

How are schools using PESS to raise achievement across the curriculum?

The stories here show just some of the ways that schools involved in the PESS investigation have used PESS to raise standards of achievement across the curriculum. For more examples, visit QCA's PESS website at www.qca.org.uk/pess.

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Leading learners and core tasks

The school: Astley Sports College and Community High School, a mixed comprehensive in Tameside, Cheshire, with around 860 pupils aged 11 to 16

The objective: To raise year 9 pupils' attainment in PE, geography and design and technology

The starting point

Drawing on its earlier successes in PE, the school was keen to extend its use of core tasks and young leaders across the curriculum, starting with food technology and ceramics (within design and technology) and moving on to geography. The PE department had been at the forefront of the leading learners' movement at Astley, which involves staff training pupils to lead other learners in the school and community. Staff generally recognised the strength of this model and its impact on all involved (for example leading learners in PE had successfully coached dancers from local primary schools and organised and run a dance festival).

Staff in food technology and ceramics had no experience of designing or using core tasks to evaluate and improve pupils' performances, and they were hoping to see a clear impact on attainment. They wanted their pupils to have greater exposure to challenge-type activities in which they could exercise judgement, demonstrate thinking skills and independence, and generally show more autonomy and commitment.

In terms of high quality outcomes, an assessment highlighted different concerns in each subject. In PE, pupils tended to perform well against the outcomes in games and athletics, but encountered more problems in dance and outdoor and adventurous activities. In food technology and ceramics, staff wanted to achieve improvements in pupils' commitment (outcome 1), confidence (outcome 4), willingness to take part in different types of activities (outcome 6), and thinking and decision making (outcome 7). Joint research between geography and outdoor education revealed a relatively high proportion of pupils struggling with commitment (outcome 1), understanding (outcome 2), thinking and decision making (outcome 7), desire to improve (outcome 8), stamina (outcome 9) and enjoyment (outcome 10).

The PE team offered to give a lead to the new departments taking part in the investigation by monitoring and maintaining pupils' achievement of the high quality outcomes.

Action

The PE team had already replaced its largely teacher-directed, skills-based programme with one that uses core tasks to give pupils more opportunities to demonstrate their knowledge and understanding as learners and leaders. At the same time as changing its scheme of work, the department began to place far greater emphasis on assessment for learning, including peer and self assessment. Pupils are taught in groups that offer them the opportunity to take on a variety of roles as part of an entitlement to leadership skills for all – sharing expectations, planning, organising and, above all, communication.

The school decided that this PE model should act as a guide and support for the other curriculum areas taking part in the investigation. The Director of Sport, who is leading the project, spent time talking with members of staff in food technology, ceramics and geography about what made their subject distinctive and finding common ground for setting up core task work. She also devoted a lot of time to classroom visits to see work in action and talk to staff and pupils about the investigation's progress.

Staff in food technology and ceramics matched the content of their existing year 9 schemes of work to the expected learning outcomes and levels, then created their own core tasks to meet all of the criteria. In doing this, they took into account their wish to improve pupils' performance against the high quality outcomes of commitment, confidence, willingness to take part, and thinking and decision making.



The PE and geography departments worked jointly on core tasks in outdoor and adventurous activities, each department taking responsibility for delivering different aspects of expertise. A group of eight gifted and talented pupils went with four members of staff (two from each department) to a two-day Geocaching festival, where they learnt about digital mapping and transferring data to and from GPS using tracklog data. Following this, all seven groups in the year 9 cohort were offered a residential experience in the Lake District using GPS for core tasks in PE and geography. The emphasis was on planning and completing a journey for PE and on a river study for geography. The pupils decided to camp rather than stay in a youth hostel, as they wanted to ‘get the real experience’.

Throughout the year, joint moderation of standards took place between staff from the PE, D&T and geography departments. Overall, the progress of the project was reviewed after three, six and twelve months, and pupils’ progress was consistently monitored and evaluated against the high quality outcomes and baseline assessments. Case studies were used to keep the school leadership team informed and pupils’ successes were celebrated regularly and informally through staff comments and feedback. In particular, pupils were praised for demonstrating that they understood what they had to do and surpassing themselves by rising to and completing a challenge.

Impact

The first year of the investigation has been such a success and had so much impact that the project leader is now pushing, with support from all quarters, for the implementation across the school of a competence-based curriculum with learners at its centre.

The year 9 pupils’ attainment improved dramatically in all four subjects involved in the project and staff were delighted to see that targets for progress were being met. Staff were also able to trace clear improvements in the number of pupils achieving the high quality outcomes.

PE

The targeted year 9 pupils continued to improve their standards of performance in PE. Whereas at the start of the year 50% of pupils were at level 5 and 50% at level 6, by the end of the year their attainment had improved to 25% at level 5, 50% at level 6 and 25% at level 7.

The pupils also started to display the high quality outcomes much more consistently across the different areas of activity. There were particular improvements in commitment (up 25% in two groups), understanding (up 25% in one group), confidence (up 25% in one group) and desire to improve (up between 50 and 75% in two groups).

Food technology

Autumn 2005

Summer 2006

Group 1

75% level 5

43% level 5

25% level 6

57% level 6

Group 2

4% level 4

2% level 4

33% level 5

23% level 5

63% level 6

75% level 6

Group 3

5% level 4

80% level 5

15% level 6

35% level 5

65% level 6

Group 4

15% level 4

80% level 5

5% level 6

5% level 4

35% level 5

55% level 6 (5% absent)

This extract from the food technology teacher’s log sums up her view of the impact of the investigation on her pupils: ‘They were focused, enthusiastic and motivated... What they have achieved is immense!’

Again the pupils performed much better against the high quality outcomes. In the four targeted areas, commitment was up by 25 to 50% in three groups, confidence up by 25 to 50% in three groups, willingness to take part in activities up by 25% in all groups, and thinking and decision making up by 25% in two groups and 50% in two groups.



Ceramics

Autumn 2005

Group 1

39% level 5

61% level 6

Summer 2006

100% level 6

Group 2

20% level 5

2% level 6

23% level 5

77% level 6

Group 3

27% level 4

73% level 5

9% level 4

91% level 5

Group 4

32% level 4

68% level 5

30% level 4

70% level 5

Group 5

21% level 3

53% level 4

5% level 5

52% level 4

48% level 5

Group 6

70% level 4

30% level 5

24% level 4

67% level 5 (9% absent)

Group 7

10% level 3

67% level 4

90% level 4

14% level 5 (4% absent)

Group 8

39% level 4

61% level 5

38% level 4

62% level 5

Geography

At the start of the year, levels of attainment for the year 9 target groups in geography were 25% at level 4 and 63% at level 5. By the end of the year this had risen to 63% at level 5 and 37% at level 6. One pupil achieved a level 8 as a result of core tasks on Kenya and the river study.

There were marked improvements overall in the pupils' performance against the high quality outcomes in geography lessons. In three out of seven groups, pupils' understanding improved by 25%, while in one group it was up by 50%.

In all eight groups, the vast majority of pupils now understand what they are trying to achieve and have the necessary skills. Confidence and commitment have improved, along with willingness to take part, desire to improve and stamina.

Confidence, control and coordination

The school: Combs Ford Primary School in Suffolk, a community first school for pupils aged 5 to 9

The objective: To improve the coordination and concentration of a group of pupils with special educational needs

The starting point

The school identified 13 pupils in years 1 to 4 with special needs ranging from behavioural difficulties and attention deficit disorder to dyspraxia and muscular dystrophy. All were on individual education plans and some were statemented. Their self-esteem was low and many felt that they weren't good at anything. In PE and school sport activities their control, balance and spatial awareness were poor and they did not think about what they were doing. They took up to 15 minutes to get changed for PE and in many cases needed help with buttons and shoes. Their lack of coordination and concentration carried over into other lessons and their handwriting and drawing skills were particularly poor.

Combs Ford decided to focus on increasing the pupils' confidence and skills by encouraging them to take part in a lunchtime gym trail.

Action

The school trained a teaching assistant to set up and run a gym trail zone at lunchtime, overseen by the PE and special needs coordinators. Trails were designed to meet the pupils' needs and to be suitable for use in different weather conditions.

Each of the pupils was assessed by the special needs coordinator using 12 indicators taken from the county's gym trail pack: balance (walking along a curved wall); basic movement (eg running with a relaxed posture); coordination (catching, throwing and kicking a ball); fine motor skills (eg pencil control, threading); mid-line crossover (eg doing up buttons and laces); self-esteem; spatial awareness; symmetrical activity (eg star jumping); visual discrimination (eg spot the difference); visual sequencing (eg copying patterns); visual tracking (eg reading from left to right without jumping); handwriting. They were also asked to draw a picture of a person.

The pupils then began to use the gym trail four lunchtimes a week for 20 minutes. Working in groups of three or four, they were told what time to be there and were expected to arrive with their PE kit and on time. Getting changed was an important part of the trail: they were given a hoop in which to undress and were expected to get changed by themselves (although some needed help at first).

A circuit of about six activities was laid out, which changed every two weeks. Activities were designed to slow pupils down and force them to concentrate on precision, coordination and control. The first circuit, for example, included throwing a beanbag in a box, walking along a rope, bouncing and catching a tennis ball, pegging clothes pegs on a line, moving a leg front to back and crossing it over left to right, and walking backwards toe to heel. The teaching assistant marked down whether each pupil could perform each activity at the start of week one and again at the end of week two. Each fortnight she met with the PE and special needs coordinators to discuss any areas that the pupils were finding particularly difficult. Together they modified the trail to accommodate these needs, making the new activities more or less challenging.

At the end of the investigation (which lasted one term), the pupils were reassessed against the original 12 indicators. The school wrote to parents to tell them about their child's progress and invited them to come and see the gym trail in action.



Impact

The results of the work were extremely positive, with all of the pupils improving their levels of self-esteem, spatial awareness, coordination, fine motor skills, basic movements and visual discrimination. In addition, 85% improved their balance, symmetrical activity, visual sequencing and visual tracking.

By the end of the term, 10 out of the 13 pupils were given the top score for self-esteem (on a scale of one to five, two jumped from a rock bottom score of five to a one). All were rated one or nearly one for coordination. All of the pupils can now throw, catch and kick a ball in a coordinated way, and they understand how to keep their heads up and use their arms to balance on the curvy wall. Even the youngest pupils are able to get changed independently.

Before the gym trail work, the pupils' lack of coordination carried over into their handwriting and drawing: when asked to draw a person, some of the pictures had a head but no body, others a body but no head, most had no facial details and one pupil drew a hedgehog. By the end of the term, there was a vast improvement in pupils' pictures, which showed more pencil control and greater awareness of the human body. Teachers particularly noticed that the pupils' drawings were much bigger, which they felt reflected their increased confidence about themselves and their bodies. The people they drew were far more defined and had a body with arms and legs and a head with a face.

Many teachers have commented on how the pupils' confidence, willingness to join in and concentration have improved in class. One parent wrote to the school to thank the teachers for increasing her son's confidence, as a result of which he is much more willing to take part in activities outside school.

John's story

John was a shy six-and-a-half year old who didn't want to join in the gym trail, didn't understand what he was supposed to do and was easily distracted. His coordination was poor and he scored mainly threes, fours and fives on the tests in the original assessment, with one being the highest score and five the lowest. His drawing of a person was assessed as being at the level expected of a child of three years and nine months.

By the end of term, John was scoring one or two on everything except tasks such as doing up buttons and shoelaces. His drawing of a person was assessed as being at the level of a child of four years and nine months – an improvement of a year in one term.

At the end of each lunch break, when the targeted pupils had finished the gym trail, it was opened up to everyone else in the school. Initially John would stand back and watch, but the teaching assistant said she could see him twitching with frustration when other children didn't do the activities properly. Gradually he began to edge closer and closer, until finally he plucked up the courage to explain to other pupils, many of whom were older than himself, how activities should be done. The increase in his confidence, knowledge, understanding, commitment and enthusiasm over the term were remarkable.

Better English grades through PE leadership

The school: Dowdales School, a secondary school involved in the PESS investigation as part of the Cumbria Partnership

The objective: To improve the leadership skills and raise the attainment in English of a group of low-ability year 10 pupils

The starting point

A group of low-ability year 10 pupils were finding English hard and were particularly poor orally. Staff were finding it very difficult to motivate them in a lesson last thing on Friday afternoons.

Action

The school decided that the school sport coordinator (SSCo) should work with the group last period on Friday afternoons. The SSSCo observed the class and videoed each pupil doing an oral task as a baseline. She then liaised with staff and prepared and ran six sessions on mini-tennis for the group. These were based on previous leadership experiences they had gained through the Junior Sports Leader Award (JSLA) in PE. Each week pupils had the opportunity to lead various tasks within the syllabus prepared for mini-tennis. Due to the nature of the group, special needs staff were present and developed sentence beginnings for the pupils to use as visual aids during the sessions. In the third and sixth sessions, the group wrote up their own plans for a session based on warm-up, tracking, footwork and the game. Visual aids from the previous week's sessions were posted around the room to help them with their planning.

Working in boy/girl pairs, the pupils then spent a Friday afternoon delivering their plans to groups of six to eight year 3 pupils at a local primary school. An external English moderator went to the school with the pupils and graded their oral skills during the sessions. These grades were then recorded in the pupils' data profile, contributing towards their overall GCSE English grade.

Pupils gave feedback to the rest of the group in other English sessions, further developing their oral skills.

Impact

The year 10 pupils' communication skills developed during the learning sessions and there was a clear improvement in their delivery to younger pupils. They gained in confidence as the sessions progressed and, after hesitant starts, most relaxed into the task. Some even smiled, despite the presence of the moderator!

Pupils took the task seriously and prepared carefully. They were willing to work in boy/girl pairs and some spoke to people for the first time as a result. Their commitment reflected their sense of ownership of the project: they were so immersed in writing their plans for the sessions that they did not even notice it was time for the bell (they were usually chomping at the bit five minutes before!). They were clearly motivated by physical activity on a Friday afternoon and the chance to deliver an oral presentation to a different target audience.

By the end of the project:

- all pupils could answer and ask relevant questions on the subject of mini-tennis and all gave feedback to the rest of the group after their sessions
- some pupils began to use their initiative and develop their own style of delivery
- 18 pupils (out of 21) improved by at least a grade on their previous oral grades (some by as much as two grades)
- one pupil's grade stayed the same and two pupils did not do as well (both achieved between half and one grade less).

Several pupils have gained in confidence and this has continued. Two pupils have been working outside of school time with Scouts and Brownies and have displayed confidence as leaders.

Some of the pupils have now volunteered to help with Saturday morning sessions with primary pupils.

Question marks

The school: Droitwich Spa High Specialist Sports College, a mixed comprehensive school for pupils aged 12 to 18

The objective: To increase the percentage of year 9 pupils in targeted groups achieving national curriculum level 5 and above in PE, science and RE

The starting point

Last year the PE department at Droitwich Spa High carried out a pilot project with groups of year 8, 9 and 10 pupils on Kolbs questioning techniques: a continuum from basic, closed (procedural and factual) questions to open-ended (process or key) questions. Staff soon identified that most lessons were characterised by too few process questions that actually engaged pupils in thinking about and analysing activities. Changing this proved very successful – pupils spoke warmly and enthusiastically about how the project had helped them to improve their understanding, performance and enjoyment of PESS.

As part of the school improvement plan, PE staff delivered a whole-staff training session on their findings. With other teachers expressing interest, the PE team decided to continue its work on questioning techniques by extending the project to:

- the whole of years 8 and 9 in PE
- pilot groups of year 9 pupils in science and RE.

Across the three departments, on average just 11% of questions asked in lessons at the start of the year were process questions. By increasing this figure to nearer 30%, the school hoped to raise attainment and improve pupils' understanding, confidence, and thinking and decision making (all of which were revealed as weaker than expected in an audit of matched high quality outcomes across all three subjects).

Action

The school began by identifying knowledgeable research staff members to lead and develop all aspects of questioning in the classroom. It then went on to provide professional development to help staff review and implement the types of questioning they used in lessons, their relationship to intended learning outcomes and their impact on teaching and learning.

The PE team was the driving force behind the project. Science and RE were chosen as the other two departments to take part in this initial phase because both already had some staff members who were familiar with higher-order questioning techniques. All staff involved were trained by a specialist member of staff and given time to plan and to gather and analyse data. With the help of their training, they developed schemes of work for their subject that incorporated differentiated, higher-order questions and questioning techniques, along with strategies for all teachers to implement learning objectives that included process questions for each lesson.

The investigation was monitored as part of departmental review and the school leadership team's monitoring of intended learning outcomes across the school. Interviews were carried out to gauge pupils' attitudes towards and understanding of questioning techniques. The PE team also tapped into weekly sports council meetings that focused on teaching and learning and on the outcomes of questionnaires. These led to close targeting of groups to take part in the project, including groups of girls whose responses highlighted particular issues that staff felt could be tackled through better use of questioning.



Impact

In its first year, the investigation had a positive impact on two levels:

- on the achievements of the year 8 and 9 pupils in the pilot groups
- on the whole school, which benefited from the new process questioning techniques of staff in the PE, science and RE departments.

Teachers in all three departments more than doubled the original percentage of process questions asked in lessons, reflecting a significant reduction in purely factual and procedural questions. Analysis of video footage revealed that 26% of questions asked in PE lessons were process questions (up 15%), 24% in science (up 13%) and 23% in RE (up 12%). Pupils volunteered positive comments about this change, recognising that the greater use of process questions was helping them to understand the theory underpinning performance: 'It led me to be more independent and think carefully when asking questions'; 'It made me extend my answers, as I had to explain them in more detail'.

This new understanding was reflected in the percentage of pupils achieving level 5 and above at the end of key stage 3. In science, 75% of pupils in the target groups achieved level 5 and above (up by 20% from the start of the project). In RE the improvement was even more marked, with 75% of pupils achieving level 5 or above from a starting point of just 25%. In PE the school met its proposed target of just above 89% achieving level 5 or above.

An audit of the high quality outcomes at the start and end of the year showed the pupils involved in the investigation making similarly impressive progress in the targeted areas of understanding, confidence, and thinking and decision making.

	Understanding (outcome 2)	Confidence (outcome 4)	Thinking and decision making (outcome 7)
PE	82% (up 7%)	75% (up 8%)	63% (up 7%)
Science	90% (up 37.5%)	68% (down 4%)	75% (up 11%)
RE	63% (up 5.5%)	69% (up 13%)	63% (up 16%)

Plans are now in place to roll out the project across the whole curriculum through two or three subject areas at a time.

The link between games skills and handwriting

The school: Hadrian School, a special school in Newcastle-upon-Tyne for 130 pupils with severe or profound and multiple learning difficulties

The objective: To improve pupils' handwriting skills by focusing on games activities

The starting point

All of the pupils at Hadrian School have severe or profound and multiple learning difficulties. As a result, many find writing difficult. The school wanted to see if it could improve pupils' handwriting by focusing on developing their games skills.

Action

The school blocked PE lessons for games to improve their organisation, delivery and standard. This gave pupils daily opportunities to work on their whole body awareness and hand-eye coordination. To support this, pupils took part in daily handwriting practice sessions to refine their fine motor skills.

Break times and lunchtimes were restructured to give pupils focused opportunities to take part in games activities linked to the games scheme of work. Team games and structured group activities in the playground were supported and directed by adults, including external coaches.

When several new pupils joined year 4, the school took the opportunity to explore the link between pupils' gross and fine motor skills more closely. It implemented a basic skills checklist in PE for hand-eye coordination and for handwriting and assessed the new year 4 pupils on arrival.

The pupils then practised a range of hand-eye coordination skills during breaks and at lunchtimes. They also received games and PE skills practice in exactly the same way as the rest of the key stage 2 pupils, through normal timetabled lessons and the use of external coaches. They practised handwriting each day in a diary, but were not given specific tuition.

Impact

Focusing on pupils' handwriting skills at the same time as their games skills paid great dividends. There was a clear link between children's gross and fine motor skills. Pupils' portfolios of work showed an increase in their pace of learning and in the quality of handwriting and hand-eye coordination. In particular, the school saw improvements in their:

- letter formation and spacing
- cutting skills
- drawing skills
- perceptual awareness.

Pupils' games skills also improved. Blocking lessons helped them to remember more of what they had learnt and gave them opportunities to practise specific skills more often. They showed a new ability to play simple rule-based games and to work in pairs and small groups. They started to sustain their attention and cooperation throughout a lesson and became more willing to take turns.

After a term, the new year 4 pupils had made significantly more progress than expected in their hand-eye coordination skills and in other PE areas. They were much more confident and independent, and staff saw them transferring their skills to other curriculum areas, such as cutting, colouring, handwriting and drawing. The quality of their artwork, observational drawings and perceptual images improved significantly. The rest of the year group also made good progress, but the gains in attainment for the new pupils, who had not had the same PE and games experiences in the past, were startling.

Boosting learning through healthy food and exercise

The school: St Leonard's C of E Primary School in Burnley, which has around 250 pupils aged 5 to 11

The objective: To improve pupils' attitudes to learning and attainment across the curriculum by introducing them to a healthier, more active lifestyle.

The starting point

When the new head and deputy head were appointed in 2000, they soon realised that they had a school full of sluggish, switched-off pupils to deal with.

They conducted a survey among pupils and found that 60% of the school population was coming to school on an empty stomach or buying inappropriate food for breakfast on the way to school, such as biscuits and crisps. Pupils were yawning at the start of the day and were certainly not in the mood for learning. At break time they would boost their energy levels temporarily with fizzy drinks, crisps and sweets, before returning to their previous lethargic state. There were just two water fountains for a school of 170 children and pupils had to ask to go out and get a drink of water. In the summer there were long queues for the fountain, so the ones at the back either got in trouble for being late back to lessons or went without.

Action

The school began a breakfast club that ran for half-an-hour from 8.15am every morning and served food such as toast, cereal and crumpets. Sometimes it had a French week with croissants, or an American week with pancakes and waffles. The pupils had access to laptops at the club so that they could do any unfinished homework.

Fizzy drinks, crisps and sweets were banned at break time and a healthy snack club that served fruit, smoothies and toast was launched instead. Staff gave pupils access to water in the classroom by filling water bottles from the drinking fountains at the start of the day and making them available at all times.

To tackle the lack of energy and focus in lessons, the school developed a programme of structured active 'brain breaks' and simple aerobic activity. Bringing the start of the school day forward by five minutes to 8.55am created time for a five-minute aerobic session at the start of every

morning class. This involved teachers leading pupils in a brief aerobic-style session to a pop tune while standing at their desks. As a result, all pupils started lessons with a short, sharp burst of physical activity that got a good flow of oxygen to their brains.

Pupils were obviously not able to sit and concentrate for a whole hour, so the school divided lessons up into bite-sized chunks. After 15 to 20 minutes pupils took a physical break, put down their pens, stood up and moved around. Sometimes they did gentle stretching exercises; if they needed to be more energetic they did some star jumps. They relaxed, had a laugh for a few minutes, then refocused on what they were doing. The whole process was then repeated 15 to 20 minutes later.

The school made sure that the curriculum included learning about healthy lifestyles throughout the foundation stage, key stage 1 and key stage 2 through integrated programmes of science and PSHE and through participation in the Healthy Schools project. Teachers started to talk to pupils a lot about healthy eating and the importance of being active and getting enough sleep.

Impact

Before the school began this work, pupils seemed half asleep most of the time and obviously had not had enough sleep the night before. Concentration would trail off rapidly in lessons. Classrooms were noisy, but it was unconstructive, disruptive, confrontational noise. Pupils' self-esteem was extremely low. They wouldn't look adults in the eye and most of them had low expectations of themselves. They certainly had very little idea of what constituted a healthy, active lifestyle.



Today, the school has an enormous sense of energy about it. Everybody is busy and there is productive, focused noise coming out of the classrooms. The place really buzzes and pupils feel involved and proud to be part of the school.

Pupils love the aerobic start to the day and complain if the teacher does not do it for some reason, saying they are not properly awake. They have even begun to start the day with exercise during the holidays, which is having a trickle-down effect on their parents and siblings.

Most pupils are now able to articulate what a healthy lifestyle means and are much more confident about stating their needs for breakfast, water, healthy snacks, exercise and a decent amount of sleep. Now when they are in the supermarket with their parents, they remind them that they need fruit and vegetables.

Starting school on a full stomach and with a brief burst of physical activity has had a huge effect on pupils' concentration levels and attainment across the curriculum has improved dramatically.

In 2000, the percentage of pupils gaining level 4 and above at key stage 2 was:

- 46% for English
- 36% for maths
- 55% for science.

By 2004, the results had improved to:

- 76% for English
- 71% for maths
- 100% for science.

Unauthorised absences fell from 3% in 2000 to 0.2% in 2004.

Bringing creativity from dance to literacy

The school: St Leonard's C of E Primary School in Burnley, which has around 250 pupils aged 5 to 11

The objective: To generate enthusiasm for creative writing and improve literacy attainment among a mixed class of year 3 and 4 pupils

The starting point

The school had been using high quality PESS for some time to bring about improvements in pupils' behaviour and attitudes to learning. In this project, it hoped to prove that PE and school sport could also have a positive effect on standards of achievement across the curriculum.

Standards of creative writing were generally poor at St Leonard's. Pupils come from quite socially deprived backgrounds with little experience of reading and their creative writing tended to lack imagination. They were limited in their use of descriptive language and their descriptions were often visual (influenced by television). They struggled to describe emotions and found it difficult to come up with ideas. The structure of their stories was weak and their stories lacked a clear beginning, middle and end.

Action

The local authority's teacher adviser for primary PE – who was already working with St Leonard's on innovative PESS projects – suggested that the school should build on work he had done in the past on improving creative writing through dance. He delivered dance training to the whole school and introduced the Lancashire County Council scheme of work. This includes a unit called 'monster dance', which became the focus of the creative writing project.

With support and guidance from the teacher adviser, a mixed class of year 3 and 4 pupils took part in a six-week programme on the theme of monsters. At the start of the project, the pupils were asked to complete a questionnaire about their attitude to writing and were set a typical SATS-style writing task. An experienced teacher and the school's literacy coordinator marked this and assigned each pupil a level.

Each week the pupils had a one-hour dance lesson followed immediately by a one-hour writing lesson. In the dance lessons, the class teacher used music to create an atmosphere and generate an emotional response from the children, helping them to imagine their feelings and express them through dance. The pupils began to talk much more freely about their work, describing how their bodies felt and moved. While encouraging freedom, the teacher placed a strong emphasis on the structure of the dance, establishing a clear beginning in the first week, then building up to the middle and working towards a definite ending.

The follow-up writing lessons built on this dance work, with pupils asked to think back to when they were dancing and remember how they had described emotions and movements. The teacher followed the structure of the dance through the writing: in the first lesson the pupils worked on the setting and opening of their story, building up to a clear ending in the final writing lesson.



Impact

During the course of the six weeks, the quality of pupils' writing improved greatly. The children engaged imaginatively with the task and their stories contained vivid descriptions of the monster's movements and their own emotions. Lower ability pupils said that they 'had something to think about from the dance'. Higher ability pupils said that they were able to close their eyes, imagine they were back in the hall with the music playing and remember how they felt. There was also an improvement in the structure of the pupils' stories, which had a very clear beginning, a build-up of detail, the introduction of a dilemma or problem, a climax, resolution and ending.

At the end of the six weeks, the pupils were set the same writing task as at the start of the project. Their teacher encouraged them to visualise the work that they had been doing in dance and try to express their emotions in their writing. The results showed that the pupils had made the sort of progress the school would normally expect to see in a year, with all but the highest ability rising by at least one sub-level and in some cases two sub-levels.

The school now intends to extend this way of working to all key stage 2 classes. It hopes that once pupils have experienced success and are clearer about what they are trying to achieve in a piece of creative writing, the benefits will extend to writing that is not directly linked to dance.

Megan's story: a sporting approach to SAT success

The school: Skelton Newby Hall CE School, a rural school with just 31 pupils that took part in the PESS investigation as part of the North Yorkshire Partnership

The objective: To raise a year 5 pupil's standards of achievement across the curriculum by encouraging her to lead a healthy, active lifestyle

In year 5, Megan was clinically obese and underachieving. Her end-of-year report specified lethargy as a result of being overweight and unfit as one possible reason for her underachievement. She had gradually gained weight since key stage 1, during which time her maths and writing had stayed at level 3.

Megan's school worked with a dietician, her mother and the school meals service in an effort to tackle the obesity problem. It was pointed out that allowing Megan to have her own fridge in her bedroom to keep fizzy drinks cool was counter-productive.

With a new focus on PE and sport, Megan attended 30-minute swimming lessons throughout the winter and took part in the city swimming gala, competing well and being part of a winning team. She was also in the school football team and played on the winning side in two competitions. She was able to complete a 1.5 mile cross-country course and a 1.75 km orienteering course in reasonable times and, on a week's residential, took part in a five-hour fell walk and spent a day weaseling and squirreling around a moorland crag.

In the summer term, she took part in the school's English Schools Athletics Association (ESAA) activities and worked hard to improve her results for throwing, 80 and 150 metre sprinting, and 600 and 1,000 metre distance events.

At home, she started to go bike riding and walking with her mum. At break time, she ran around a homemade 50 metre track and amassed 12,000km on her marathon challenge card.

Has PE and school sport had a positive effect on Megan? The school certainly thinks so.

Megan's key stage 2 SAT results were:

- science – level 5
- mathematics – level 4B
- reading – level 5
- writing – level 4B.