
<td>90</td>
</tr>
<tr>
<td>Student J</td>
<td>63</td>
<td>90</td>
</tr>
</tbody>
</table>

- Staff were able to assess the progress of students who decided not to attend the project as well as those of the 13 students who did attend. Of the students not accessing the support, nine improved grades. Of the students on the maths support, 100% improved on their pre-test grades – only one of them did not reach the school projected SATs target.

- Some very positive responses were given to maths teachers at an end of year parents evening.

- The football coach built very good relationships with the students and it was productive to have new faces and professional role models for the students to work with. The coach was young, early 20s, so the students related to him well.

- Healthy food went down well – there was some negotiation over choices with the students each week.
Student views

Overall the feedback from students involved in the project was very positive:

It didn’t sound as good as it is. I am answering more questions in class.

The sport was a motivational tool. It helps you understand more about maths – you get more help from others – more freedom to learn.

It was good having four/five teachers/sixth formers to help.

The sport motivated us during the maths to get it done and then get to the sport.

I really like it. I really like the maths because it helps. I like the sport after it, its fun.

Boys appreciated the sporting context; they felt it made it more interesting.

One female student felt uncomfortable at first because she thought she wasn’t very good at maths but then she realised it was about her own targets. She also felt that working in groups and teams helped her improve.

Students felt more confident and able to take risks because of the grouping by similar ability and because sixth form students were the teachers, not adults.

The students liked small groups and the support of the student mentors was a significant feature of the success of the project.

One girl reported being uncomfortable at first because she felt she was falling” by being selected for the group – but admitted to gaining in confidence, ‘feeling more freedom because of the small groups’.

Student leader mentors reported seeing good improvement in the response and attainment of the students. Comments on their questionnaires/discussion with the consultant included:

- students enjoyed using the maths they’d forgotten
- satisfaction of helping other students
- impact on students
- opportunity to share own knowledge with younger students
- students became more confident and started to ask more questions about why ‘it’ was the answer
- students began interacting at a higher level
- it’s only been nine weeks and already there’s an improvement in their work – it just shows the potential ‘it’s’ got to make progress in targets
- some students’ reasons for attending was focused on sport not maths
- students tried to finish to get to the sport.

Parent feedback

It has given him more confidence in himself and with other people.

He seems more willing to work at the subject.

The sport has been a great help. I don’t think he would have done the maths alone.

I would like to say a big thank you!

It has reassured her that she is not the only one who sometimes finds maths challenging. Her confidence is continually improving, although we have a way to go yet. At first she wasn’t too keen on the ‘sports’ side of the project but it was lovely when the school provided her with a sport she enjoys. I feel this has been valuable. It is good to know that if a student is having a few difficulties it will be noticed and helped.

Without the football coaching, they would have refused to attend. They both feel their maths has improved.

Parent feedback

Ideas for next time

- A wider range of sports for the second session.
- External coaches that are also competent or trained to be supportive in the maths session.
- Include ‘double red’ students from other years to increase numbers (students reported that they wished they had larger ‘teams’ to play in the football session).
- Prepare parents more and involve them in making the project work even more. Do they really rely on the transport? (Parent questionnaire confirmed this in our case.) Wording of letter of invitation needs reviewing.
- Contract additional coaches in the future, e.g. a trampoline expert from outside school. The ‘professional’ coach from Milton Keynes Dons was an added ‘attraction’ for the students.
- Have an evening with parents to show them some of the work students did, displaying photographs taken and thanking the students and parents for being involved in the project. Intend to do this early in the new term.
Negative experiences

• The take-up was disappointing so students were asked why they did not take up a place on the project. Feedback from student questionnaires included:
  – want to do it on my own
  – too busy
  – didn’t want to
  – don’t want to give up my spare time
  – better things to do
  – don’t like maths
  – don’t want to do the sport
  – I was going to the gym at the time
  – sports put me off, didn’t want to stay after school.

• Attendance at the sport session was at first less than at the maths sessions. This was because the range of choice was too limited; originally only eight did sport (football) after maths. When other sports were introduced, four more joined. There was an 85% attendance rate – the majority of students made either eight or nine sessions out of nine.

• There was already a very heavy workload on the curriculum manager for maths and the project added to the workload; albeit enjoyable.

• The organisation of transport, food, external coaches, letters to parents and questionnaires were a significant extra workload on the director of sport so in future the work will be distributed amongst administration support and the subject area.

• The Milton Keynes Dons coach attended the maths sessions but had limited impact as he was not confident enough to join in. However, it did seem as though it mattered to the students that he was there even if it at times reinforced the negative aspects of the football stereotype.

How might you replicate this project in your school?

• Speak to core subjects department heads to gauge interest/commitment and initial ideas for their ‘project’. Who will deliver the subject material? What resources will you use? Are they an exemplar teacher able to make links with the specialism in order to motivate students?

• Identify the students you want to include in the project and criteria for selection.

• Write to the parents of the students you wish to be involved in the project.

• Baseline test the students so you have a benchmark by which to measure progress.

• Agree payment: agree with Human Resources how you are to pay key staff, i.e. casual, salaried, overtime, etc.

• Decide on how to select your student leaders – who/why? CRB check them for after-school hours working and have them complete an ‘application form’ for employment at the school on a casual basis.

• Brief the student leaders on their role in the sessions and allow them to prepare for sessions so they feel confident and comfortable with the material.

• Establish transport home – cost this in at the beginning, it will consume a large section of the funding. For rural schools, transport home could be the reason students can stay behind.

• Conduct questionnaires of students/parents/coaches/any personnel involved – gauge attitudes and opinions in addition to quantitative data.

• Engage administration support to book coaches, complete employment forms, chase invoices, liaise with the catering department and book tea weekly, etc.

• Liaise with the PE department to avoid clashes over use of facilities.

• Ask the students what they want – they have great ideas and will continually strive to improve what is on offer. This way attendance will improve.

• Involve parents – they will value your assistance in improving their child’s chances of attainment and may surprise you in terms of their willingness to get involved.

Further developments

• Celebrate, e.g. take photographs and use as posters around the maths department and use as PowerPoint slides so students feel valued; write reports in newsletters; send letters of congratulation home; mention in assembly; hold a ‘reception’ evening for parents to talk about the project; engage the local authority advisors so your work becomes high profile at the education office; use the local newspaper.

“ It was challenging for the students who worked hard to achieve end results.”

Milton Keynes Dons Coach

It was challenging for the students who worked hard to achieve end results.
School context

- Corpus Christi Catholic Sports College is a voluntary-aided Catholic High School situated in the north of Preston and serving the Catholic community of the eastern part of the city. It was formed in 1988 through the amalgamation of two Catholic schools in the Preston area which were situated five miles apart.

- The school is situated in a middle class area but serves a largely socio-economically disadvantaged community. 78% of students live in the most socially and economically deprived wards in Lancashire – four of which feature in the 40 poorest in England and Wales. 22.5% of students are entitled to free school meals. About 90% of students are British and white, the remaining 10% coming from a variety of ethnic backgrounds.

- The number of students at the school has risen steadily and is now 840. Last year’s figure for five A*-C GCSE passes was 37%. The school was designated a Sports College in June 2005.

Details of the project

- Staff at Corpus Christi Catholic Sports College have always been open-minded in their approach to teaching and learning and constantly try to find different ways to engage their students in quality learning. When the opportunity arose to experiment with sport and the core subjects, staff grabbed it with both hands!

- After an initial meeting with the Youth Sport Trust it was decided that the target group would be 24 C/D borderline students in Year 11, identified across all three core subjects. The next task was to sell the idea to the department heads of English, maths and science who welcomed staff ideas and practice.

- Realising the importance of the quality of delivery of these lessons, supply teachers were paid to allow the department heads time out of school with the director of specialism to plan what they wanted to deliver and how they wanted to organise their sessions. Being away from school with no distractions proved to be extremely productive and allowed the planning phase of the project to be completed with quality.

- The aim was to teach the target group for two weeks on a collapsed timetable, encourage attendance at the existing Easter school and have three intensive days on each of the core subjects. If the students passed a final test they were able to access the reward day.

- The students involved with the project had a massive input into how it was to be run. They laid down their own behaviour guidelines for the group, discussed the topics to be covered, gave preferences on the teachers they wanted to deliver the lessons and chose the reward day.

Two-week timetable

- Over the two week period the students received 19 lessons across the core subjects delivered by a variety of staff including local authority advisors, advanced skills teachers, exam board markers and sixth form sports scientists, all of whom helped the project have a feel of being ‘special’ and ‘different’ from the students’ normal timetable. The topics for these lessons had been identified by each department and then ideas from sport were used to bring these topics to life.

Easter school

- A commitment was needed from the students and one of the agreements was that the students would attend Easter school. In total 19 of the 24 students attended Easter school where as previously this number would have been significantly lower.

Three-day sessions

- These proved to be extremely productive. To make the students feel ‘special’ they were taken to Preston College for the science sessions where a sports scientist delivered a variety of topics in the morning sessions and a past paper constructed from the topics covered was studied in the afternoon. A similar programme was run in maths and English but within school. Toast and tea breaks also proved to be very popular with the students!

- The results from the past papers were excellent and all the staff involved were extremely pleased with the progress the students had made.

Reward day

- This was arranged for just before the start of the GCSE exams at an outdoor pursuit centre in the Lake District. 22 students attended and some early apprehension (and worries about exams) were quickly overcome. Students thoroughly enjoyed their day away from school. Staff felt that it was a great idea as a reward but a little too close to the exams. As a tool for taking students minds off the worry of their exams it was excellent and it gave them a complete break from the pressure, even if only for a few hours.
Case studies

Corpus Christi Catholic Sports College

Staff views

Positives
• Overall views were extremely positive and it was felt the whole day focus on each subject was extremely beneficial to learning. Staff are already planning to repeat the project next year and extend it into Year 9.
• Staff realised it would be extremely beneficial to the students to have someone new to deliver the lessons. The local authority was therefore contacted and the maths advisor was very keen to lead these lessons. The theme of sport was explained to him and he created his own scheme of work based around the topics staff had identified as areas for concern.
• Staff felt that the support from the local authority was extremely good in maths and would look to bring in more outside agencies in all three subjects next time. The maths project also received a very good response from students and the visiting local authority advisor stated ‘this is a great idea to raise achievement across the core subjects, the group are really up for it’.
• A very good response was recorded from all students, most encouragingly the ‘purposeful atmosphere’ in lessons. Staff also observed improved confidence and self-esteem in the target group.

Attendance during the project
• ten students = 100% to all lessons
• seven students = 92% to all lessons
• seven students = below 92% but above 79% to all lessons.

Negatives
• Insufficient time for planning.
• The timing of the three collapsed days needs reviewing.
• Created ‘cover’ problems with other classes.
• Attendance was an issue as the days got nearer to the exams.

Student views

Positives
Student views were overall positive including:
• liked having the different teachers and thought the maths activities were fun
• felt lessons were ‘more purposeful’ with better behaviour
• appreciated the visit to the college which made them feel ‘special’
• boys appreciated the sporting context – made it more interesting
• felt more confident and able to take risks because of the grouping by similar ability
• the project material was presented in a format similar to a conference pack which made them feel respected and more mature.

Ideas for next time
Students felt:
• the reward day could include something more appropriate to girls
• the sporting contexts were mostly about football – both genders asked for a wider range of sports
• the activities should be more focussed – don’t try to cover too much
• the day at the college should include some experiments
• they would have preferred the collapsed days and the reward day to be earlier – they had disrupted other GCSE lessons and there was some pressure from other staff
• they would have preferred the group to have been formed earlier, at the start of the January term
• well prepared in English Language but less prepared in English Literature.

“ The team building that took place between the heads of the core subjects has allowed a sense of teamwork and collaboration to evolve.”

Head of Maths

The team building that took place between the heads of the core subjects has allowed a sense of teamwork and collaboration to evolve.

Head of Maths

Raising your game
Results

• Whole school A*-C: 37%.
• Core subject project A*-C: 52%.
• 92 grade Cs available to this group – 48 achieved.

English
• 43% of students moved up one grade from their department prediction.
• 9% of students moved up two grades from their department prediction.
• 31% of students maintained their predicted grade.
• 82% of students achieved a grade C or higher.

Science
• 17% of students moved up one grade from their department prediction.
• 48% of students maintained their predicted grade.
• 43% of students achieved a grade C or higher.

Maths
• 13% of students moved up one grade from their department prediction.
• 52% of students maintained their predicted grade.
• 44% of students achieved a grade C or higher.

Top tips

• Give yourself plenty of time to plan and organise your staff.
• Get the backing of your headteacher and senior management team.
• Secure some finances from your headteacher.
• Identify students who will be committed to raising their attainment.
• Don’t try to cover too many areas of a syllabus, really focus on what you want to achieve.
• Involve as many outside agencies as possible (as long as you know their qualities).
• Try to get staff to think differently about the way they normally deliver.
• Choose a reward that all students will work for.
• Make the students feel special and different; they value what you are doing more.
• Be prepared to make mistakes, the positives will far outweigh the negatives and the programme can always be fine tuned next year.

“ This project has opened the door to allow teachers the opportunity to rethink how they deliver their lessons. Sport has been a great motivator for our students and staff and we are continuing to explore new ideas to enhance our teaching and learning."

Director of Sport
Leon School and Sports College

School context
• Leon School and Sports College serves East and South Bletchley, Fenny Stratford, Water Eaton and the Lakes Estate. Built in 1970 it is an 11–18 all ability comprehensive, catering for over 700 students.

Details of the project
• The aim of the project was to develop those skills that are generic to coursework across the curriculum. The focus was a sporting context. The target group was the whole Year 9 cohort of 154 students. The cross-curricular project involved all of the core subjects along with PE. The project started as soon as the SATs exams were concluded and ran for three weeks before the early start to the academic year in June. The project covered approximately 23 lessons in total depending on which sets the students were in.

• Two hours of planning time was allocated for discussion by the four subject leaders who planned how the project should be co-ordinated. Informal discussions also took place as the project began to take shape, equivalent to approximately another two-hour session.

• Each subject leader took responsibility for the preparation of the scheme of work for their area. The subject leader for science had overall responsibility for the organisational aspects of delivery. The time spent writing for each subject area was approximately two hours. The PE department based its work on the coursework students complete in Year 10. Maths and science also used components of Year 10 and this reduced the preparation time that might be expected. Each subject planned their part of the project in a departmental meeting, sharing ideas about how the project might have the best benefit for the students. This involved all members of the departments and all teaching staff felt part of the process as a result.

• Each subject identified a specific skill they wished to develop during the project and these were discussed at planning meetings to ensure they were included. The subject leader for English has overall responsibility for literacy across the school and he had responsibility for checking the project aims fitted in with the whole school literacy aims.

• Students collected data from circuit training in PE to develop coursework skills in English, Maths and Science. The project was developed to assist with literacy skills and to help students make the transition from KS3 to 4. The overall tasks completed by students as described right:

  • Science: Predictions were made as to how a stimulant (caffeine) will affect performance in a circuit training context.
  • PE: Fitness and circuit training sessions were carried out and data recorded.
  • Maths: Data was analysed (including some statistical work).
  • Science: Evaluations were made of the method and research into the effect of drugs on performance and health was carried out.
  • English: Extended writing skills were developed and language used in the media when drugs are used in sport was analysed.
  • All students collected work in one folder that they carried across all four subjects.

What went well
• The objectives of the project were powerful for the long term development of students’ skills, i.e. the development of coursework skills which were both generic and subject specific.

• The core subjects working together with the specialist subject was also very positive and pioneering for the school. The staff enjoyed the opportunity to work on the project together, which proved useful for sharing good practice and for developing a team approach to whole school objectives in the future.

• The project timing was good because it filled the ‘deadtime’ between SATs examinations and the start of the new academic year.

Can we do this every lesson?"
### Staff views
- The hardest part of the project was the ‘pulling together’ of the data collected in four areas. The rigid timetable did not help with having lessons in the ‘correct’ order.
- Generally all the staff involved enjoyed having an opportunity to work with colleagues across the curriculum and doing something concrete with the students after SATs exams.
- Some good ideas on how the project could run more smoothly were invariably thought of after the event.
- There was a feeling that there was a lot to cover in a short time span.

### Student views
- Students agreed the idea was good but they felt they did not really know the intended outcome of the project.
- The feedback at interviews conducted by the external consultant indicated that they thought that the best part was the circuit training in PE, with one student commenting they ‘do not usually work so hard in PE lessons’.
- The general feeling at the interviews was that the activities were very focused. The boys in particular were very positive about the PE sessions. One girl liked the science investigations. Two of the boys enjoyed the visit. Many of the brighter girls declined to attend.
- Evidence from the school survey of student opinion found that the PE aspect of the project was very popular, especially with the boys, although a lot of girls also made positive comments in the survey questionnaires. The urine testing practical was also well received by many students. The ‘practical’ elements of the project were very popular, it was the analysis in maths and extended writing in English that were considered by students to be ‘boring’ or ‘not as good’.
- Only a few students had discussed the project with parents.
- Many students were very positive about recommending the project to the following year group and their suggestions for improving the project were well thought out and considered.

### Areas for development
- The subject leaders underestimated the planning time needed for such an ambitious project. There was a lot to do in a short time frame. The amount of support that students would need to draw together work from four curriculum areas was also underestimated. They regarded the work as ‘separate’ subjects rather than a co-ordinated project.
- There were some problems with the launch assembly and so some students were not on board as quickly as they should have been.
- There was a wide variation of experience according to ability and a more differentiated project would have supported some students. Scrutiny of the students’ folders confirms this.
- The reward visit was not taken up by some students.
- Another project was also being undertaken in the school at the same time. This resulted in a clash of interest at times and an overload on some resources.

### Ideas for next time
- The project will be managed by the director of specialism as part of their responsibility for specialist status and programme targets. Having a position on the senior management team will ensure that there would be no clashes with timetabling or other projects and a greater ability to ensure the timetable is collapsed for Year 9.
- More planning time for the subject leaders.
- Identify key teaching staff earlier and give them sufficient time so that they can familiarise themselves with the project content and receive training and support where necessary. Use the school ‘focus’ meeting time more effectively.
- The launch assembly will better organised with guest speakers and use former Year 9 students to ‘advertise’ the project and trip.
- The visit will be integrated into the project and a different venue will be considered.
- Outside support such as guest speakers, medical staff and journalists will be used further.

**“It’s good to see students enjoying reading newspapers.”**

*English teacher*
**Park House School and Sports College**

**School context**
- Park House School and Sports College is situated on the outskirts of Newbury in Berkshire. Park House is an 11-18 mixed comprehensive school with 1,300 students on roll. Students achieve better than national average SATs and GCSE results, despite having a growing number of students from backgrounds of social deprivation. The school has a significant gender imbalance; 59% of the students are male.

**Why was the project needed?**
- Regular analysis of attainment data relating to ability and gender highlighted a surprising result: positively, boys across the individual subject areas and years were achieving above national average levels. The area most in need of improvement was lower attaining girls.
- As staff looked across all subjects at the achievement of lower ability girls, it became evident that there was a specific group of female students who were underachieving – those who were both lower ability and taught in ability groups.
- This was particularly evident in KS3 maths and became the focus of a pilot project for Year 9 students. The gender imbalance and male dominance that existed in these groups were seen as barriers to girls’ learning and achievement.

**The aim of the project**
- The aim of the intervention project was to use PE and sport to raise lower ability girls’ achievement in maths. This would be achieved by exploring the effect of the learning and teaching strategies on the development of those skills required for coursework across several subjects, i.e. data handling in maths.
- During the data handling project sporting contexts would be used to engage and motivate students, sporting values applied to maths lessons and varying pedagogy would be utilised as much as possible.

“**I know the impact that PE and sport can have on the personal development of students. I now feel that is being recognised and utilised.**”

Headteacher
Case studies
Park House School and Sports College

The process

• The project had total support from senior staff including the director of sport, deputy headteacher (responsible for student entitlement) and headteacher.

• It was a collaborative project that utilised the expertise of both departments and involved quality, off-school joint planning. This resulted in the production of a scheme of work, an outline of lessons, lessons being allocated to PE facilities and additional PE staff freed for several of the maths lessons.

• The delivery of the project was shared by staff from both maths and PE including the director of sport, a female PE teacher, head of maths and a maths teacher responsible for ICT.

• The project consisted of a target group of 68 Year 9 students. These were the bottom three maths sets, consisting of 35 girls and 33 boys.

• A review of how these lower ability groups were organised resulted in the restructuring of the bottom three groups into two sets of single gender students in maths for several weeks prior to the SATs in Year 9.

• The project covered eight lessons across two weeks at the beginning of June.

• The two single-sex groups experienced different teaching and learning strategies which were as best a match between the teacher’s teaching style and the learner’s learning style as possible.

• The timing of the project allowed for the integration of recent innovative whole school initiatives, particularly in ICT. The maths department had already incorporated the use of voting system equipment into their teaching and the PE department had recently introduced online surveys for students to monitor attitudes to PE and healthy lifestyles.

• Throughout the project students used ICT, e.g. heart rate monitors and cardiovascular equipment at the local health and fitness suite, chart wizard to manipulate the data, interactive white board and voting system equipment.

• Video evidence of students was captured during the first Youth Sport Trust support visit, providing benchmark material to assess their responses to the project. Six students from the pilot group (three male and three female) were randomly selected for an interview reflecting learning experiences and attitudes to learning in maths and PE.

• The project compared pre- and post-SATS data and attitudinal information, pre- and post-intervention project, regarding attitudes to learning, perception of ability and progress.

Summary of the project content

• The project was launched in the school hall by the director of sport with maths teachers and learning support assistants present. This was an interactive session for all 68 students using ICT and footage of an Euro 2004 penalty shoot out.

• Students participated in practical sessions to collect data. The expectations in terms of behaviour, work ethic and responsibility were implemented as in any other PE lesson.

• The boys used tennis serves and basketball penalty shots as the activity to collect primary data. The follow-up lessons were taken by the head of maths.

• The girls participated in a practical activity at the local fitness centre, using a range of cardiovascular equipment to raise their heart rate. The director of sport had previously shown students how to use the heart rate monitors and lessons were taken by a maths teacher and a female PE teacher.

• A series of follow up lessons to collate and analyse the data were delivered by the maths teachers.

Impact of the project

• The greatest impact was in the lowest ability group; 58% of all students involved in the pilot improved by one National Curriculum level.

• Similarly, 50% of the girls in the lowest set (set 8) improved by one National Curriculum level.

• It also achieved a reduction of students not achieving level 4 (5.8%).

• Just four failed to achieve their MIDYIS targets.

• Eight girls exceeded their target level and only one girl failed to achieve their target level. Nine boys exceeded their target level and three boys failed to achieve their target level.
Outcomes from student interviews

Girls from the single sex group

I like the different things we did in lessons... using laptops, interactive white boards, making number games and doing maths in PE.

Going to the gym and using heart rate monitors was fun... I also felt good because we don’t normally go to the gym until Year 10.

I answered more questions in class... I felt more confident.

We get more work done without the boys... they distract us.

It’s a better atmosphere.

I prefer all girls.

Boys from the single sex group

We work better without the girls, they are always talking.

The work is easier because we get it in small blocks and I understand it more.

I’m not bothered if we stay only boys, it depends on the work we do.

Making up number games using ICT and doing PE in maths was good.

Staff views

We have a genuine working partnership that has had a positive impact on students and both the PE and maths departments. I now have a better understanding of the power that PE can have on motivating students.

Head of Maths

It was great to see students collecting data accurately and independently. No cheating! This was surprising because they were very competitive with their peers, but they wanted to collect their own results accurately.

Head of Maths

When does my class get to follow this programme?

Maths teacher who had come out to the courts to see what it was all about!

I feel that due to the success of the pilot and the enthusiasm of the head of maths this will flourish at Park House and spread across all core subject areas and eventually the whole school.

Director of Sport
Future development, building capacity and sustainability

- There is an ongoing commitment from both the maths and PE departments to further develop and embed the use of sport within the curriculum in KS3 and KS4. The focus will remain on data collection, handling and manipulation in a practical context that will develop independence, confidence and teamwork. This will be incorporated into the Year 9 curriculum for all ability groups.

- A presentation of the pilot to the senior leadership team was carried out by the director of sport and head of maths. Both heads of science and English were also invited to the meeting with the intention of similar principles being used in all core subjects, followed by the director of sport attending a science department meeting to discuss opportunities. A three-year plan is being developed to embed this work.

- Lessons from this project are being linked to the sports leader programme with the going to primary schools to do maths coaching and promote practical activity learning in core subjects. Once again, collaborative planning will be essential between maths and PE but will also include the primary class teacher and leaders.

Other spin-offs

- A small group of male students from the pilot have been highlighted for ongoing monitoring as they transfer from KS3 to 4. This will focus on student attitude to, and behaviour for, learning and fulfilling potential.

Top tips

Surround yourself with a team of enthusiastic and positive colleagues

- A small team will spread the workload and responsibility and will also bring together a wider range of ideas.
- A team can motivate each other when tasks are not top of your list of things to do!

Consider the composition of your team

- Leader – could be the director of sport.
- Another member of the senior leadership team, e.g. deputy headteacher or headteacher. This will provide a critical eye, give the programme a high profile and the leader support.
- Head of core subject who is receptive to innovation and change and has the capacity to be part of this.
- Develop a true partnership with the core subjects; remember, you are not inflicting this upon them, but using each others expertise.

Ensure that the initial project is likely to be successful

- Park House had a very clear focus group of students and so a manageable size of group.
- It was also a short term project but, due to its success, will become part of the PE curriculum.

Know how you will monitor and evaluate the success of the project

- Park House collected objective evidence to evaluate changes in achievement. In addition, the student voice was used to reflect on student attitude, confidence and self-esteem during the project.

Have clearly defined tasks

- Consider who is in the best position to complete tasks most effectively.
- Share the information frequently so that everyone is kept informed and motivated.

Case studies

Park House School and Sports College
Thornleigh Salesian College

School context

- Thornleigh Salesian College was founded in 1952 by the Salesian Society at the request of the Clergy of Bolton. The school is a voluntary-aided 11–18 establishment of approximately 1,560 students which includes approximately 340 students in the sixth form centre. The school serves the northern Catholic parishes of Bolton and draws its students not only from some of the most affluent areas of Bolton, but also from three areas in the top 10% of the most socially economically deprived wards in the country.

- The school was part of the old Bolton Education Action Zone and is now included in the Bolton Excellence Cluster. The sixth form is open access and serves students from the Bolton Catholic secondary schools and other schools in the borough if numbers permit.

- The school achieved Sports College status in 2003 and is under the trusteeship of the Salesians of Don Bosco.

Details of the project

- The project comprised of two collapsed days, one for English and one for maths for all students in year 11.

- The students covered three workshops in the morning: three English on day one, followed by inter-form games activities in the afternoon. The process was repeated on the maths day with three topics in the morning and inter-form games in the afternoon.

- The project was written by the two heads of department and the director of learning for KS4.

- Funding was used for cover to enable the writing group to plan and prepare.

- All of the activities were organised around competitive group activities with students gaining points.

- Almost all of the staff in each subject department were involved in the teaching – 15 staff in total; eight from English, seven from maths and six PE staff.

- Heads of department and KS4 team leaders had a day off timetable to plan the project following departmental discussion and input. Subject teachers were briefed and students had two assemblies preparing them for the project. Topics focussed on exam techniques, based on examiners comments from past papers. There had also been some analysis done of performance from the mock exams, highlighting key areas for revision.

- English topics included some media material as an introduction to the new post-16 course and as direct link to a key piece of coursework and a section of the exam.

- Sporting contexts were used where possible, for example data about marathons in maths.

- The reward was PE all afternoon, with a choice of football or rounders.

- The tutor group collecting the most points across the two days received a reward of a trip out for a meal followed by ten-pin bowling.

- Tokens worth £100 were also given to the two students gaining the most points. Staff were given ‘bingo dabbers’ as an easy way to distribute points onto student cards. All cards were collected at the end of the morning session and totals calculated so that a further competitive edge could be introduced in the afternoon in PE. Points were awarded in all three subject areas for participation, progress, attitude, quality of work and behaviour. The maximum number of points allowed being 20 points. Points were carried over the two days, but students did not know their individual totals to discourage ‘giving up’.

- The more challenging group that I don’t usually teach, and I thought I’d have problems with, were fully engaged.

Teacher
Other observations

- The project has clearly had a significant positive impact, particularly in the maths department.
- The school A*-C maths results have improved from 41% to 50% and staff felt that part of that rise could certainly be attributed to the Raising Your Game project.
- Whilst the three departments did not initially plan the work together the resulting work showed an overlap in style and content.
- There were some issues about consistency and quality across teaching and learning and the impact this has on the competitive/motivational aspect of the project, including the students perceptions of the 'fairness' of the points system.
- The school has recognised the need for more cross-curricular work and has recruited a new co-ordinator to support further development.

Ideas for next time

Students felt:
- they would have liked an additional day for science
- they would like more use of ICT in the programme
- there was too much ‘reading’ in English
- two hours of PE in the afternoon was ‘boring’ and they would have liked a wider range of sports.

Staff views

**Positives**

- Representatives from each subject gave their views which were overall positive and the project is to be repeated next year and extended to other subjects and year groups.
- Dates have already been planned for 2006-2007 and the project will be extended to include science and RE (RE is a compulsory core subject in this Catholic school). In addition, from 2007-2008 PE will be included as the school will have a full cohort sitting GCSE PE.
- Staff felt that the whole day focus on a subject was beneficial to learning and students were ‘more engaged’.
- Maths report a wider variety of teaching styles used compared to normal classes with more group work. This has been sustained across the department in other classes together with ‘more talking about maths than doing maths’.
- Maths staff said they would never have considered using group work to deliver some of their topic areas. Based on the success of this day, this strategy has now been included in their scheme of work for the future. Staff were pleasantly surprised by some students who had stated that they now wanted to be entered for a higher maths paper.
- Resources prepared for these sessions are also being used with other classes.
- All staff reported a very good response from the students with a ‘purposeful atmosphere’ in the sessions.
- Quotes from staff included:
  - *The competitive edge pushed the boys. I wouldn’t have thought of using sport as a context for learning.*
  - *Staff reported some student success, for example two students requested a move from intermediate to higher level maths as they were more motivated due to the project and whole school approach.*
- One student commented that he believed that if he had been taught like that all year he would have easily gained a grade C. Students requested that the strategy be used in other subjects as a way to prepare for exams. This has been noted and subsequently the project has been extended to include science and RE.

**Negatives**

- Collecting points for the tutor group very successful, with the ‘form approach’ working better than the individual.
- The value of the individual prize was considered worthwhile.

**Student views**

**Positives**

- Many students commented that one of the best things about the project was that ‘we didn’t have our normal class teacher so it made it more interesting’. They also commented that the different style of activities kept them engaged, particularly in maths, as it was not what they were used to.
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School context

- Toynbee Community Sports College is an 11–16 comprehensive in Hampshire and has been a Sports College since September 2003. It is located in a mainly urban residential area with a mixed catchment of private housing and council/social housing.

Details of the project

- The aim of the project was to address the need to increase learners’ engagement and motivation within English, currently a real strength within the specialist subject, PE.
- English value-added at KS3-4 was well below national average.
- Motivation among boys was a concern.
- There was an identified need for new pedagogic approaches and teaching styles in English, especially collaborative group work. Some teaching was observed as dull and regimented, geared more to control, so not enabling learning to flourish.
- Absence of male role models within English at KS3 and KS4 was also a perceived issue.

The process

- The project was planned between the director of specialism and the newly appointed head of department for English.
- The aims and objectives of the project were explained to the English department at a full staff meeting towards the end of the spring term. Youth Sport Trust staff also attended to support the head of department and the director of specialism.
- The director of specialism produced a DVD of sporting performances and techniques to act as stimulus material for writing tasks in English. The PE department helped to edit the video clips from existing footage.
- A two-week programme of study was written (The Tools of Analysis) to support the development of the skills of a targeted class of Year 10 students.
- The targeted students were identified from assessment tracking data. Criteria for selection was middle band C/D borderline group which contained a large number of boys, many of whom were motivated in PE and sport but not so engaged in English.
- The project was implemented in the last week of the spring term. Lessons were videoed to provide material to inform the development of teaching and learning styles across the department.
- Throughout the summer term the focus in department planning meetings was on active engagement strategies/group work, roles in lessons/guided reading, etc. The use of sport-related texts such as autobiographies to motivate students in the analysis of texts was encouraged.
- The project was evaluated at the end of the summer term by the head of department and the director of specialism.
- The programme of study was cascaded to all English staff and used with additional targeted groups from Autumn term 2006.

Outcomes

- Student self-review data showed an improvement in the target group regarding engagement in lessons and the quality of work being produced during the project.
- The link between English and PE allowed the crucial differences between analysis, review and comment to emerge very naturally.
- Some of the video clips featured the students’ own performances as well as those of their friends and the fact that clips included dance and gymnastics as well as athletics and games also motivated the girls in the group. This helped their engagement in the lessons still further.
- The project particularly encouraged group work and has led to more self-evaluation and peer analysis of speaking and listening performances.
- At the end of the eight-lesson project, in student interviews all but one of the boys in the group could explain the difference between ‘analyse, review and comment’, and all used references to sport when correctly doing so.
- Students said the links with sport brought the ideas ‘to life’ and enabled them to ‘see the point more’.
- Students enjoyed the joint teaching by the PE and English specialist and appreciated being taught English skills by a man for a change. This has continued to have a very positive effect on this group as interest has been maintained by further developments planned.
- Student engagement/group work strategies across all lessons were the focus of senior leadership team lesson observations during November 2006. Early results, observed by members of the English department, have been really encouraging, with the percentage of lessons now either ‘outstanding’ or ‘good’ (based on current Ofsted criteria).
Plans for further development

**Key Stage 4**
- Follow-up work planned with this group includes continued shadowing of lessons by the director of specialism but led by the English head of department. This will be combined with monitoring students’ work and feedback sessions.
- The transfer of skills between English and the theory aspects of GCSE PE will continue.
- Two of the identified boys in English will be mentored by male PE staff, with the specific aim of supporting the production of high quality coursework.
- A joint Sport and English Camp will be held at Easter to focus on exam and revision skills alongside a planned programme of sporting opportunities to reward attendance.
- The same project has begun with new Year 10 students, this time with two targeted groups.

**Key Stage 3**
- Funding is being used to allow a young male member of the PE department, who also runs Junior Athlete Education, to work alongside the English co-ordinator and one identified and specifically trained learning support assistant. After some initial planning time, these three key members of staff will deliver an intervention/support programme starting with Year 9 students and cascade down through KS3.
- A partnership has been formed with Southampton Football Club Study Skills Centre to support continued developments in school on the pedagogy of active engagement strategies, group work and use of ICT.

“It was interesting to see just how more confident the target group was when discussing the performances – they were fluent in the meta-language of sport which clearly empowered them, especially their discussion skills.”

Head of department
Success factors
success factors
This chapter describes the key factors that tend to be present in successful specialism-related work. Each factor is illustrated using examples from the case studies in the previous chapter.

Pilot projects were particularly successful when:

**Plans were not too ambitious**

Thornleigh Sports College is a large school employing more than 100 staff across many subject departments. These departments are physically located in different parts of a large school site. As a result, the school has little experience of, or tradition in, working across the curriculum.

The director of specialism saw an opportunity in the core subjects project to break with tradition and proposed, what was for this school, an innovative but very effective intervention to the Year 11 curriculum. Recognising many of the possible barriers to success, her plans realistically included only two of the core subjects, English and maths.

The time involved in curriculum disruption was kept to a minimum, one full day for each of the two subjects. Only very experienced staff, two from each subject, were involved in the planning and these had excellent support from the director and other staff from the PE department. There was sufficient time arranged between each of the two days to enable the effects of disruption on other areas of the school to be minimised. The director and a member of the senior team planned for the collection of appropriate evaluative evidence of success from a wide range of groups such as students, parents and other school staff. This resulted in a sense of shared ownership and a clear understanding of outcomes by all parties.

**Senior school leadership, particularly the headteacher, played a role in the planning and implementation of the work**

An extract from the consultant’s report on Corpus Christi Catholic Sports College (right) reveals the extent to which the involvement of the headteacher was evident right from the start and the impact of this.

> "I felt confident and excited about my first visit to this school in the North West because communication with the director of specialism about the arrangements for my visit were so positive from the start. His e-mail messages were friendly and sensitive to my needs – to the extent of providing me with a detailed step-by-step guide to the school from the hotel! The headteacher, with the director of specialism in attendance, made his personal commitment to the project very clear. He explained how important this work would be in supporting the development of the school as a whole. He talked enthusiastically of the role the school might play in the Youth Sport Trust network and gave his personal assurance that all his staff were keen to be involved. It was very clear to me that this head, having delegated the management of the core subjects project to his director, was using the opportunity of my visit to reinforce his absolute faith and trust in his staff to deliver, and his clear intention to support them along the way.

It was no surprise several months later to find that a team of staff led by the head was one of the most popular presentations at the Youth Sport Trust conference that supported development work in the core subjects."

**Consultant, Youth Sport Trust**

The young people involved were carefully identified and included in the planning

The maths department at Buckingham School used a database to monitor the progress of students. Data was recorded across the whole group of Year 9 students and assessment was regular and frequent. This enabled the subject leader to impose a simple ‘traffic light’ coding system that clearly identified at a glance those students in real need (colour coded red) and those who might cause concern (amber).

The core subject intervention project invited a target group of 28 students, all showing signs of underperformance, to form a ‘special’ group. Letters were sent to parents clearly explaining the purpose of the intervention programme – to raise achievement in maths through the incentive of football coaching with representatives from the local professional football team. The students themselves were consulted during the planning stage and their views about a wider range of sporting activities were listened to.

The teachers and other staff involved were carefully chosen

Many of the schools in the project chose their strongest staff to manage and teach the programme. Some of the reasons for this included:
- the target students were often some of the most vulnerable, identified because of under-achievement, attendance or disengagement from their learning, and requiring sensitive management
- these students were likely to have a significant impact on the examination results of the whole school
- the planning and teaching of the programmes required creativity, innovation and a need to take risks in order to raise standards.

In many cases subject leaders took on the additional responsibility of the teaching. At Corpus Christi the subject leaders from each of the three core subjects worked together as a team to plan the programme. They reported very positively on their experience, recognising that while they felt a greater sense of accountability for whole school standards, this was balanced by a greater feeling of ‘worth’ and importance in the school management structure.

In Brierton School specialist classroom assistants were assigned to the Year 9 groups in each of the three core subjects and in ICT. They stayed within the subject, were involved in all the planning and preparation of materials, and supported the learning in the classrooms. At the end of the project they reported enthusiastically on their experiences, recounting examples of progress with individual students and talking about their own personal aspirations that had been raised as a direct result of being involved in the programme.

High quality resources were used

The single gender groups of Year 9 students that were identified as needing support in Park House School enjoyed a wide range of high quality ICT equipment during their intervention programme. Both groups, boys and girls, reported very positively about the regular use of interactive white boards that were a stimulating feature of their learning. They also used voting system technology to collect data, look at patterns and test their understanding of new concepts. Many of the boys, and some of the girls, took part in a national scheme focussed on the World Cup where students ‘voted’ online for their favourite teams, laying odds on who was going to win through to the final.

In Brierton School all Year 9 students were presented with high quality, well planned ‘conference packs’ that included all the materials they would need during their three-week intensive revision sessions. The students reported how ‘special’ they felt and recognised the amount of time and effort that teachers and support staff had put into the preparation of the materials and the planning of the support programme.

External organisations and individuals were involved in various stages

In nearly all of the core subject intervention programmes, students were unanimous in praising the features of each project that involved ‘visitors’.

At Corpus Christi, the subject leader for maths worked closely with the local maths consultant to recruit advanced skills teachers from other schools who presented showcase lessons to the target group of students. The science sessions were taught at the local college by college staff (which has led to a number of further collaborations between the two institutions) and the grand finale of the programme involved staff at a nearby adventure centre leading motivational activities the day before the Year 9 national tests.

Professional coaches from Milton Keynes Dons attended intensive revision sessions in maths with Year 9 students at Buckingham School before providing football coaching as the motivational feature of the intervention programme. Sixth form students who were part of the Sports Leaders Award scheme and competent in maths were also used to provide mentoring to the target group of students.

Appropriate planning time was used

One of the most successful and ambitious support programmes took place at Brierton School. The success was largely due to very good planning, building on prior experience of a smaller trial project.

The intervention programme involved all Year 9 students in a ‘collapsed’ timetable that focussed on intensive revision in all three core subjects plus ICT. Planning had to take account of the requirements of the new timetable whilst still recognising the needs of the rest of the school. Teaching staff involved in the intervention were carefully selected and provided with time to prepare materials and write new schemes of work to cover the three-week programme. Their classes in other year groups were ‘covered’ by remaining staff and additional temporary staff. Classroom assistants were recruited and many of the senior team took on additional teaching for the period of the intervention programme.

This was a remarkable project that had the total support of the whole school with a clear target of improving standards at the end of KS3.

The method of evaluation had been considered in the planning stage, not during implementation

An independent consultant externally evaluated each of the core subject intervention projects during two visits. The first visit supported the planning, helped to set realistic targets and agreed with each school the range of evidence required to validate the work planned. The second visit provided further review and identification of additional evidence needed to sustain high levels of rigour and to substantiate the impact of the work on standards and student achievement.

The range of evidence included:
- student/parent/staff surveys
- analysis of attainment data/examination results
- summary statements from staff/students/parents
- recording outcomes from debriefing/consultation events
- photographic/video evidence of impact.

6 Success factors
Having a clear picture of where schools wanted to be by the end of the project, and what their starting points were, enabled staff to set clear objectives, realistic targets and regularly review progress towards each. This clarity in planning also ensured that a reliable assessment of value for money could be made at the end of the pilot schemes, when the costs were evaluated against the impact on the standards and achievement of students, and improvements in the quality of teaching and learning, curriculum design and leadership skills.

Departments worked together to plan activities

One of the most effective examples of the sports specialism having a significant and positive impact on a core subject is seen at Toynbee Community and Sports College. The school’s own concerns about standards in GCSE English Language were confirmed by an Ofsted report that advised a focus on improving the quality of teaching and learning in the subject.

The specialist subject had significant strength in strategies to motivate and engage students in their learning and these were harnessed by the English team during the intervention project. A newly appointed subject leader for English worked with the director of sport to produce a DVD of sporting performances and techniques. This material was then used in English during the English team during the intervention project.

In Corpus Christi the senior management team arranged for the three subject leaders from the core subjects to spend time away from school to plan their schemes of work with support from the director of sport.

Ways of motivating or rewarding students had been considered

Many of the schools in the core subject intervention programmes included reward and celebration events in their planning. Leon School took students to a local professional sports complex where staff at the centre provided a varied and interesting programme for the visit. This model was also part of the planning at Corpus Christi where students attended an outdoor pursuits centre in the Lake District just before their GCSE examinations. These students benefited from the break away from the pressure of examinations.

The coaching by professional footballers proved to be a key aspect of getting the target group of students at Buckingham School to engage in extra maths sessions.

Thornleigh Salesian College and Brierton Community School incorporated schemes that involved the collection of reward points by students. This was regarded by students at Thornleigh as a key motivator for success, with students keen for their tutorial groups to do well enough to be included in the meal out at a restaurant followed by ten-pin bowling and each individual hoping to win the coveted prizes of £100 of tokens.

The feedback from many of the schools carried out at the end of the project confirmed that any future developments would look more closely at the range of sports and reward schemes. Evaluation of student views indicates that they would like to have a greater say in the planning so that the motivational impact would be greater.

Projects had explicitly increased the confidence and self-esteem of the young people

The views of students and staff formed an important part of the pilot projects. Many of the target groups were identified against clear criteria that related to underachievement, for example, the ‘double red’ group in maths at Buckingham School; boys performance in English at Toynbee; and the response of weaker girls to maths at Park House School.

Survey results from questionnaires and the response of students interviewed by the external consultant provided clear evidence of increased student confidence arising from a more secure knowledge and understanding of the subject and the feeling of being ‘special’.
7 Final thoughts
final thoughts
Many Sports Colleges gained the status because of the belief of their leadership teams, staff and communities in the power of sport and high quality PE to make a difference to the lives of young people. However, it is important to recognise that improving the practice and performance of a subject or school will involve a range of strategies, only some of which are specialism-related. The first part of this publication described specific areas of development that a sports specialism might be expected to be able to make a contribution to. School-specific factors will influence the success of the work and will therefore need to be considered when planning specialism-related improvement work.

A generalisation of the key requirements necessary and likely impact is given below for the themes described in Chapters 1 to 4.

### Strategies that use the motivational and relevant contexts of sport can be:

- useful in schools beginning to establish a culture of using the specialism across the curriculum or without a leading PE department
- relatively easy to implement as a small number of people can be used to generate ideas and resources
- used to increase engagement of young people in subjects and of staff in the specialist status.

### Building on the positive values and the generic skills developed in high quality PE and sport:

- requires strength in the PE department and a developing identity of the specialism in the school
- requires commitment from across the school to develop a common understanding and enable quality joint planning
- is used to have an effect on the personal attributes and skills, such as self-esteem and confidence, of young people and so can result in an enrichment of the school experience for students and staff.

### Using the specialism to change teaching approaches by utilising successful pedagogies from PE:

- requires a leading PE department with capacity and an established confidence of the school in the specialism having an impact in raising achievement
- requires a long term commitment across the school to share practice and a willingness for staff to take risks
- used for long term, sustainable change in practice which leads to empowerment of staff to try new ideas confidently and young people to become involved in contributing more fully to their learning.
The diagram above summarises some of the issues described on the previous page. It illustrates that although, in general, some themes are relatively easy to implement and might be expected to have a short term impact, there is not a straightforward correlation and progression actually seen in practice. The effort required and impact achieved depends on how the work is planned and delivered.

Incorporating a sporting context into a core subject by producing high quality resources in collaboration with the PE department can require more effort and have a more significant, longer term effect on achievement than an enforced, poorly managed system of lesson observations between the same two departments that attempts to share practice and expects a change in teaching approach.

The themes can be useful when considering an appropriate area of focus for specialism-related support but also should not be regarded as mutually exclusive. The school examples and case studies show that schools plan work that runs across all of the themes.

Sometimes the outcome of a project shows impact in more than one area even if this was not the original intent. For example, work focused on developing leadership skills in core subjects can lead to a different teaching approach used to deliver lessons, and developing strategies to improve group work in core subjects can lead to an increase in confidence and self-esteem. In addition, schools often describe a whole list of unexpected positive spin offs.

It has been a privilege for the Youth Sport Trust to work with the schools described in this publication, particularly the seven schools detailed in our case study section. These schools implemented ideas that may initially appear to be relatively simple. However, without exception, the effect in these schools has been highly significant and from which, they all believe, there is no turning back.

Mighty oaks from little acorns grow!