

Getting Runs on the Board



Stories of successful practice from two years of the Sport in Education initiative

April 2015

Report prepared for Sport New Zealand

Sally Boyd, Rosemary Hipkins, and the lead Sport in Education teachers and staff from Aotea College, Hillmorton High School, Howick College, Kaikorai Valley College, Papakura High School, Queen's High School, Tauranga Boys' College, and Te Kuiti High School



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1. What is Sport in Education?

Sport has generally been promoted for its positive impact on young people's physical health but an increasing body of international evidence suggests that increased participation in sport and physical activity can also lead to improved academic and social outcomes, benefitting students, schools and communities.

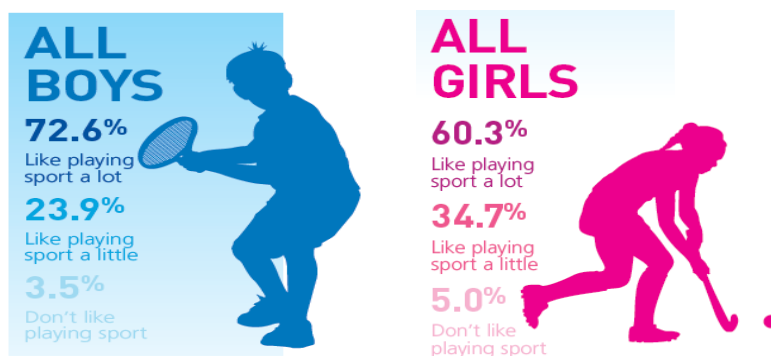
The Sport in Education initiative was introduced by Sport NZ in 2013 to demonstrate the contribution that the context and concepts of sport can make to enhancing teaching and learning for schools and students. Eight schools were chosen to demonstrate that this approach is equally valid across genders, geographic locations, roll sizes and differing socioeconomic environments.

The 8 project schools were:

	Decile	Roll	Type
Aotea College	5	980	Co-ed, Main Urban
Hillmorton High School	4	650	Co-ed, Main Urban
Howick College	8	1850	Co-ed, Main Urban
Kaikorai Valley College	5	600	Co-ed, Main Urban
Papakura High School	1	990	Co-ed, Main Urban
Queen's High School	5	450	Girls, Main Urban
Tauranga Boys' College	6	1800	Boys, Main Urban
Te Kuiti High School	2	350	Co-ed, Minor Urban

The Sport in Education approach uses sport as a context for learning and student engagement leading to improved academic, social and sporting outcomes for schools and their students. High quality sport and physical education have been shown to impact positively on the aspirations of young people, the extent to which they feel connected to their school, the aspirations of young people and the development of leadership and citizenship skills.

Why Sport? The Sport NZ Young People's Survey (2011) indicates 95% of NZ kids like playing sport - it is an ideal vehicle for engaging a large number of our students.



SiE has a number of work-streams that aim to engage students in *learning in* sports-related contexts, as well as *learning through* taking part in sports-related activities and experiences. Learning through sports-related contexts includes using *sports metaphors to strengthen learning* such as focusing on a class of learners as a “team” that support each other to achieve goals, and viewing teaching as “coaching” to get the best out of the team or individuals.

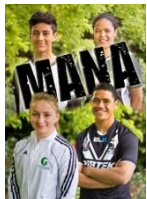
The work-streams are;



- **Curriculum.** Sport in education uses *sport as a context* for learning to engage students and utilises “*active*” *pedagogy in delivering learning outcomes* to students. Combining this with an *integrated, cross-curricular approach to teaching, learning and assessment* creates a powerful learning environment.



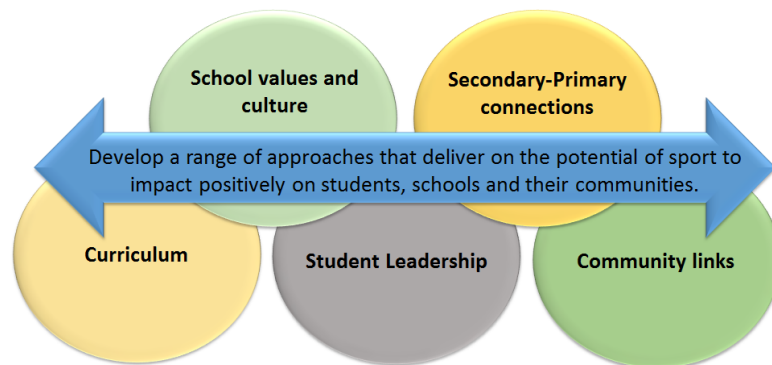
- **Student leadership.** Sport provides opportunities for students across all levels of a school to experience leadership and develop leadership skills – in their own school and in local primary schools, including within formal, qualification based curriculum settings.



- **School culture and values.** Sport is an effective way of translating values for young people and improving the extent to which positive behaviours exist within a school. In particular, visual imagery and sporting stories that illustrate desirable characteristics are powerful tool.

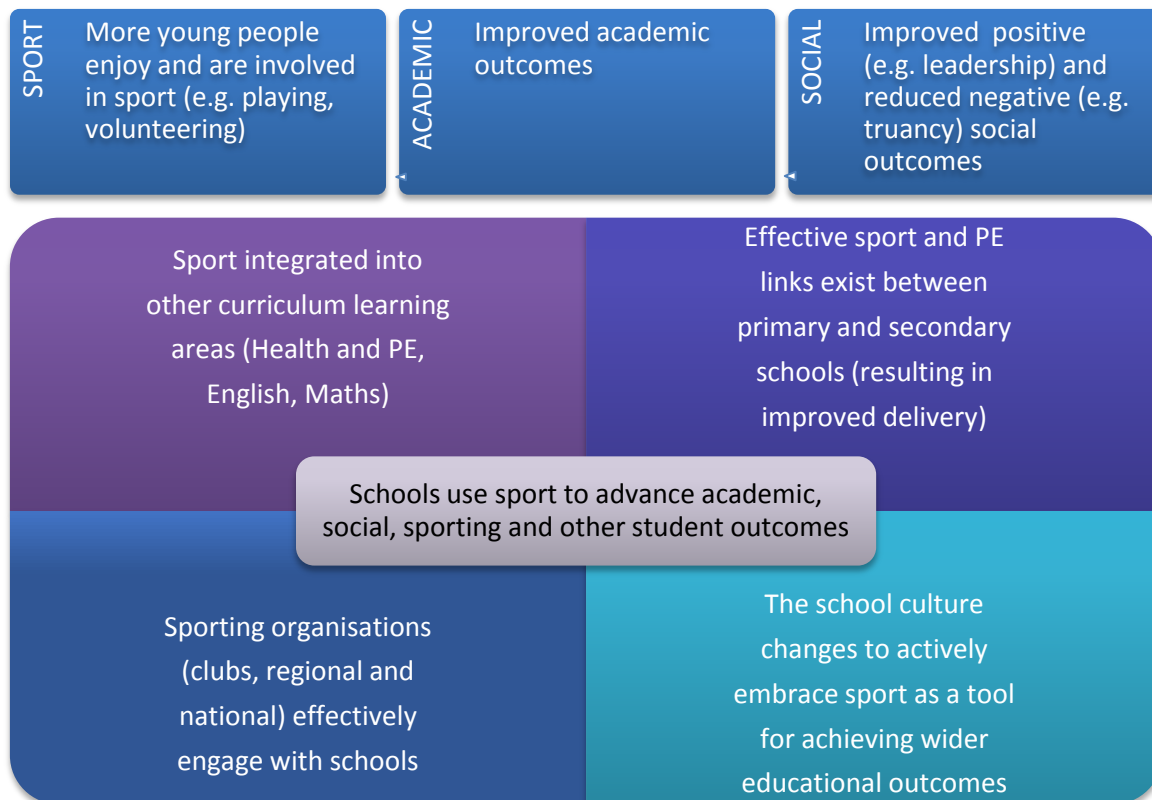
- **Primary school connections.** Sport is an ideal vehicle for establishing strong links between a secondary school and local contributing schools. Opportunities exist for secondary school students to contribute to primary schools sports programmes by providing sporting leadership and running events as well as providing access for younger students to the sporting facilities available at secondary schools.

- **Community connections.** A strong connection between a school and its’ community can be built on the pillar of sport – promoting community access to school facilities and bringing the expertise and passion that exist for sport in the community, parents and clubs, inside the school gates to provide coaching and management for students.



Sport in schools typically already caters well for the Community Connections, and Student Leadership work streams. Much of the Sport in Education project since 2013 has focussed on the Curriculum and School Culture & Values components and there is now considerable expertise in the project schools on how to implement these aspects.

The outcomes sought by Sport NZ and schools can best be outlined as follows:



A complete intervention logic for the SiE approach is available from Sport NZ on request.

2. What has been the impact of Sport in Education?

The evidence collected by schools and discussed at the *stories of success* workshops with NZCER, suggests that SiE is making a substantial difference for students, teachers, and schools. By the end of the second year, and building on their experiences and shared SiE professional learning with other schools, the benefit of having time to reflect on and trial improvements to approaches was evident at the schools. Two years is a relatively short time frame within which to expect to see change. Even so, the range of different data sources that schools collected suggests that many activities were impacting positively on students and staff.

Impacts for students

The success stories shown in this report are activities which teachers considered had made a difference. Data collected about SiE classes are sometimes compared with classes that are not part of SiE or with equivalent classes in the years prior to SiE.

By the end of two years some common patterns appear to be emerging across schools. One of the main initial impacts of SiE appears to be enhanced engagement of selected groups of students with regard to specific learning activities, and in some cases, with school.

Some of the **indicators of enhanced engagement** which were reported across a number of schools included:

- **Increases in attendance rates** and/or **decrease in behaviour incidents** for SiE classes in comparison to similar previous classes or selected comparison classes
- **Higher retention rates** for students in SiE classes compared to past or current students with similar characteristics
- **Higher levels of engagement** as reported on engagement survey items by classes of SiE students in comparison to selected comparison classes, or for particular units of sports-focused work in comparison to non-sports focused units
- Feedback and reflections from students about their interest in and enjoyment of classes
- Anecdotal evidence of students engaging with topics (e.g., asking more questions, staying after class to complete work, or particular students finding a pathway or passion).



Some of the **indicators of improved achievement** which were reported across a number of schools included:

- **Higher rates of task or assignment completion**

- **Higher than predicted class results** in some end-of-topic tests or end-of-year assessments, and greater than expected gains on standardised assessments such as e-asTTle or Progressive Achievements Tests (PATs)
- Student reflections or teacher observations of **increased conceptual understanding** or critical thinking
- **Improved NCEA results** compared to previous students or classes or groups of comparison students (e.g., higher rates of submission of work; larger proportions of a class achieving a particular achievement standard; or higher proportions of merits, excellences, or endorsements).

Some of the **indicators of enhanced student capabilities** reported across a number of schools included:

- Student and teacher reports, and student survey data, which suggested **improved self-confidence** was transferring to new learning experiences (e.g., in public speaking)
- Student reports of **increased sense of belonging and pride** in school (from surveys or from student reflections)
- Teacher observations and student reports of **enhanced learning dispositions** such as self-management or the ability to set and work towards goals
- Student and teacher reports of a wide range of **leadership capabilities** such as relating well to others or problem-solving
- Increases in the range of leadership roles students took on at school or the variety of school and community activities lead by students

Impacts for teachers

Many teachers reported that being part of SiE, and/or a SiE team at their school, was spurring them to think more deeply about school practices and pedagogy. Some of the impacts of SiE reported by teachers, in terms of their beliefs and practice, were an enhanced awareness of:

- the multifaceted nature of student engagement
- how to think like a coach by considering the needs and interests of individuals or groups of students and designing learning activities to suit these students
- how to design learning experiences that are fun, relevant, and engaging and step-off from students' interests
- how learning that involves real-life contexts and experiences can engage students and also assist them to grasp key subject concepts
- how to include more physical activity within learning activities
- how to use sports-related values and ways of working as metaphors to reinforce learning values and to build students' learning dispositions, e.g., a focus on team work and competitions, positioning learning as "training"
- how to create a sense of belonging and a team culture within classes, or for groups of students, in a way that enables the team of students to support each other's learning
- ways of building the capabilities of junior and senior student leaders so they can contribute to, and connect with, their local community.

Teachers were also gaining more knowledge of how to work in cross-curriculum teams to:

- design approaches to support struggling learners and build team-based class cultures

- integrate learning and align subject requirements and assessments, including NCEA assessment tasks for senior students
- use evidence to inquire into their practice.

Impacts for schools

For schools, SiE was supporting lead teachers and other school leaders to strengthen school values and build on other initiatives such as PB4L School-Wide, encourage student belonging through a widening range of extra-curricular activities, focus on good-practice pedagogies and cross-curriculum planning and teaching, and enhance teaching as inquiry and use of evidence for decision-making. At some schools a focus on using sports contexts and ways of working to engage struggling students was assisting staff to take action to address Ministry of Education goals relating to supporting priority learners. Working with their wider community was improving relationships with local primary schools in ways that enhanced senior students' leadership capabilities and also supported younger students' transition.

3. Critical Success Factors – the enablers for SiE in schools.

School leaders who offer support and promote a big-picture vision. Principals and senior leaders enable SiE when they:

- show **strong support for the initiative and model** the ideals of the project in ways that enhance the school culture.
- **mentor and give visible support** to lead teachers and teaching teams.
- **communicate the different facets of the initiative to staff**, and address misconceptions, e.g., that SiE is not only about using sports contexts. It can be about the values and metaphors of team-work and sport and building a team learning culture. It is not about playing more sport in class-time.
- **communicate a big-picture vision to all staff** that shows how SiE is inter-woven with key school goals or other initiatives (such as PB4L School-Wide, or a focus on effective pedagogy or curriculum integration). This sends the message that SiE is an integral part of school practice, and not an add-on.
- **act as an advocate** for SiE when meeting with primary school leaders and education agencies.

The change process is planned. School principals and leaders are better able to create change in their setting when they plan processes that draw on knowledge about how change happens in schools. For SiE schools change is being supported by:

- extra funds that are used to release lead and curriculum teachers and **create time for shared work**.
- **realistic time frames** for change, e.g., a time frame of 3-5 years gives time for teachers to work through cycles of inquiry as they trial, adapt, and improve approaches.
- **starting small** and using processes that ensure the team can learn from experience.
- taking action to **align school structures with SiE**. Two key structures are the timetable and professional learning processes.
- **connecting SiE with school goals, and strategic and annual plans**.
- investing in **building teams of teachers** who can act as SiE champions as well as new leaders. A team approach is more sustainable in the longer-term.
- frequent **sharing of successes and innovations** with SiE staff, other teams, and the wider school community. Stories of students' experiences can be a powerful way to share ideas.

Lead teachers are nurtured and supported. Each SiE school is benefitting from having a leader or a team driving change. Lead teachers are better able to create change when they:

- are motivated and **well-regarded by staff**.
- act as a **champion for SiE ideas** and model new approaches to staff.
- are in a **position of responsibility** and able to work with other school leaders to align school structures and processes to support SiE, e.g., heads of faculty, senior managers
- have **senior leaders** they can go to for **support**.

- are provided with **extra release time** to develop new approaches, and time to meet and work with a cross-curriculum team of staff who are also exploring SiE ideas.

A strong cross-curriculum team is built. A cross-curriculum team is more likely to be able to build practices and champion SiE ideas if the core team:

- are **volunteers** with an interest in developing new approaches. They have a passion for their curriculum area as well as a personal passion for including sports contexts or metaphors within their curriculum.
- **teachers who are enthusiastic about, or experienced in, working with colleagues from other departments** to co-construct learning activities.
- has **extra release time and shared non-contact time** to plan together, reflect on their experiences, and work in each other's classes.
- includes a **mix of experienced senior teachers and early career innovators** who can share their different expertise.
- includes teachers who have strong **pedagogical content knowledge** and are able to bring together knowledge about learning with a focus on sports contexts or metaphors to design learning activities.
- includes a **mix of teachers from different subjects** e.g., maths, science, English and social science teachers all add different lens on learning contexts.
- has a clear **shared focus and reason to work together** e.g., developing integrated units, shared assessments or topics that relate to the same theme, joint building of team work approaches or use of the Teaching Personal and Social Responsibility (TPSR) model ([Hellison, 2011](#)).

School processes support teachers to share ideas, inquire, and reflect. Teachers are more able to develop and consolidate new approaches if:

- **they have time to reflect** on and share their successes and challenges with colleagues. The sharing of success stories can engage other teachers with SiE.
- **PLD structures are aligned** to support SiE, e.g., teachers are part of inquiry teams that are able to meet and work on SiE related inquiries as part of the school's usual PLD structure. Innovation is supported when teachers have the space to plan, gather evidence, and reflect in a community of practice.
- **teachers have time to consolidate approaches** over a number of years, e.g., time to go through at least two cycles of inquiry.
- individual teacher or school SiE inquiries are supported by well-developed **processes for accessing SMS data** to track student achievement and behavioural data.

School practices are changed to align with SiE

- SiE teachers are more likely to create optimal learning environments for students when there is **flexibility to adjust the timetable** to create options to that suit SiE classes and teachers. Core changes include timetabling that enables SiE teachers to teach the same class and/or have shared non-contacts; or locating SiE classes next to break-times to give more flexibility for off-site visits.

- changing school practices, such as banding and streaming processes, can support SiE goals. Non-banded pathways or SiE classes, **based on student interest** rather than ability, are an enabling feature of SiE in several schools.
- **assessment processes which include the flexibility to adapt to class needs** enable teachers to include sports-focused contexts into assessments or exams.

Teachers have access to external support and PLD networks. Innovation is supported when teachers have time to:

- **network and build ideas with colleagues** at other schools (e.g., at shared workshops, through visits to other schools, or via Yammer and other online connections.)
- **attend internal or external PLD** that is relevant to the approaches they are developing.
- **meet with critical friends** who visit their school to discuss their work (e.g., Sport New Zealand staff, workstream leaders, and NZCER researchers).

Authentic and cross-curriculum contexts for learning are found.

- Activities that make use of **authentic contexts engage students** as they provide a real purpose for learning. Seeing this engagement can be a powerful motivator for teachers.

Learner-focused pedagogies and support systems are prioritised. Learning activities are more likely to successfully engage students when teachers think carefully about learners' needs and include learners in the process by:

- **identifying struggling students whose interest in sport can be strategically harnessed** to re-engage them and boost their achievement at school. Focusing on supporting struggling students in Years 9 and 10 can assist these students to stay at school. Providing extra support structures for Year 11 students can assist them to achieve NCEA.
- **providing continuity of support to students**, e.g., homerooms or whānau classes, teachers who teach a class for more than one subject, or access to mentors or academic tutors.
- **enabling students to be active participants** in decision making about learning.
- **developing a class ethos of teamwork** that provides students with access to peer support and builds students' learning capabilities and dispositions.

An interest in SiE is built in subject departments.

- **Supportive subject department leaders** assist SiE teachers to build innovative practice. Spreading SiE ideas within English, mathematics, and PE departments is facilitated when each SiE curriculum teacher is in a position of responsibility in their department, or is actively supported by the SiE lead teacher or principal to work with their department.

4. Stories of success

Stories of success workshops

During November and December 2014, two NZCER researchers visited each SiE school for half a day to hold a *stories of success* workshop with the key staff involved in SiE. They developed a workshop format that drew on ideas from two methodologies: the Most Significant Change approach (Davies & Dart, 2005) and Mediated Conversations (Cowie & Hipkins, 2014). Both these workshop processes are a way of gathering stories that show the impact of an initiative from the perspective of key stakeholders. The processes can have multiple benefits including acting as a professional learning experience for the teachers who take part as they engage with, and contribute to, the stories from their colleagues. Another benefit is that the product from these workshops is a series of stories that have been shared by teachers for an audience of their peers. Compelling narratives from people who have trialled ideas are one effective way of sharing practice and innovations (Bentley, 2010).

During each workshop, participating teachers were asked to share an example of effective practice relating to SiE that stood out for them. They were also asked to share any evidence they had collected that indicated effectiveness. These discussions were recorded. After the workshops, teachers used a common template to write a short summary of their story. This was sent to NZCER who then used the workshop discussions and teacher notes to develop a draft version of the stories. These drafts were reviewed and amended by the schools to produce the final versions included in this report.

Introduction to the school success stories

The stories from each school are presented as a group so that the reader can see how SiE is being experienced at each school and by teachers from different subject areas.

During the workshop at each school, a few themes emerged about the focus of this school and the way teachers were working. These themes are briefly discussed in the introduction to each school and woven within the stories.

Each story briefly describes an activity or learning experience designed by a teacher or a team, and the main aim of this activity. The section on impacts gives the reader an idea of how each activity is contributing to enhancing student learning. This section also shows the data sources teachers drew on to inform their judgements. The next steps and reflections section provides the teacher's suggestions about how the activity might be further enhanced and/or summarises some of the tensions and learnings gained from the experience. The images included in some stories were provided by each school or taken with permission from the school website.

It is important to note that the 8 SiE schools are developing many different activities and ideas in relation to the five different workstreams. Many of the approaches designed by schools meet the goals of more than one workstream. For an idea of the workstream each story relates to, see the tags at the bottom of each story. A short description of each tag is provided below. These stories are intended to give the reader a flavour of each school's experiences and successes. They are not intended to be a complete summary of SiE activities at each school.

Tags relating to curriculum learning areas and assessment

- **PE:** *learning activities involve physical education and health content or ways of working*
- **English:** *learning activities involve English content or ways of working*
- **Mathematics:** *learning activities involve mathematics content or ways of working*
- **Science:** *learning activities involve science content or ways of working*
- **Social sciences:** *learning activities involve social sciences content or ways of working (e.g., history)*
- **Integrated learning:** *learning activities makes connections between the content or knowledge base of two or more learning areas*
- **NCEA:** *learning experiences support students to gain credits towards NCEA assessments*
- **Pathways:** *classes based around areas of interest to students offer pathways to the senior school or post-school options (e.g., sports leadership classes)*

Tags relating to design of learning

- **Sports-themed learning:** *learning activities include a focus on sports contexts*
- **Active learning:** *students learn through real-life experiences or physical activity*
- **Team learning:** *students learn through activities that involve group or team work*
- **Community/primary school connections:** *learning activities make connections outside school with local community groups or primary school students*

Tags relating to building students' capabilities

- **Student leadership:** *learning activities aim to build students' leadership capabilities*
- **Learning dispositions:** *use of sports' analogies to assist students to develop behaviours that enable learning such as perseverance (e.g., coaching students to see efforts as "practice" for building mastery)*
- **School values:** *activities aim to support students to demonstrate the school values*

Aotea College



Why Sport in Education?

At Aotea College many students are able at sports and sport is a strong focus for the local community. The school has been part of the PB4L School-Wide initiative since 2013 and has settled on four values: manaakitanga, perseverance, excellence, and sauni (a Samoan value that means being alert and ready). These values resonate with the Sport in Education initiative and school leaders were keen to leverage these synergies.

For this school, key priorities include building a strong sense of community, a focus on raising achievement for target students, and provision of a responsive curriculum. Creating an integrated sports class was seen as one way of building stronger learning relationships for Year 11 students who had been identified as at risk of not gaining an NCEA qualification, and creating a more coherent learning programme for them **(see stories 1 and 5)**.

In 2014, the challenge of creating coherent learning extended beyond this class to encompass exploration of integrated learning across a whole cohort (Year 10), using the Commonwealth Games in Edinburgh as an integrating context **(see stories 3 and 4)**. The wider aim is to have all students feel they belong at school, and see themselves as capable of ongoing learning.

Another focus is providing authentic contexts for junior and senior students to demonstrate their leadership capabilities through activities such as seniors running school events and teaching juniors the school haka **(see story 2)**. A focus on Aotea students coaching and supporting events at local primary schools is also part of the mix **(see story 6)**.

Aotea College is a coeducational, multicultural, decile 5, year 9-13 school with a roll of around 900 students. The decile rating obscures the fact that the school serves different populations. Some students come from the large and still rapidly growing Aotea subdivision. Others come from less prosperous areas in the Porirua Basin, which has large areas of state housing.

Building learning communities: Working in teams

The following 'success stories' were shared by teachers at Aotea College to represent the flavour of Sport in Education as it is playing out in their school. At this multicultural school, fostering strong engagement and a sense that learning efforts will be rewarded with success are priorities for all learners. The school is working hard to build a sense of whānau and supporting each other.

Story 1: Creating a community of learners in a Sports Studies class

Sports contexts and the "team" environment of an integrated Sports Studies class were used to improve engagement and achievement for Year 11 Māori and Pasifika students, with a specific focus on boys

What was the main aim?

A Level 1 Sports Studies class was created to provide a sport-contextualised teaching and learning programme for Year 11 students who were seen to be at risk of not gaining Level 1 NCEA. The teachers aimed to have all students achieve Level 1 literacy and numeracy by the end of the year. The aim was to provide a broad, deep learning programme which could increase the number of endorsements students received in NCEA English, Mathematics, and Physical Education. They wanted to ensure that all students were still at school at the end of the year, and were motivated to return for Year 12 studies.

What learning activities were involved?

The students were together for 12 hours per week, with two health/PE teachers covering six hours each. One taught a Mathematics/PE combination. The other taught an English/PE combination. The ratio of male/female students in the class was 2:1 and 21/23 students identified as Māori or Pasifika.

The teachers were given an hour a week for planning and coordination. They experimented with using sports-focused learning contexts and integrating NCEA assessment tasks (i.e. one task was used to assess specific aspects of two learning areas). They also set up a common repository in Google Docs, where they could share ongoing reflections and any resources they created.

Sporting analogies were used every day to reinforce class culture and expectations, and to contextualise the teaching and learning. Throughout the year the teachers maintained a strong focus on being a 'team', although as the year went on students began to refer to themselves as a family or whānau. The teachers noted that the whānau environment which evolved was hugely valuable to some students in providing stability.

How did the teachers know these activities had an impact?

Students came into the Sports Studies class with the belief that being there would help with their achievement. Both teachers and students noted that students' confidence increased, just from being in the class.

Students engaged with their learning and enjoyed the team philosophy, even though this became a bit competitive between the boys and the girls as the year went on. The sport-related resources made it easier for the students to make connections to, and be interested in, their learning. The routine use of 'team' and 'coaching' metaphors, combined with the creation of a tight whānau group, also served to keep them on track.

Attendance was slightly higher (87.4%) than for a matched group of Year 11 students (84.6%). All students were still at school at the end of the year (two had left from the matched group without achieving NCEA level 1). Referrals for pastoral issues were almost halved compared to those for the same students in 2013.

All students in the Sports Studies class achieved NCEA level 1 literacy, compared to 21/23 in the matched group. They were also more successful in gaining NCEA Level 1 numeracy (22/23 compared to 17/23 for the matched group) and in gaining the 80+ credits required for an overall NCEA award at level 1 (Sports Studies class 20/23;

"In the past I have not been very good with schooling but when I came to Aotea and was introduced to Sport Studies everything changed. I really enjoy school and complete all my work." (Student)

"Another positive is the way work and assessments are given, in a sporting context. With everyone being into sports, it makes work more fun and easier to understand." (Student)

matched group 15/23). Almost half the Sports Studies class (11/23 students) had gained endorsements for internally assessed achievement standards in PE by the year's end (2 with excellence and 9 with merit).

Reflections and plans for the future

The teachers noted that the 2:1 male to female ratio made it very difficult to ensure that boys did not dominate the class. In 2015 they will aim for a better gender balance. Both teachers noted that creating the integrated course and working towards NCEA assessments in the non-PE parts had been a steep learning curve. They felt they would be able to strengthen many aspects of the course when they taught it for a second time and they now had a better idea of how to integrate internal assessments, which would free up time in the final term for examination preparation.

Tags: *Mathematics; English; PE; NCEA; integrated learning; sports-themed learning; team learning*

Story 2 – 'Aotea Games' for Year 10 students

A very successful day of 'Aotea Games' marked the completion of three-weeks during which Year 10 learning in different classes was centred on the context of the Commonwealth Games

What was the main aim?

The timetable was suspended for one day so that Year 10 students could participate in a day of games and activities to mark the completion of a unit of cross-curriculum work with a focus on the Commonwealth Games (see stories 3 and 4). Teachers wanted students to celebrate being a part of the Aotea College community, to reinforce the school values and to bring the learning over the previous three weeks together in a practical setting.

What learning activities were involved?

Students were encouraged to participate in at least two activities, which they had selected prior to the day. Sports activities included ki o rahi, dodgeball, rugby sevens, netball and rowing. Non-sporting activities included pavement art, a general knowledge quiz, and a technology challenge. Year 11 students led all sports activities.

The games started with an opening ceremony that included a haka competition. Students had been learning Kapa o Aotea in Health/PE during the cross-curricular unit. This learning had focused on the school's values, which were also a focus during the games. During the day coupons were given out by teachers and Year 11 students to acknowledge the demonstration of these values, with a prize coupon drawn during the closing ceremony. The Year 10 technology class had made trophies for the prize-giving. The closing ceremony also featured guest speaker Te Huinga Reo Selby-Rickitt, and a performance from the Aotea College Pasifika Beats band, Jah Mon Fever, with the students joining in. The Year 10 students gave an impromptu performance of Kapa o Aotea as a sign of respect for the guest speaker.

How did the teachers know these activities had an impact?

Both students and teachers judged the day to be highly successful and they hope to include more learning areas next year. Teachers aspired to have all Year 10 students participate in at least one of the Games activities, and they did.

The Games provided an opportunity for the Year 11 students in the Physical Education classes to demonstrate leadership. They could work towards PE AS 1.8 (taking action). In 2013 79% of students achieved the standard, but in 2014 94% did so.

"We don't do formal stuff that well. This was semi-formal and we nailed it. We don't do that enough." (Teacher)

Students in the Sports Studies class were able to use their experiences from the Aotea Games to write a report used to assess their formal writing (English AS 1.5). This standard was achieved by 61% of students in the Sports Studies class compared to 55% of students in the top band English 101 class. (Students in other classes used different contexts.)

Performance data generated during the games was used to assess students' ability to use bivariate data (mathematics AS 1.9). Again other classes used different contexts. This standard was achieved by 52% of students in the Sports Studies class compared to 88% of students in Maths 101. However the success of the Sports Studies students is more apparent when compared with another lower stream class, where 32% gained the standard.

Reflections and plans for the future

The teachers hope to repeat the day and get more buy in from more departments. They noted that it would be good to work more closely with Performing Arts especially as this was a great opportunity for students to perform and to showcase their talent.

Some teachers also noted that the Year 11 students needed more time to prepare aspects of their leadership approaches before the event, especially being more specific in giving feedback about values they had observed when they gave out tokens.

Tags: NCEA; integrated learning; sports-themed learning; student leadership; school values

"Make the day longer - don't try and squeeze it in one day; then more people would do more events." (Student)

Story 3 – Mathematics in a Commonwealth Games context

During the cross-curriculum unit, centred around the Commonwealth Games, all Year 10 mathematics classes worked towards gaining their first Level 1 achievement standard

What was the main aim?

The whole team of mathematics teachers used this unit as an opportunity to explore the potential of cross-curriculum thematic learning to engage and extend students. At least some of the learning they chose was not 'new' for many students - the intention was to step up the learning demand, from Year 10 to Year 11, as one precursor to participation in NCEA.

What learning activities were involved?

All the Year 10 classes (seven teachers, eight classes) used a Commonwealth Games cross-curricular focus to link number and statistics, generating data that students could use in the statistical inquiry cycle. During the first week of the unit, students investigated a budget to travel to the Games in Edinburgh. The predominant focus was the number strand.

The second week was devoted to a statistical inquiry. Students took part in sporting events that simulated actual competition activities (e.g. vertical jumps represented the high jump). Over-arm beanbag throws, standing jumps and skittle runs were also used. Over two periods, students participated in all four events on a rotational basis. All the data was captured on one spreadsheet and cleaned to remove glaring outliers (e.g. very tall students who didn't put in their best effort would make it harder to investigate height/achievement patterns).

The data was used for an activity assessed using a Level 1 achievement standard entitled 'Investigate bivariate numerical data using the statistical enquiry cycle'. The topic of bivariate data had been taught early in the year and was revised before students completed the assessment.

How did the teachers know these activities had an impact?

The data gathering phase of the unit stimulated high engagement and a sense of competition among the students. Some of the boys, especially, went "all out" on the four physical activities.

The Level 1 NCEA standard on bivariate data was used to assess students' learning (i.e. they were assessed at Level 6 of the curriculum). Students drew on data collected in the Commonwealth Games context and 51 % of the cohort successfully demonstrated the necessary understanding to reach the standard required. The teachers had not previously assessed this standard in Year 10 but will do so again.

Students said they enjoyed the process of data collection. They were able to link the mathematical concepts with

the data they had generated but they also said they wanted more time to develop the work in the unit.

Reflections and plans for the future

Teachers could compare their experiences of teaching the unit earlier in the year and in the Commonwealth Games context. They noticed that in this familiar context, and where they had gathered their own data, relationships between data sets were easier for students to understand and work with. The teachers also realised they needed to do more to prepare the students for NCEA-style assessment. Next time they would use actual exemplars of student work to discuss the characteristics of work that met the specified NCEA standard.

Tags: *Mathematics; NCEA; sports-themed learning*

Story 4 – English in a Commonwealth Games context

A cross-curriculum Year 10 unit centred around the Commonwealth Games generated multiple opportunities to integrate aspects of English with the learning in other subject areas

What was the main aim?

A group of English teachers were keen to make meaningful connections between the learning they planned and the English demands of tasks planned by other learning areas for inclusion in the Commonwealth Games unit. The faculty leader for English set up meetings with colleagues from other departments to discuss how they could integrate aspects of their curriculum areas with English, with the aim of developing a holistic approach to the unit. The teachers hoped that students would see that skills learned in one subject were transferrable to other subject areas.

What learning activities were involved?

Examples of integrated tasks the teachers co-developed were:

- Using learning about athlete's nutrition and foods unique to a country to create a cook book with recipes from participating countries. Students gathered the information in food technology and crafted the writing in English, with an emphasis on fitness for purpose and audience.
- Producing an information leaflet in English that described an athlete's village or was a tourist information leaflet for the games' venue. This acted as a precursor to the formal assessment, and writing skills were taught and revised prior to the assessment.
- Producing a poster to promote the Aotea Games event (**see story 2**).
- Using the cost analysis completed in maths (**see story 3**) to write a persuasive letter requesting sponsorship to attend the games. This task provided the overall assessment activity for the unit, with the knowledge and understanding gained in maths supporting full participation in the writing task.

The English teachers introduced a competitive element, grouping students in 'countries', and awarded points to these teams for various activities, and for demonstration of the school values, which were also discussed throughout the unit and related to the learning. (What do these values mean? How can athletes use these values? How can we show these values in this competition?). At the end of the unit the teachers presented medals to the winning 'countries' in a special ceremony.

How did the teachers know these activities had an impact?

Both teachers and students noted that it was beneficial to see how activities done in one subject potentially worked as part of a wider whole. The competitive element generated good 'buy in' from the students and some groups were seen in the library at lunchtimes working on their homework together so they could get points for their assigned country team.

Most students achieved at the curriculum level expected of a Year 10 student, with a few achieving at a higher level. The few students who did not achieve either had poor attendance, were working below stanine 3, or were

ESOL students.

Most students said they enjoyed this unit of work and liked the cross curricular approach. They also enjoyed working with people they normally wouldn't work with. The students had a sense of pride in achievement when they saw their own work (posters) advertising the Year 10 Aotea Games.

Tags: English; NCEA; sports-themed learning; integrated learning

Story 5 – Individualising the curriculum for NCEA success

An authentic sports context was used to re-engage a small group of students who were at risk of not completing the work they needed to do to gain NCEA credits in media studies

What was the main aim?

Early in the SiE project the lead teacher offered to work with any teachers who were interested in exploring ways to incorporate sports contexts into their subject area. A media studies teacher contacted her to ask for help with a student who was disengaging from school and falling behind with Level 3 NCEA assessment requirements. The unit of work they devised was designed to re-engage this student, and others like him, to keep them on track with their learning and assessment.

What learning activities were involved?

With the support of two teachers who were the school's First XV coaches, the media studies and PE teachers designed a unit of work that connected the two subject areas and enabled the student to showcase his passion for rugby at Aotea. This student helped form a group of students (two of the three were PE students) who planned and filmed a documentary, *Behind the First 15*. The focus was the school rugby team preparing for a big match and reflecting on what it means for them to represent their school.

How did the teachers know these activities had an impact?

Staff commented that the group involved in making the documentary (3 students) had worked incredibly well together, and with other people, to finish the work. The media studies teacher observed that the targeted student was motivated to complete all assessments whereas before he had been at risk of not doing so.

All three students gained the three media studies achievement standards used to assess their work. This gave them each 13 credits. The work of this group also supported about 12 other students to gain credits as they analysed the features of the documentary for a different NCEA achievement standard.

Behind the First 15 has been played at school—with a good response from staff and students. School leaders consider this documentary to be a great product that the school can use in the future as it demonstrates both sports values and the school's PB4L values in action.

Tags: NCEA; sports-themed learning; integrated learning

Story 6 – Building leadership and community connections through tuakana–teina relationships

Building a range of connections between older and younger students strengthens the older students' leadership capabilities and the school culture

What was the main aim?

Providing a wider range of opportunities for student leadership is a priority for Aotea College. Over the course of the first two years of SiE they have done this in a range of ways.

What learning activities were involved?

Examples of leadership opportunities in 2014 include:

- A Year 13 PE class completed a 'Leadership Through League' unit. Over the course of the unit, students coached children from local primary schools, culminating with a tournament between the schools. The children's participation was supported by local league stars.
- A second Year 13 PE completed AFL 'Coach the Coaches' with a local primary school.
- An Aotea teacher now attends meetings of both Porirua Primary Schools sports clusters. He finds out what Aotea students can do to support upcoming events, and the school provides Year 10 sports leaders to officiate at these events (cricket, netball, athletics, ki o rahi, hockey).
- Stronger tuakana–teina bonds have been forged within the school when Year 13 students teach junior students the school haka, Kapa o Aotea.

How did the teachers know these activities had an impact?

From the Year 13 PE class who studied Leadership through League in 2014, 72% of students achieved AS 3.8 (Leadership). From the Year 13 PE class who studied Coach the Coaches (AFL) in 2014, 71% of students achieved 10 unit standard credits towards their NCEA level 3.

More students from the participating primary schools are now coming to Aotea College: the connections made with college students seem to have helped their transition to secondary school.

Staff and students see learning the haka as a very successful experience which has continued to build senior students' leadership abilities and strengthened the school culture. There is an example of its spontaneous use in **Story 2**.

Year 10 students who took part could clearly describe the impact of their learning experiences on their personal development, including the strengthening of their leadership skills, and their self-confidence and willingness to ask questions in class. Given the public nature of being a referee they knew they had to see it through: *"Once you are out there you have to stick at it."* This taught them the value of not giving up even if something is hard at the start.

Tags: student leadership; primary school connections; school values

"I felt proud as heaps of parents came up and said you did a good job. It was my old school—it feels good going back." (Year 10 student)

"Everyone was yelling at me, I said I've got the whistle ... do you want to do the job? ... Outside I looked calm, but inside I was going crazy ... now I feel good I stuck up for myself." (Year 10 student)

Hillmorton High School



Te Kura Tuarua o Horomaka
Hillmorton High School

Creating Better Futures

Why Sport in Education?

The principal of Hillmorton High School (HHS) saw a strong fit between the Sport in Education (SiE) project and the school's pedagogical goals. Like many other Christchurch schools, post-earthquake stresses have contributed to attendance and engagement challenges for some groups of students. (As just one example, there are significant areas of post-earthquake poverty nearby, so the school runs a breakfast club on Fridays.) The principal saw the focus on sport as one proactive way to contribute to community building and address the complex issues facing the school and the surrounding area.

At the start of SiE the principal was aware of the possibility that the school would expand to take in students from the adjacent intermediate school. In 2013, once this change was confirmed, there was an intensive time of planning for new buildings at Hillmorton High School. Staff worked to reorganise school ways of working to support the younger students who joined the school in early 2014.

The principal saw the change to a Year 7-13 school as an opportunity to expand the school's focus on providing clear pathways for students, developing modern learning environments, and using specific pedagogies to support purposeful and engaging learning for all students.

Collectively teachers at Hillmorton have been exploring Understanding by Design, a form of curriculum planning that works backwards from outcomes to how these might be achieved. This model has a focus on integrated learning, so the teachers investigated what this might look like in Years 7-10, and how they might better engage students and develop and strengthen student inquiry pedagogies. Staff recognised that sports contexts could be readily adapted for all these purposes.

Working as a tight team: creating greater coherence for both teachers and students

In 2013 core subjects for one Year 9 class (PE, English, and Maths) were taught by a "tight team" of SiE teachers. They worked together to build their awareness of how their subjects could fit together and create greater coherence in the students' learning experiences. The teachers planned and coordinated the overall programme of work, drawing on sports contexts and metaphors to engage students and

About Hillmorton High School

Hillmorton High is a coeducational school in Christchurch with a multicultural roll of around 750 pupils.

In 2014, changes following the large earthquakes in Christchurch saw the school take in the Year 7 and 8 pupils from the adjacent intermediate to become a Year 7-13 school. In the 2014 review of school decile ratings it dropped from decile 5 to decile 4.

There is a strong culture of sport in the school and students enjoy success across a wide range of sporting codes.

"Sport in Education gives more teeth to what this school is doing as a whole" (Principal)

motivate them to become more self-directed in their learning (**see HHS stories 1-4**). This model morphed in 2014 into a Year 10 Sport in Education class. Social science and science teachers joined the team. In a city where there has been considerable teacher (and student) churn in the aftermath of the earthquakes, the team is a highly strategic mix of more experienced and early career teachers.

In 2013 and 2014 the SiE teachers had shared non-contact time, once a week during the school day, to plan together, to develop a more integrated and coherent curriculum. Forming a SiE-focused professional learning team enabled them to use a PLD time slot to work together on their teaching inquiries relating to their SiE classes. They worked closely together to build new approaches and share ideas.

Student leadership

Using sport as a means to reach out to local primary schools has been another SiE focus. In 2014 the Year 11 to 13 PE classes shared a common timetable slot during the last period in the day on a Wednesday. This enabled these students to travel to local primary schools to provide leadership in a range of physical activities, including a range of sports. Students also run health promotion activities at their own school (**see HHS story 6**).

Impact of the Sport in Education class

To monitor progress of students in the Sport in Education class, a sample of 50 students from other classes was drawn up. At the start of the year there were 25 students in the Year 10 Sports Studies class. Of the comparison sample, 25 students had achievement results higher than the sports class, and 25 had lower results. The table below shows a sample of academic results gathered using this strategy.

Year 10 results	2014 SiE Class	Comparison sample	Overall Year 10
MATHS – Average grade over 5 units of learning throughout the year (1-5)	3.41	2.92	3.13
SCIENCE - Average grade over 4 areas of Science	3.50	3.41	3.55
ENGLISH – End of year examination average grade	3.49	3.22	3.49
SOCIAL STUDIES – Inquiry unit average grade	3.96	3.09	3.53

Engagement survey data showed that the SiE class had maintained a high level of engagement across the year whereas the comparison students conformed to the more usual pattern, which is a decrease in engagement by the end of the year. As the next table shows, the SiE students were also less likely than the comparison students to be referred for poor behaviour.

2014 Referral Data	Sports Studies (SiE) (25 students)	Comparison Student Group (50 students)
Term 1	0	4
Term 2	16	35
Term 3	6	54
Term 4	0	6

This initiative has been so successful that there are plans to expand to two Year 10 SiE classes in 2015, and to continue the similar class in Year 9. Late in 2014 there was more demand for this Year 9 class than there were places. The school was still debating how best to select among the applicants. The school leaders recognise that this model has really helped some “kids to find their element”. They are exploring the potential to introduce a similar pathways-focused arts education course.

The following ‘success stories’ were shared by teachers at Hillmorton High School to represent the flavour of Sport in Education as it is playing out in their school.

Story 1: Bringing statistics alive for students

Students relate a range of measurements to real people and events when learning statistics

What was the main aim?

In this example, an early career teacher didn't initially have an explicit aim related to SiE. However she quickly saw how engaging it could be to use 'real' data, especially in a sporting context to which students could strongly relate. She then began doing that in a more purposeful way. Students also began to collect data for themselves.

I put "The Heights of the Boys' Hillmorton Basketball Team" on the board. I started putting data up...making it up. The class copied this down and then I heard 'Miss J, the tallest must be [student] isn't it?' The class then started erupting in talk of who was the shortest and who was the tallest". (Teacher)

What learning activities were involved?

In a statistics unit Year 10 students were working out the median, mode and range, using invented data (see quote above). Students were highly engaged because they could relate the data to a real team and they completed the work quickly.

Students requested that any further data they used also related to real teams, including international teams. The teacher researched the heights of the All Blacks, and the weights of New Zealand's weightlifters at the Commonwealth Games. She then edited these datasets to make sure they clearly showed concepts such as outliers that the students needed to understand. She also supported students to begin to collect their own data on different sports teams.

By the end of the topic the students were well equipped to complete all the parts of a full statistics inquiry. Tests throughout the unit were all based on a sport of some kind and a set of data that was interesting to the students.

How did the teachers know these activities had an impact?

The teacher said that use of sports contexts made students want to do the required work. They readily understood the intended learning because they could relate the statistical procedures to a real context. Assessments and tests showed that students were able to retain the statistical concepts and apply them to the problem at hand.

The engagement factor soared through the roof, just by this one example. It showed me the importance of the connections that can be made with their interests and how this can benefit their learning. (Teacher)

An end of year test included a non-sports context. The teacher was expecting some students to have difficulty generalising their learning to a different context but most students passed the test. In total, 71% of the students gained an "achieved", with 25% exceeding this level.

Even the smallest example you use in class can be influential to students! (Teacher)

Reflections and plans for the future

For this teacher, these experiences have cemented the importance of using engaging contexts as often as possible. She has plans to continue to find new engaging contexts for other classes.

Tags: *Mathematics; sports-themed learning*

Story 2: Peer learning in 'teams' in science

Some students worked as 'coaches', within the overall metaphor of being a sports team, to ensure that everyone understood challenging science ideas

What was the main aim?

In a mixed ability class some students needed more support than others to learn particular science topics. Remedial work was needed by a number of students. Students who had already mastered the learning took on the role of 'coaches' to support those who needed more help.

What learning activities were involved?

Together the teacher and students developed roles for peer learning, based on the metaphor of a team (manager, coach, captain, team members). Criteria for each role were then developed (e.g. the coach assisted other students to learn the content and encouraged them to practise it).

The teacher then used the results of a formative assessment to split the class into four groups. Three groups needed help to understand one or more of three specific learning objectives. The fourth group comprised students who had already demonstrated competency for the learning objectives. The students in the "competent group" then chose which of the other three groups they wanted to work with as managers and coaches. Within the three "teams" the students selected a captain.

The lesson was structured to include a practice, a practice game, and then a final game. In the practice round, team members worked in pairs on pre-prepared flash card games, with encouragement and help from the coaches. Once the manager felt they were ready they played a memory game using the terms learnt during practice round. Then, for the final game the pairs competed against other pairs from the group to trial their knowledge under pressure.

The teacher has used this approach several times to assist students to grasp concepts that might be difficult. For example teams supported each other to understand force and motion in physics using basketball (NBA) as a context. In the last term of 2014 student teams explored chemical reactions.

How did the teachers know these activities had an impact?

The teacher said that the coaches and managers reported improvement in level of understanding within their teams. They enjoyed teaching and helping their peers to learn. In subsequent lessons students took it upon themselves to assist others, or ask others for assistance.

Results of an assessment showed that the students had increased their understanding of the targeted concepts.

"The students loved it. The 'team members' enjoyed being 'coached' and 'managed' by their peers." (Teacher)

"This whole process meant that I was able to get around groups and individuals much more quickly and frequently to assist as well." (Teacher)

Reflections and plans for the future

The teacher did not think she could have done this kind of activity at the start of the year. A constant focus on team building throughout Term 1 and 2 had "gelled" the class so that they were at a level where they could work successfully in peer learning teams.

Plans for the future included placing more emphasis on student reflection after activities. The teacher thought this would assist students in being clearer about their own areas of strength and weakness, as well as allowing her to make adjustments where necessary. She also planned to collect data on students' team work capabilities, as it was important to map students' successes.

Tags: Science; team learning

Story 3: Equality rules - Igniting inquiry in social studies

Year 10 students were highly engaged in a unit that explored social justice issues in rich sporting contexts

What was the main aim?

At the beginning of the year, students in a Year 10 class had been “reluctant inquirers”. The teacher hoped that choosing a topic area with the potential to engage them emotionally would motivate students to put the necessary effort into their personal inquiry topics. She wanted to encourage students to “dive into the topic” and develop the background needed to form good questions.

What learning activities were involved?

The unit began with an exploration of the movie *Remember the Titans*. Starter activities aimed to encourage students to identify inequalities. Themes addressed in the movie include prejudice, the integration of schools in America in the 1970's, racism in the sport of Gridiron, the value of team work and the role that communities have in this, including the broader themes of the growing movement to counter racism across the globe.

The teacher then moved the focus to exploring inequality in media reports of sports played in NZ. Students analysed newspaper items to investigate coverage by gender, and the nature of the stories about males and females that they found. Then students explored inequality within their own school, and specifically the sporting opportunities available to male and female students.

Keeping the focus on sports contexts, students then looked at issues surrounding sports clothing, for example the use of sweatshop labour in developing countries and the huge earnings potential of sports people in some sports codes if they promoted clothing made in sweatshops.

Students then developed and pursued a personal inquiry question related to a sports-related social justice issue of their own choosing.

“We looked at sweatshops and how they produce gear for companies such as Nike. That gripped them straight away. They are really interested in inequality” (Teacher)

How did the teachers know these activities had an impact?

Compared to earlier topics, the students produced better inquiry questions, worked more steadily on their inquiries, produced more detailed reports, and the teacher noticed more evidence of critical thinking. They also got better assessment results. Whereas 52% of students had achieved at or above the standard in a previous inquiry, this time 68% did so.

Reflections and plans for the future

The social sciences teacher, and the other staff in the SiE team, could see how successfully a well-selected movie could hook students' attention, and be used to build a very successful unit of work. They then worked together to design other ways to use movies to encourage learning. At that time the English teacher was struggling to get students to write meaningful reflections in their journals. Some students would barely write anything. The PE teacher wondered if exploring a basketball movie (*Coach Carter*) might help address these motivation issues because a lot of the students play basketball. In English, the class watched the movie and explored several pertinent themes (e.g. self-respect, working together to build success). The class used each theme as a specific reflection. The teacher noted that the volume of students' writing dramatically improved.

Tags: *Social sciences; English; sports-themed learning*

Story 4: Building strong within-class relationships and leadership potential

A Year 10 Sports Studies camp, held early in Term 1, provided rich opportunities to foster and build students' leadership capabilities and to meld them into a tight learning unit

What was the main aim?

At the very beginning of the year the teachers thought there might be a few cliques forming in the Year 10 Sports Studies class. They decided to use the Term 1 camp as an opportunity to focus on working together and building strong relationships, between students, and between students and teachers. All the SiE teaching team attended the camp at some point and the PE teacher was there throughout.

What learning activities were involved?

A range of activity based learning (ABL) experiences were designed for students. The aim was to build confidence and a sense of being a team. Students worked in teams to support and encourage each other to complete initiative activities and a confidence course. They also competed in a sports afternoon and worked together in a subject wide quiz. The entire camp was set up as a competition with a running scoreboard and prizes at the end.

How did the teachers know these activities had an impact?

All the SiE teachers noticed an immediate change in the Sports Studies class when they came back from camp. Students worked together willingly and had higher attendance rates than any other Year 10 class. Māori students in SiE class had 12% higher attendance rate than all Year 10 Māori. Female attendance in SiE class was 10% higher than for all Year 10 females.

Following on from the camp, the SiE teachers worked to build students' team work and leadership skills throughout the year (*see HHS Story 2*). By the end of the year the teachers said they were seeing more examples of the class taking on leadership roles. On one occasion when the PE teacher was absent and students were timetabled to be in the gym, the reliever noted the "amazing" way the class stepped up. They willingly got on and worked together to ensure that they completed the activities planned.

The leadership capabilities these students displayed were also put to good use when working with local primary schools. The class officiated at athletics days for three contributing primary schools that use Hillmorton High School's fields. They helped run events, measured performances, collected discus and shot puts, and supported and encouraged the primary students to compete and try their best. They also helped with the South West Zone Athletics Competition where teachers said they were "superb role models" for the school, demonstrating their leadership potential again. Teachers received lots of positive feedback from the primary school staff who were impressed by the secondary students' abilities.

Reflections and plans for the future

Given the very positive results, the teachers plan to run the Year 10 camp along the same lines next year. The PE teachers also plan to work more closely with the other subjects, either through more detailed planning of units or one off lessons.

Tags: team learning; student leadership; primary school connections



Students at the SiE camp (from school website)

"I had tried groups before but got some resistance. After the camp they were much more willing to work with others and often they did this voluntarily."
(Teacher)

"I can't thank you enough for the extra helpers today. It made our day so much easier having the help at each event and the teachers have all commented how it made it run more smoothly and less stressful" (Primary principal)

"The students were very organised whilst being supportive and encouraging of the younger students."
(Teacher)

Story 5: Putting the school values on prominent display

Two-storey high posters on the ends of the school's 'Nelson Blocks' classrooms illustrate and exemplify the school values in action

What was the main aim?

Hillmorton High School's values (Ako; Whanaungatanga; Whakaiti; and Mana) resonate strongly with sporting values such as the Olympic values. The SiE lead teacher wanted to see their values become "more deeply embedded in the everyday life of the school". Several forms of visual reminders were used to raise awareness and create talking points.

What learning activities were involved?

The SiE lead teacher worked with one of the DPs to create new signage that would make the school values "real" for the students. The school values are now illustrated on huge posters displayed on the end walls of the school's two-storey high 'Nelson Blocks'. Each poster depicts students who are actively engaged in one of the school's sporting codes. The school values are also sent home as attractive postcards, so that parental awareness is raised. On each postcard home a particular example of their child demonstrating a value is described and celebrated.



Inside the SiE classrooms, values for learning and social responsibility are also on display. These posters are based on Hellison's personal and social responsibility model. Early in the year one SiE teacher used the Hellison's criteria to support students to self-assess their learning behaviours. She recorded students' ratings and took specific note of any positive shifts.

How did the teachers know these activities had an impact?

The larger than life posters have become a real talking point in the school. Students are keen to see themselves displayed in this positive light.

The teacher who used the Hellison's posters found that they worked well for a time but by Term 3 she no longer needed them. The students had become much more self-moderating and tended to quickly deal with any issues as these arose.

Reflections and plans for the future

In 2015 NCEA endorsement posters will be positioned around the school to celebrate the achievement of students who received subject endorsement certificates. There are also plans to create posters of Canterbury and NZ Sporting Representatives.

Tags: school values; learning dispositions

*"How do we get on one of those [posters]?"
(Student)*

"I have had emails and comments directly from parents about the difference receiving a postcard made to their child's attitude towards their study. These postcards often seem to take pride of place on the fridge door or mantelpiece. Parents love the positive feedback too." (Principal)

Story 6: Building Year 11-13 leaders

Senior students work towards achievement standards in health promotion while proactively building opportunities for physical activity during the school day

What was the main aim?

Hillmorton High School has a goal of increasing participation in sports-related activities across the school – for staff as well as students. Students in a Year 12 health class designed health promotion approaches aimed at increasing the participation of both students and teachers in the range of sports offered. Their work was assessed using NCEA achievement standard AS 91237: *Taking action to enhance an aspect of people's well-being with the school or wider community.*

What learning activities were involved?

Students engaged in a range of different health promotion activities as part of their NCEA study. One group designed a school-wide survey on sports participation. They then summarised the data. As a focus for planning lunch-time activities they identified the sports in which students showed most interest.

A second group developed a DVD which showed student and teachers talking about the benefits of coaching and supporting sport, for example building positive relationships. With the aim of promoting physical activity at school, students showed the DVD to staff and students.

How did the teachers know these activities had an impact?

These Year 12 students all achieved the standard. Staff also noticed changes to students' behaviour at break times. Various groups of students gravitated to the activities set up in the quad, for example 4-square, and gutter board. Students from all year groups were mixing and having fun during the break times.

Physical Education teachers also noticed an increase in numbers of students wanting to use other equipment at lunch times to play their own games on the tennis courts and in the quad during break times.

Reflections and plans for the future

In view of the success of the health promotion activities undertaken by senior health and physical education students, PE staff are now planning for Year 13 PE students to develop physical activity games with the students in the school's Upland Unit (where learning support is provided to a range of students). In 2015 Year 12 Health students will explore various ways to enhance the school community's wellbeing, with possible actions including undertaking "random acts of kindness", and organising physical activities for students during break time, run and lead by senior students. Another idea is an "adopt a team" promotion to get more teachers involved with school sports teams.

Tags: PE; NCEA; student leadership



Why Sport in Education?

The principal and some of the senior management team at Howick College were elite sports players before becoming secondary teachers. With this background, the rich potential of the Sport in Education (SiE) initiative was immediately apparent to them.

Sports pathway classes

Participation in SiE has supported Howick College to develop successful “sports pathway” classes. Students in these classes are taught their core subjects by a small group of teachers who plan together and make use of sports contexts when relevant. They also have additional PE time built into their timetable.

The school began with two Year 9 sports classes in 2013. Students took PE in single-sex groups and were mixed for other subjects. An extra PE focus was included for their options classes. The PE teachers, and some English and Maths teachers of these classes, experimented with ways to use sports contexts to engage students. The success of this trial saw the programme expand in the second year of SiE.

In 2014 two Year 10 classes were added and science was included for the first time. A retreat at the end of 2013 allowed dedicated planning time so that Year 10 teachers coming into SiE could maximise curriculum links between subjects for these classes and consider ways to build stronger relationships with students.

In 2015 the pathway has extended again. There are now two Year 9, three Year 10 and two Year 11 classes. One of the Year 10 classes is a boys-only class. The other two Year 10 classes do PE in single-sex groups. Students must apply for a place in one of these classes and SiE teachers have noted that winning one of these places gives students a sense of being special.

Building student leaders is also a focus at Howick College (**see story 6**). From the start of SiE some students have volunteered as Saturday Sport Ambassadors and others have helped coach sports in local primary and intermediate schools.

About Howick College

Howick College is a coeducational, decile 8 Year 9-13 school, with a roll of around 2000 students. The school is located in the eastern suburbs of Auckland and welcomes students with a wide range of nationalities.

The school's vision is summarised as “equipping students for lifelong learning”. Howick College teachers are on a journey to explore the school practices and teaching pedagogies that might support this vision.

*“Students gain a sense of identity with the SIEP class. Teachers meet fortnightly and issues are highlighted and discussed”.
(Teacher)*



Developing dispositions to support learning to learn

The following ‘success stories’ were shared by teachers at Howick College to represent the flavour of Sport in Education as it is playing out in their school. Making changes to pedagogy has been an important focus. Teachers have been investigating the use of sports contexts to create stronger learning engagement for some students and to build links between learning across subjects (**see stories 1, 3, & 5**). They have also explored the use of coaching and training metaphors to help students build stronger learning dispositions (**see stories 2 & 4**).

All the teachers at Howick College are part of inquiry teams. Each teacher works with a learning partner to complete a teaching inquiry that is part of their appraisal process. SiE is giving teachers a shared inquiry focus and allowing them to build a “different sort of network” to those they had experienced when working in faculty teams.

“I feel more involved in the school than I was before”. (Teacher)

Story 1 – Becoming an “intelligent athlete”

Designing a sport-specific circuit training regime assists students to own their personal training programmes and to lead others

What was the main aim?

One SiE teacher has focused on finding ways to support students to develop learning dispositions, and specifically, a “mind-set of effort”. She wanted the Year 9 and 10 students in her all-girls sport classes to develop more determination and “stickability” as they worked on building skills and fitness for their chosen sports. She aimed to have them put more thought into the specific training programmes they were using, so they built a sense of strategic (“intelligent”) ownership of their own efforts. She hoped this sense of ownership would also transfer to other aspects of learning. The teacher also wanted students to build their confidence as leaders so they could support the learning and training of their peers.

What learning activities were involved?

The unit began with standard circuit training set by the teacher. Once students were familiar with the routines the teacher challenged them to develop a circuit that was specific to their own sport, and to explain why they had made the changes they had. They published their circuit designs as posters, to be displayed in the gym.



Each student then taught their circuit to their classmates. They introduced their circuit, explaining how to undertake the exercises correctly and what they were intended to achieve. Once the students had experienced a range of circuit designs they came to an appreciation of the diverse physical needs of different sports.

How did the teachers know these activities had an impact?

The teacher commented that the students built confidence as they lead their peers through the circuits. Their work was of a very high standard and students were proud of their designs. She said that the girls were thoroughly engaged in the group work and this further built their respect for each other and their desire to create work that they were proud of.

"There was a lot of pride...I have lots of thumbs up photos! The Year 9s could now set circuit lessons for any sport." (Teacher)

Reflections and plans for the future

This year (2015) Year 9 students are completing the same task. The Year 10 students will revisit the topic in term 4 as they build up to studying NCEA level 1 PE next year.

The teacher said she has followed this outline plan to develop a mental health topic where students will work in their 'sports interest' groups and create a sport specific guidebook, with a focus on mental health of athletes. She noted that students are already enthusiastic and engaged in the challenge, which she described as collaborative working at its best.

Tags: *PE; student leadership; active learning; learning dispositions*

Story 2 – Coaching metaphors build learning dispositions in science

Year 10 students learn that it can take several attempts to design an effective investigation

What was the main aim?

Early in a unit that required students to design their own investigation the teacher realised they were struggling with the challenges of the task. He began to use sports coaching ideas as a metaphor for the effort and repeated attempts needed to gain mastery of a new skill set – in this case planning an effective investigation. He wanted to reduce students' anxiety and make sure they knew that initially "getting it wrong was no big deal".

What learning activities were involved?

The students did an investigation called 'Sweet As'. They were challenged to design and carry out an investigation to identify which type of sugar dissolved the fastest (seven different types were provided). They had to identify and control all the variables involved in carrying out a fair test that produced valid data.

During the unit the teacher used the level descriptors of the SOLO taxonomy to illustrate how uncertainty increases when a more complex investigation is designed and to reassure students that this is perfectly normal, as is the use of trial and error to arrive at a best solution to a specific investigative challenge. As students move from a more formulaic approach to actively designing their own investigative strategies, the meaning they derive from the activity can be different from that derived by other students and still be right. The teacher likened this to coaching a skill in tennis. As a coach he can provide the fundamentals of the sequence. However each player, as they practice and improve, will develop their own idiosyncrasies yet still be able to perform the skill at a high level of competence.

How did the teachers know these activities had an impact?

The teacher surveyed the students prior to the investigation and prior to using the coaching metaphor. He used the idea of "flow" to help them identify their level of involvement in the task. He then surveyed the students after the investigation and just prior to them carrying out a new investigation. He found that the emphasis on trying out, and then refining, inquiry plans gave students a confidence boost and led to a significant decrease in feelings of anxiety. Prior to the 1st investigation and introduction of coaching metaphors, 76% of the students reported varying levels of anxiety. After the learning experience 28% of

the students reported feelings of anxiety.

The teacher noted a profound impact on two boys who were usually disengaged in lessons and lacked confidence in their learning abilities. These boys became more proactive and confident once they realised they could try again if their design didn't work as intended. Now these students don't give up at the first learning obstacle.

Reflections and plans for the future

The teacher noted that he had tried similar ideas before but not given the same level of emphasis to the metaphor of practice to try out and hone plans. He had previously introduced the class to the idea of "flow" in learning and this combined very well with the coaching metaphor to reduce anxiety and keep students on task as they worked through their design challenges.

He also noted that students' sense of confidence and pride in themselves as learners was "spilling over into the community". As a next challenge he wanted to build stronger connections between his classroom science programme and the local community.

Reflecting on teaching as coaching was a topic of shared conversation in the wider SiE team, which included the school's Sports Coordinator. She had come to the school specifically to be part of SiE. She noted that drawing out ideas and solutions is an important aspect of coaching and she could see this happening in the SiE teacher's pedagogy.

"They [the teachers] sound like coaches to me" (Sports coordinator)

Tags: Science; learning dispositions

Story 3 – Hooking students into a love of reading

Sports contexts were used to encourage reluctant Year 10 students to develop a deeper engagement with the texts they were reading

What was the main aim?

Early in the year only 7 of the 29 students in a Year 10 English class said they liked reading. Building students' interest in reading became the focus for this teacher's inquiry. She worked with the school librarian on strategies to attract students to print materials that they might find engaging. Together they developed a collection of sports-themed reading material which was carefully selected to match students' interests. Examples included *Keeper*, by Mal Peet, *The Name of the Game*, by David Hill, *Going for Gold*, by Trevor Wilson, *Extra Time*, by Morris Gleitzman, and *The Year My Life Broke*, by John Marsden, to name a few.

What learning activities were involved?

Students took part in a 'reading race' which involved reading a variety of personally chosen texts of different kinds. Six students finished the 'decathlon' and others read at least five books in addition to the texts the whole class studied.

The teacher selected the novel "Speed Freak" as a text for the class to study. She hoped that the engaging sports context (Go-Karting) would draw them into "that deeper understanding that leads to enjoyment", and that this enhanced understanding would provide a platform for thinking critically about the text. She provided lots of scaffolding as the class explored Chapter 1 then gave the class a grid they could use to develop a picture of each character. The class explored the vocabulary in the text.

Many students had prior knowledge of Go-Karting and they were encouraged to use this to make predictions about the action as the novel unfolded. To make sure students understood the plot and vocabulary, students did close reading tests for chapters 1-3. This helped to consolidate their understanding prior to completing a Year 10 common assessment task (CAT). The CAT was based on a character the student admired or disliked in the text. They completed a character grid then wrote a

structured essay. All the students found it easy to complete the essay.

Later in the year the class followed a similar process to study *The Name of the Game*, by David Hill. This time they were prepared for the end of year exam which would involve writing another literature essay.

How did the teachers know these activities had an impact?

The strategies worked - all the students read the novel in the allocated time. A science teacher found one student still reading behind his bag after a change of classes! All the students wrote a response to text essay at the end of the unit. In the end of year examination 5 students gained Excellence, 13 gained Merit, and the other 9 gained an Achieved grade.

As part of her inquiry the teacher collected data on students' reading. At the start of the year attitudes to reading on the e-asTTle scale ranged from 3B to 4A. By the end of the year the range was from 4P – 5A and 23 of the 29 students reported they had enjoyed reading the text.

As well as increasing students' enjoyment of reading there was evidence that they were becoming more self-reliant as they worked on English tasks. They had become sufficiently confident to tell the teacher what they needed to work on for revision. By the end of the year students could sustain silent reading for an hour. Other staff also commented how the class were able to work independently.

Reflections and plans for the future

The teacher said her inquiry data and observations showed that students' engagement with reading had improved. However she also reflected on how long it took for the pedagogical changes to consolidate and become more effortless. She felt that she really only became "comfortable" that a planned strategy would work as she intended in Term 4, even though she had been working hard on making changes all year.

Tags: *English; sports-themed learning*



"You are the most persistent teacher I ever had" (Student to English teacher)

Story 4 - Differentiated learning in mathematics

Students worked in teams to coach and support each other as they learned new mathematics concepts and skills

What was the main aim?

The teacher focused her professional inquiry on using team work and coaching metaphors to build a strong peer learning culture in her Year 10 mathematics classes. She wanted to find out if this would be a successful way to differentiate the learning experience for students of differing abilities.

What learning activities were involved?

The teacher used sports contexts to introduce new mathematical ideas in number, algebra, and measurement. For example, the Olympics was used to learn about percentages, drawing on a table of records of the Women's Shotput distances. The number topic dived into skills such as finding goal percentages and a comparison between netball and basketball. This also tied in with an exploration of the salaries of players, and venue capacities.

The teacher also differentiated her Year 10 classes into groups who worked together and could "use each other as help". When students had been absent those who had been present had 10 minutes to teach the previous lesson and catch them up. They needed to communicate their ideas clearly and work together until everyone understood.

"The idea came naturally as the students already had strengths in teamwork from their sports teams. Tuakana/teina kicked into place and mathematically stronger students helped others." (Teacher)

How did the teachers know these activities had an impact?

By the end of Year 10, 87 percent of the students in the SiE class had increased their achievement levels in number, algebra and measurement, compared to their overall achievement levels in these areas at the end of Year 9.

The teacher used the SOLO taxonomy to look for improvements in the students' depth of thinking over the course of the year. By the end of Year 10 most students were maintaining "Es" on the taxonomy.

Anecdotal incidents also suggested that the students became really engaged when learning in their teams. For example, one episode that at first appeared to be an off-task argument in a group actually turned out to be a heated discussion about the best method to solve an algebra problem.

"Students now have arguments about algebra and how to do it.... There was a sense of belonging in Year 10... I was pleased how students were not afraid to have these conversations... I investigated using sports contexts in maths and ended up making three classes of students better people." (Teacher)

Reflections and plans for the future

This teacher reflected that working with other teachers to support the same classes was acting to give students a sense that their teachers believed in them. Finding sports contexts to engage students was also enabling her to build better relationships with students as she got to know more about their interests.

Tags: Mathematics; sports-themed learning; learning dispositions

Story 5 – Integrating learning around a memorable event

A visit to an SiE class by a Commonwealth Games athlete provided the focus for learning in PE, English and mathematics

What was the main aim?

A Year 10 SiE class worked with an internationally successful athlete who visited the school. The aim was to build a memorable experience that would engage and motivate learners while building rich connections between their three main SiE subjects. The school is aiming to build the profile of athletics as a sport and increase participation. The high-profile visit also contributed to this aim.

What learning activities were involved?

On the day when the athlete visited the school the class interacted with him and asked him questions about his World Championship experiences and his athletic career. In preparation students had studied effective questioning in English and they were able to try out their questioning skills during the visit.

Students then tested their own athletic skills against those of the athlete (a shot putter). As they did so they collected multivariate data for statistical analysis in mathematics.

How did the teachers know these activities had an impact?

The lesson was taught in a PE and Sport context but the students involved were able to take the learning from this session and apply it to their English and Maths classes.

Reflections and plans for the future

The success of this visit has promoted the English, Maths, Science and Physical Education teachers to look for further integrated learning opportunities. This year (2015) they are developing a major unit of work in the context of a snorkelling and body-boarding trip for the students in the SiE class.

At the end of the visit the teachers had the opportunity to discuss the experience with the athlete. He had been an early school leaver himself. He said that the sort of learning that had just taken place would have kept him at school for longer.

Tags: *integrated learning; sports-themed learning; active learning*



"That's certainly a Maths class I'll remember". (Student)

"The stats now have more meaning to me as an athlete ". (Student)

Story 6 – Building sports leaders while forging links with local schools

Secondary students provide leadership in physical activities for younger students at nearby schools

What was the main aim?

Cockle Bay School (Howick College's closest feeder school) was looking for a way to provide a quality cross country event and Howick College was looking for an opportunity to build a stronger relationship between the two schools and to showcase the leadership being shown by SIE students.

What learning activities were involved?

In front of a large crowd of local parents, Cockle Bay School ran the annual cross country event on the Howick College grounds. Senior students helped to organise and run the event. Year 9 and 10 SIE students assisted and supported the younger students by running with them.

The senior students gained valuable insights into the organisation and planning that goes into running a major school-wide sporting event.

How did the teachers know these activities had an impact?

The experience was a very positive one for both parties. Many of the college students were ex-students of Cockle Bay. Their ex-teachers from Cockle Bay noted their growth in maturity and leadership.

Reflections and plans for the future

Students from Cockle Bay school are now regular visitors at Howick College. Cockle Bay School will continue to hold both their Cross Country and School Athletics sports on the school grounds.

Tags: PE; student leadership; primary school connections



"On behalf of Cockle Bay School, I would like to thank you sincerely for yesterday. The use of your fields is wonderful for us, but the use of your pupils is just magical. Every one of them was brilliant with our pupils and staff, and showed their absolute maturity and empathy for the younger children." (Principal)



Why Sport in Education?

A priority for Kaikorai Valley College (KVC) is finding ways to live their values. The school wants to build approaches that ensure students with different cultural backgrounds, interests and ability levels are engaged and participating in learning, and in the wider life of the school.

About Kaikorai Valley College

KVC is a mid-decile Year 7-13 college located in Dunedin. The Dunedin region has declining numbers of students, so one challenge for the school is recruiting and retaining students.

Reflecting a diverse student population, KVC has a strong emphasis on providing a safe environment which promotes inclusion, participation, and success for all. These ideas are encapsulated in the school PRIDE values developed through PB4L School-Wide.

Participation Respect Inquiry Diversity Environment

An active journey for staff: Increasing student engagement and participation

KVC saw Sport in Education (SiE) as a professional learning opportunity that could assist staff to think about new ways of working. Together the different facets of SiE are taking staff on a pedagogical journey as they think deeply about ways to increase student engagement through:

- **team-based** (group) learning experiences (these include activities that create a learning culture and space for students to learn from and support each other, or which include a competitive team-focused element) (**see KVC stories 1, 2, & 4**)
- **active learning** (this encompasses students learning through hands-on experience of a real activity as well as learning that includes an aspect of physical activity) (**see KVC stories 3, 4, & 5**)
- **relevant and sports-related contexts for learning** (**see KVC stories 1, 2, 5, 6**)

Teachers have become increasingly aware that “learning by doing” adds an embodied dimension to learning that contrasts with traditional learning approaches that rely on reading or listening. They now have a much greater awareness of the many benefits of team (group) work. Working with peers can contribute to students’ engagement and content learning as well as building their ability to relate to others and take on leadership roles. When the context is perceived as relevant to students, this further enhances students’ engagement with learning experiences. Putting these ideas together is changing the way teachers at KVC teach. For the team of teachers involved, this experience is energising and challenging. They feel more able to play to their strengths and design learning experiences that “engage more of the senses”.

Sport in Education curriculum focus

In 2013, the SiE curriculum focus started with the Year 9 cohort of two classes. Mathematics and some English classes were taught by the teachers who were part of the SiE team. In 2014, the focus on the Year 9s was continued and the Year 10 cohort was included. A larger group of teachers joined the team (PE, English, Maths, and Social Sciences).

Each term, the curriculum programme for the SiE classes is based around a shared theme. In 2014 one topical theme was related to the Commonwealth Games. The learning programme connects to school values. Participation is a key focus, so learning themes are connected to large “participation events” for students and staff. In 2014 this took the form of a winter Olympics which tied in with the Commonwealth Games theme.

As a team, SiE teachers are also developing a shared approach to developing group work skills. In 2014, the students in SiE classes were all placed in teams that were named after a country (linking to the Commonwealth Games theme). Teachers made use of these groups as well as other group arrangements during the year. Threading through the KVC stories you can see how different teachers incorporated group work within their subject.

Impacts of the curriculum focus

The whole cohort of Year 9 and 10 students are now involved in SiE classes for Mathematics, English, PE, and social sciences. This gives the school the opportunity to look at achievement, engagement, and behavioural data for these students in comparison to other years and groups. In the first year of SiE in 2013, the Year 9 students had very low levels of detentions and behaviour referrals compared to past Year 9 students, as well as students from other year levels. Student engagement survey results supported this data. In 2014 a similar pattern was evident. Both the Year 9 and Year 10 cohorts had lower levels of behaviour referrals compared to the rest of the school.

For the SiE Year 9 students in 2013 and 2014, end-of-year English achievement data showed a pattern for more students to perform at higher curriculum levels for listening, viewing, and writing compared to previous Year 9 results. Maths results showed slight positive shifts for Year 9 and 10 students in number. Algebra results were more mixed. Overall, it appears that Year 9 and 10 achievement patterns are changing. However, these results need to be interpreted with care as they could be due to fluctuations between different cohorts of students.

Building student leaders and community connections

Another priority for the college is building students’ leadership capabilities and forming stronger links with local primary schools. KVC has developed an approach based around participation in physical activity. Stronger connections are being made with feeder schools as KVC offers senior student leaders to support primary school PE and sports activities (**see KVC story 6**). These student leaders learn as they work with primary students and they also contribute to the life of KVC by running activities such as lunch-time games. In keeping with the school focus on participation for all, the student leaders also assist with events such as the KVC Sports Expos (**see KVC story 6**).

The following ‘success stories’ were shared by teachers at KVC to represent the flavour of Sport in Education as it is playing out in their school.

Story 1 – “Cool Runnings”

A sport-themed film study helped create a team culture and assisted students to develop a range of English skills

What was the main aim?

At the start of the year many of the Year 9 students in a low- to mixed-ability class were struggling with English. The teacher wanted to find the right hook that could create a class bond and assist students to develop a range of English skills.

What learning activities were involved?

In Term 1, as an ice-breaker, the teacher designed a film study that could assist in creating a class learning culture. The teacher selected the film “Cool Runnings” as it seemed a good fit for the class and it reflected the sports and school values that KVC wants students to develop. Cool Runnings is a drama about the difficulties overcome by the Jamaican Bobsled team to compete in the 1988 winter Olympics in Canada. The film’s focus linked with a shared learning theme for the SiE classes (issues related to the Commonwealth Games), and tied in well with the winter Olympics event planned for students later in the year.

The class watched the film and the real race – this really grabbed their attention. In groups they explored the film’s themes and character development. The themes that emerged included perseverance, overcoming obstacles, teamwork, fair play, honesty, attitudes to winning, leadership, and growing up.

One particularly successful aspect of the film study was that students learnt the skills the characters displayed in the film. Students identified how personal growth and change can happen when people work in teams. At the same time, they were themselves learning the skills needed to work in groups.

Students also built knowledge of the context and developed research skills by exploring areas such the Winter Olympics, Jamaica and Canada, the current Jamaican team, and bobsledding.

As students were really captured by the context, the teacher used the film to develop a range of other English skills, including:

- comparing and contrasting the Cool Runnings drama with the real story
- analysing the language features of the Jamaican bobsled team’s song, with student teams each writing a team song
- creating static images based on the film’s themes
- writing film reviews and essays based on the film themes and characters
- developing speeches based on the themes

Resources to support these activities were easy to find as there were lots of internet articles, interviews, and video footage on the 1988 Jamaican team and coach, and on the current team.

Later in the year the teacher used the film as a context to teach essay writing skills. This was an aspect of English she knew students would find hard. For many this was their first experience of formal essay writing and they were not familiar with text features like paragraphs. As the film was an enjoyable and familiar context for students, it was a safe context to build new skills.

How did teachers know these activities had an impact?

The teacher said the film study had been very effective on a number of levels. Students were highly engaged with the film. They adopted the Jamaican bobsled team’s song as a “class song” which they continued to sing throughout the year. The film also provided a model of how a team functions, and this assisted the teacher to actively teach the skills needed for group work more quickly than usual. The result was a strong team bond in the class.

Using the film study to build students' basic analysis and writing skills, before teaching the formal aspects of essay writing skills later in the year, had also worked well. Students' assessment results showed a better than expected outcome, which the teacher attributed to the earlier scaffolding and students' engagement with the text.

"Many of the students in this class struggle with English and at the start of the year struggled to write cohesive sentences, let alone paragraphs or essays! Whilst most of the class are still at Level 3 for their formal writing, they understood the purpose of a response to text essay, which I think is a fantastic achievement on their side, and this was because of their engagement with the text." (Teacher)

Students could use their work on the film as a basis for the essay writing component of their end-of-year exam, so the class re-watched the film as part of their revision. The whole class attempted the essay writing section of the exam, whereas usually some students left this section blank. End-of-year results showed this low- to mixed-ability class had fewer students (25%) performing at curriculum level 4 for writing compared with their cohort (42%). However, their English results were stronger than previous non-SiE classes in writing (in 2012, 9% of the cohort performed at level 4 for writing). The class also performed well in other aspects of English. By the end of the year, only a small proportion of students were assessed as performing at level 2. This was a different pattern compared to the two previous years, in which large proportions were at level 2.

Reflections and plans for the future

The teacher found this experience had helped her think deeply about how to engage students. Finding the right context for a particular class, and a focus on team work and bonding, had really made a difference.

Tags: *English; sports-themed learning; team learning; school values; learning dispositions*

Story 2 – Overcoming obstacles to being a champion public speaker

Sport-themed topics, and a 4-step approach, helped build students' confidence in public speaking

What was the main aim?

An English teacher wanted to make sure students were knowledgeable about how to research and prepare a speech. With past classes she had seen how, if students didn't know their material well enough, they could become focused on the content at the expense of speech delivery techniques.

What learning activities were involved?

The English teacher brainstormed ideas with a Social Studies teacher and designed a four step process to build students' knowledge and confidence in researching and preparing speeches. The topic was related to a shared Commonwealth Games theme. First students gained background knowledge through activities like watching YouTube clips of Usain Bolt and doing research about the Commonwealth Games. They created a fact sheet from this research.

Next students were offered a choice of three options to research information to use for their speeches. The teacher wanted to make sure that all students could find a topic they were interested in so she offered three choices that had lots of scope. Students could the factors that influenced the development of a champion they admired or an NZ athlete. Or they could research one of a number of sports-related themes such as "success in sport is all about goals", or "the Olympics are a waste of money", and connect this to an individual's experience.

The brief for the third step was to "*deliver a speech that inspires and convinces others that with hard work you can overcome obstacles to achieve your goals*". The specifications suggested that students could use their 3-minute speech to encourage their classmates to see difficulties as something to overcome – this focus links to the values KVC is fostering. Students could also include their personal or family stories about overcoming difficulties.

The teacher had not intended to mark the speeches. KVC usually does a formal speech assessment later in the year. However she changed her mind because students were so motivated. The Commonwealth Games were on at same time – this made the speeches very topical.

After each speech, the teacher gave students a grade and verbal feedback about how they could improve. Later in the year when they prepared a speech for a formal assessment, the teacher offered suggestions about how to aim for a higher level.

How did teachers know these activities had an impact?

For the first speech, the contexts created a lot of discussion. Some students didn't reach the expected Level 5 standard or didn't do the presentation, however the overall standard was good.

"They all chose topics they were interested in and quickly did the required research. When it came to delivering the speeches I had some students that volunteered to go first which was unusual at year ten. The standard was high with only 5 students getting below the level (L5)." (Teacher)

The teacher commented that the class helped others to overcome their fears. They were living the values embedded in the speech context. One student was nervous and shaking, she was worried that people would stare at her. Another student, who was not usually a class leader, suggested that everyone could close their eyes. Everyone took this idea on board, and the student completed her speech.

For the formal speech assessment, some students were very keen, and all handed in a text version. Two students who would not present a speech in the first round overcame their nerves. Over half of the class improved their performance, and seven students were assessed at Level 6. These students all volunteered for a speech competition.

Reflections and plans for the future

The teacher felt the four step process worked well. Usually many students find presenting a speech a nerve racking experience. The shared Commonwealth games focus meant that students had knowledge of the context which boosted their confidence. Covering less content during the year, and giving students more opportunities to practice and improve, also helped students on their journey to become champion public speakers. They were now

better prepared for the Level 1 NCEA speech achievement standard they would do next year.

Tags: English; NCEA; sports-themed learning; school values; learning dispositions

Story 3 – Spelling races

Adding a competitive and team focus into routine spelling tests can turn a boring activity into something students find fun and motivating

What was the main aim?

In junior English classes spelling is usually a dry activity that students don't find engaging. Instead of the usual teacher-run oral test, the teacher wanted to design an activity that could increase students' motivation to spell accurately.

What learning activities were involved?

The teacher combined a competitive race with a Spelling Bee format. Two Year 9 SiE classes raced each other in the gym. Each class was split into two teams (students in each SiE class are part of class teams). A team from each class lined up behind a cone. They had to run to a teacher, spell a word the teacher gave them correctly, then run back to the next person who repeated the process (or attempted the previous word, with support from their team, if the first student did not get it correct). The first team to spell 30 words correctly won the first race. A second race was held between the other two teams, and a final between the two winning teams. The winning team was presented with a certificate.

Teachers also used "spelling teams" to improve the format of the short spelling tests that are a starter activity in English classes. The student teams were set up to self-manage the marking of the test. Each day one team worked together to come up with the right answers to the test. They then wrote these on the board so that each student could mark their own work.

How did teachers know these activities had an impact?

Teacher observations and a short survey indicated the spelling races were successful in engaging students. Students reported they enjoyed the activity, especially the competitive aspect.

"Students were all engaged in the activity – cheering each other on, helping each other when they were stuck. I heard various students say that it was the most fun they'd ever had with spelling." (Teacher)

Reflections and plans for the future

Next year the teacher planned to hold a spelling race once a term to keep up students' motivation for spelling.

Tags: English; active learning; team learning

Story 4 – Mapping the school

Active and team-based experiences offer students new ways to access learning

Learning activities

A social science teacher wanted to find an active and more engaging way of assisting students to learn some of the mapping and graphing skills covered in Year 9 social studies.

Usually students sit in class and learn grid-referencing. Instead, the teacher covered the basic skills in class. Then she created a map of the school with grid references to use as a resource for a class competition. Students had to use a clue, the grid references, a set of directions, and map interpretation skills to find the next clue which was hidden around the school. They worked in their SiE teams to see which team could find the clues first. This meant that students also had to rely on their team members if they wanted a good result.

Later in the year the class covered mapping skills. This built on the earlier grid-referencing topic.

Impacts

Teachers noted that students threw themselves into the task. Some students who usually struggled with social science topics were clearly enjoying themselves and were able to explain exactly what they were doing to groups of visiting principals who were visiting on that day.

The end-of-year exam included a task that related to the social studies topics. Students were required to use latitude and longitude coordinates to find reference points. Over 90% of students could accurately find the reference points.

Reflections and plans for the future

This exercise had cemented this and other teachers' views that, doing something active adds an embodied dimension to students' learning that makes it quite different, and more memorable, than the learning that occurs through sitting and reading.

Working in teams in a context they found engaging also acted as a memorable trigger for students when they attempted to recall their learning. Working in teams also brought out the different skills and strengths of a range of students. However, teachers were clear that all students, especially the quieter ones, needed to have a role. This requires teachers to actively teach "how to be a team member".

At the start of the next year, the SiE teachers planned to work more closely together to strengthen their shared approach to teaching team work skills. This would involve making greater use of strategies, such as rotating the team leader, so all students have experience of different roles.

Tags: Social sciences; active learning; team learning

Story 5 – Making maths real

School plans to carpet the tennis courts provided a real-life context for measuring in mathematics

What was the main aim?

A Year 9 Mathematics teacher wanted to improve students' engagement and understanding in mathematics through finding contexts that students could experience first-hand.

What learning activities were involved?

KVC planned to get the school tennis courts covered with an artificial surface. This provided a timely real-life context for a measurement unit. Using a local setting meant it was easy for students to engage in the physical experience of measuring the courts.

Students worked in teams to take measurements such as the court perimeter. The teacher designed a staged process for them to use these measurements to do increasingly complex calculations. Students were given information about the cost of set amounts of carpet, glue, paint, and heaters. They then calculated:

- the area of the court.
- how much carpet was needed and the overall cost.
- how much glue would be needed to fix the carpet in place, and the overall cost of this glue.
- the total amount of paint needed to cover sections of the courts, and the overall painting cost.
- what volume of air would be covered if a roof was added, and how many heaters would be needed to heat this volume.

One thing that added value to this unit was that students were able to watch the real progress when contractors started covering the courts. This led to interesting discussions about extra costs such as wages, which then led to discussions about the minimum wage, budgeting, and funding your lifestyle.

Impacts, reflections, and next steps

The teacher noted that the real-life context and active measurement experiences worked well for most students – as evidenced by their interest in watching the real process and having further discussions. However, some of the calculations were beyond the level expected for Year 9. This was the teacher's first try at designing this sort of unit, next year he planned to adjust the level to ensure a better fit.

Tags: *Mathematics; active learning; sports-themed learning*

Story 6 – Growing coaches and a sense of community

The Growing Coaches programme develops student leaders who make connections with local primary school students

What was the main aim?

KVC wanted to develop the leadership potential of senior students and strengthen connections with local primary schools so they could better support students' transition to secondary school.

What learning activities were involved?

In Year 12 both PE and non-PE students can do the Growing Coaches programme as an elective. They train for 4 weeks and then do a 4 week block of coaching at a primary school in Term 1.

Later in the year, to maintain the connections with primary schools and offer students more opportunities to build leadership skills, Year 13 PE students (who did Growing Coaches the year before) run a second block of coaching sessions with primary school students. This contributes to their study for a NCEA Level 3 PE Standard: *91505-Examine contemporary leadership principles applied in physical activity contexts*.

By involving both Year 12 and 13 students, KVC is able to run weekly coaching sessions for 5 local primary schools during Terms 1-3. The Year 12 and 13 students coach lots of different sports: tee ball, futsal, mini ball,

football, kiwi tag, rippa rugby, and netball.

How did teachers know these activities had an impact?

The students who complete Growing Coaches are well-represented in leadership roles at KVC. In 2014, two of the four head boys and girls had completed Growing Coaches, as had all four of the recently introduced Sports Leader prefects. The Growing Coaches students are also stepping up to manage activities teachers used to run. They coach KVC teams, manage lunch-time games, and run events for KVC juniors as well as the children from a local early childhood centre.

Students can gain a formal qualification from their voluntary coaching. A survey showed that other benefits included increased leadership capabilities and confidence and a sense of pride in school. The success of the approach is also demonstrated by a 100% increase in the number of Year 12 students who want to do the programme in 2015.

Feedback from primary schools is very positive. They value the skills of the secondary students and the connections between younger and older students. Primary schools are increasingly contacting KVC with requests for assistance with other events such as mini-Commonwealth Games or relay races.

"The children really enjoyed the KVC students joining in their games and demonstrating new skills to them."

"A highlight is seeing ex-students return to coach". (Primary teacher feedback)

Overall, school leaders consider the use of Growing Coaches had multiple benefits for students and the schools involved. The process that KVC has designed is helping to build a range of student leaders and a stronger sense of community within KVC, and with local primary schools.

Next steps in strengthening transition processes

These experiences of building closer connections with primary schools are encouraging KVC to think of new ways to support students as they make the transition to secondary school. Next year, some of the KVC's new intake of Year 7 students will accompany the Year 12 and 13 students when they visit primary schools. The plan is to give the primary students an opportunity to ask someone they know questions about secondary school.

KVC is also building connections with local schools by running a Primary Schools Sports Expo.* In 2014, 550 primary students visited KVC to try out a range of different activities on offer. Senior student leaders support KVC staff to run Expos. Activities such as coaching from senior students, and Sports Expos, all aim to increase primary students' familiarity with different facets of secondary school life.

**KVC holds two Sports Expos a year. One for KVC students and the other for local primary students. These start-of-year events introduce students to a range of clubs and activities on offer at the college and in the local community.*

Tags: student leadership; community connections; PE; NCEA; active learning

Story 7 – Reporting home

Reporting to parents on students' learning characteristics is one way of building a collective focus on learning dispositions

What was the main aim?

KVC want to build a stronger focus on the attributes students need to fully participate – as learners as well as in school life.

What learning activities were involved?

Being part of SiE has led to KVC building an approach to learning characteristics that includes a new report for parents.

SiE teachers collect student data on seven learning characteristics such as "participation" and "classwork". The characteristics are based on school values and the key competencies. Individuals or groups can be assessed and graded using set criteria from 1 (improvement needed) to 5 (exceptional). Teachers use these characteristics to

build students' capabilities through a mix of self, peer, and teacher assessment.

In Term 2, the characteristic "classwork" was the focus for Year 10 SiE classes. Teachers used the grading system in different ways. Some used the system to encourage submission of work. Completing specific classroom tasks or assignments contributed to the grade. Some teachers displayed students' grades on wall charts so students could see how they were doing. At the end of the term, certificates were awarded to students with high grades. Other teachers used the system to build team skills and accountability. Each SiE class is split into teams so teachers assessed the performance of the SiE teams on "classwork". Some classes held competitions and charted the results so they could see which team got the best overall grade.

In Term 3 the school decided to use the grades to develop a new report for Year 10 students. The aim was to get parents more involved by giving them up-to-date information about their child's learning behaviours. SiE teachers met and decided to report on "classwork" as they were most familiar with these criteria. Both the criteria and the reports needed to be easy to understand. Teachers improved the criteria so the difference between each grade was clear. They agreed that, once a fortnight, they would enter students' summary grades from their subject into the school SMS.

From these grades, parents were sent a short fortnightly email with a PDF report. The report included their child's summary grades from five core subjects and a short description of what each grade means, e.g., "what we see in a student who gains mainly 5s is...". The final report for each term included all the grades so parents could track their child's progress.

How did teachers know these activities had an impact?

The first round of emails generated immediate positive feedback from parents, and a survey generated further feedback. Both parents and students thought the reports were leading to more discussions about learning at home.

The success of the report trial quickly spread. Year 9 parents and students were interested, so they were included in Term 4.

Teachers are finding that the whole process is assisting them to develop individual and team learning dispositions. A number of students became more focused in class. The criteria gave teachers a starting point and shared language to talk with students about learning behaviours.

Reflections and plans for the future

After consultation with the whole staff, next year the email reports home will become a school-wide system that will be extended to academic learning. To support Year 11-13 students and families to monitor NCEA progress, an update will be sent home at the end of each term. This will show students' progress with credits. KVC hopes that providing this feedback will identify any issues early on, assist dialogue between home and school, and support students to plan to achieve their goals.

Tags: learning dispositions; school values; NCEA; team learning

"I thought email reports are great :) We are finding it very useful for starting discussions with [student]. I think he may also be trying a bit harder because he knows that we are getting a report every couple of weeks - not that he will admit that! :)" (Parent)

PAPAKURA HIGH SCHOOL



Why Sport in Education?

Papakura High School (PHS) is a multi-cultural, low decile school. For staff, key priorities include creating a stronger sense of community, improving attendance and achievement rates, and keeping students on pathways to study and work.

Students at the school are very sports focused and the school has some highly skilled sports people. Staff therefore recognise that sport is a powerful hook they can use to engage students and build their confidence as learners.

To strengthen the learning programme the school is reviewing pedagogical approaches and building a more coherent and inter-connected focus. The Sport in Education (SiE) emphasis on contextual learning, engaging sports contexts, and community connections captured school leaders as they considered this emphasis to be strongly aligned with their current directions.

A number of initiatives had laid a foundation for the way SiE is developing at this school. These include Te Kotahitanga (with its focus on pedagogies and contexts that engage Māori students), Starpath (focus on pathways and data support), and the Secondary Schools Student Achievement contract.

Currently the school is part of PB4L School-Wide which connects with ideas about community building and the school culture and values focus of SiE. The school also sees synergies between SiE and other current initiatives including Kia Eke Panuku (Building on Success – and accelerating achievement for Māori learners) and Manaiakalani (with a focus on digital learning).

Belonging and learning in a strong community

The following 'success stories' were shared by teachers at Papakura High School to represent the flavour of Sport in Education as it is playing out in their school. In this multi-cultural school, building community is a priority. Teachers aim to find compelling local contexts for learning, and structure learning experiences that enable students to consider their identities and/or contribute to building stronger communities (**see PHS stories 2 & 3**). Finding engaging contexts that hook students into learning is part of this focus. In 2013 and 2014, teachers also trialled using sports contexts for learning with Year 10 classes (**see PHS stories 4 & 5**).



About Papakura High School

This decile 1b school is located in an outer suburb of Auckland. Around 60% of the students identify as Māori, and about 20% as Pasifika.

Challenges for the school include high student mobility and teen pregnancy rates. A number of students arrive at the school with low levels of literacy and numeracy.

Creating pathways

SiE is also supporting the school to strengthen the study and work pathways available to students. The school has a Year 9 and 10 Sports Academy and a Year 11-13 Health and Sports Science Academy (HASSA) (see **PHS stories 1 & 2**). SiE is also assisting the school to forge closer links with local primary schools to connect primary students with their local secondary school (see **PHS story 3**).

Story 1 – Sport is a hook that assists senior students to find a pathway

Contextual and cross-curriculum learning is supporting students to see links between their interests, school learning, and career pathways

What was the main aim?

Since 2012, Papakura High School has been building a Health and Sports Science Academy (HASSA). HASSA started with a class of Year 11 students and core subjects of PE and Health, English, Mathematics, and Science.

HASSA is part of the school's pathways focus. School staff could see that students' skills and interests were a good fit with social sector jobs such as social work, nursing, or lab technicians. HASSA is designed to make a stronger link to these pathways whilst also using sport as a "hook" to build on students' interests. Students apply to join HASSA if they have an interest in the pathways on offer.

Improving students' sense of community and belonging is a key concern. HASSA classes are homeroomed and stay together for most subjects to support continuity of teaching and relationship building with peers and teachers.

What learning activities were involved?

In 2013 HASSA was extended to Year 12, and in 2014 to Year 13. In 2014 the focus subject areas were Biology, PE, Health, and History. In PE the class also cover sports physiology, and training approaches.

Improving students' literacy and numeracy is also a key concern. Learning in HASSA is cross-curricular and is linked by one main theme a term. The aim is that this thematic structure, which enables students to learn about the same context in different subjects, will support students' understanding.

For each learning theme, teachers align NCEA standards so students can see the inter-connections. Students are able to complete more credits as they can use their study towards each theme to contribute to a number of different standards. Teachers have a focus on approaches that engage students such as learning in the local community or from visiting speakers. In 2014 some of the themes were gender and identity and big events that have a local impact (e.g., sports events such as the Rugby Sevens or the Springbok tour).

How did teachers know these activities had an impact?

The first year of HASSA (2012) was very successful with higher attendance at external assessments, fewer behavioural incidents and stand-downs, improved NCEA pass rates, and more endorsements than usual. Teachers and students reported that the whānau class structure and integrated learning supported students to develop a better work ethic and a supportive peer culture. Teachers found that the homeroom structure enabled them to mentor students and provide more pastoral support.

In 2013 and 2014 timetabling constraints and staff changes resulted in changes to HASSA. These changes meant it was not possible to continue to include English as a key learning area. Achievement results were more mixed. However, more HASSA students achieved Level 1, 2, or 3 of NCEA compared to the students in equivalent cohorts. For example, in 2014, 75% of the HASSA students studying Level 2 of NCEA gained this qualification. In comparison, 60% of non-HASSA students did the same. In 2013 and 2014 HASSA students also had higher levels of attendance and retention to senior classes, and lower numbers of stand-downs than equivalent groups of students. For an example of how HASSA students were achieving successes with their study see **PHS Story 2: "Politics and sports don't mix"**.



Reflections and plans for the future

Staff are planning to make HASSA more embedded within the school, and therefore sustainable in the longer-term. One focus is making stronger links with the existing career and vocational pathways activities at the school such as GATEWAY, work experience, and links with external mentors. The aim is to make learning as localised and relevant as possible for students.

Tags: *integrated learning; NCEA; Science; PE; pathways; sports-themed learning; team learning*

Story 2 – “Politics and sports don’t mix”: Learning about key events in the local community

Historical sporting events are a useful hook that can engage students and support them to develop skills in social science research

What was the main aim?

A history teacher wanted to structure learning around contexts experienced by people in the local community as she considered this would be more meaningful and therefore more engaging for the predominantly Māori and Pasifika students in her class.

What learning activities were involved?

The first shared theme in 2014 for Health and Sports Science Academy (HASSA) students was “big events” related to rugby. The History and PE teachers worked together to develop a Year 12/13 unit called “Politics and sports don’t mix”. The history teacher focused on the Springbok tour protests in 1981. This was an event she knew past students had found engaging. She drew on her personal experience of being there, and invited guest speakers who had lived in South Africa. They spoke about apartheid and the power of sport.

The four associated Achievement Standards students could gain from their work (two for history and two for PE) were:

- *History 2.1: Examine an historical event, or place, of significance to New Zealanders*
- *History 3.1: Research an historical event or place of significance to New Zealanders, using primary and secondary sources*
- *PE 2.5: Examine the significance for self, others and society of a sporting event, a physical activity, or a festival*
PE 3.5: Examine a current physical activity event, trend, or issue and its impact on New Zealand society.

For the history assessments, students develop and conduct a personal social inquiry. They form a question and investigate it through gathering, selecting, reading, and interpreting primary and secondary source materials. The level 3 assessment criteria require students to “show initiative” within the inquiry process. Teachers were surprised at how creative students were. Some visited archives, museums and art galleries, and others analysed song lyrics and poems written at the time of the protests.

How did teachers know these activities had an impact?

The history teacher considered the Springbok tour work was the most successful history unit of the year. Students were really captured by the Springbok tour protests and the themes of discrimination and racism in connection with sport.

Most of the Year 12/13 HASSA students had never done history before, however they got better results on the Achievement Standards than students in a mainstream history class. Factors that contributed included the inter-connections between subjects which enabled students to learn about the same topic from different angles, and the engaging topic. As one student wrote in their reflection:

“We tried to select topics that would directly (or indirectly) relate to our students, who are predominantly Māori and Pasifika. Once they had made this connection, they were quite intrigued by what they were learning and were eager to learn more from us... but more importantly they wanted to find out more for themselves...which is what all teachers would hope for their students... We were ecstatic!” (Teacher)

"The best bit was learning about how South Africa was back then, blacks and whites....This was very difficult because there was so much information to take in. I was proud of the outcome because now I know how to filter information and check the reliability of sources". (Student)

Tags: *integrated learning; sports-themed learning; NCEA; Social sciences; PE*

Story 3 – Connections between primary and secondary students build a healthy community

As part of their NCEA programme Year 13 PE students are assisting a local primary school to promote social wellbeing and students' transition to secondary school

What was the main aim?

A PE teacher wanted to build PE students' leadership skills and ability to think critically by setting up a learning experience that enabled them to contribute to their local community. In 2013 and 2014, Year 13 PE students have assisted local primary schools to promote health and wellbeing.

What learning activities were involved?

In 2014, the teacher organised the Year 13 students to work with a class from a local decile 1 primary school. The Year 13 students were completing an internally-assessed Achievement Standard (PE 3.6/91503) developed in 2013. As part of the standard, students work through an action competence process. This process encourages them to think critically about health promotion and models of health and wellbeing, and turn their thinking into actions aimed at supporting a group to take part in physical activity.

For the Year 13 students, a key starting point was finding out about the needs of the primary school class. They used surveys and interviews to collect needs analysis data. When they compared this data to holistic models of wellbeing, students realised that the primary school placed the most emphasis on supporting academic achievement, with less focus on building social wellbeing. The analysis suggested the primary students needed more strategies for relating well to others and avoiding getting into fights. The secondary students also noticed that the primary school did not have a structured PE programme that potentially could assist students to build these skills.

With the input of the primary teacher, the Year 13 students started a team planning and design process. The result was a 10 week health promotion programme which used physical activity as a context to develop social and interpersonal relationships, cultural identity, leadership, and team work. The programme also aimed to increase the younger students' wellbeing, and enjoyment of physical activity and awareness of its benefits.

The Year 13 students used holistic Māori models of health and wellbeing such as Te Pae Mahutonga to assist their design process. The majority of students at the primary school were Māori, so the secondary students thought that using Māori models would assist them to think about how wellbeing is related to cultural identity. The Year 13 students wanted the younger students to understand that there are many different forms of physical activity. They included activities such as haka and poi that could enable the young students to express their cultural identities and existing leadership ability.

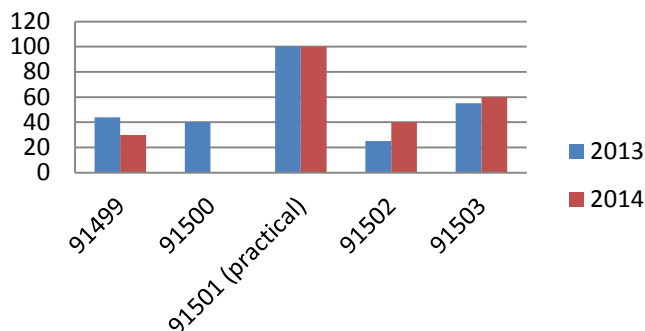
Most activities took place at the primary school, and the primary students also visited the secondary school. During visits to the secondary school, the younger students engaged in activities and were introduced to the PB4L values of the secondary school.

How did teachers know these activities had an impact?

With the exception of one practical NCEA standard, in 2013 and 2014 the Year 13 class gained the best results on the health promotion achievement standard (number 91503 – *see graph*). The teacher considered this result reflected the value students placed on contributing to their community. This value was evident in students' reflections.

"It is the greatest feeling being able to positively impact someone's life, just like the kids have done to us..." (Student)

% Achieved in Health Promotion 91503



The secondary teachers had lots of positive feedback from the primary school about the success of the programme. Both primary and secondary teachers thought the Year 13 students really stepped up and took on leadership roles. Secondary teachers saw this as an example of students modelling Papakura High School's PB4L values in action (Mahi, Kaitiakitanga, Whanaungatanga, and Ako).

Reflections and plans for the future

Working through the requirements of a new standard over 2013 and 2014 was a learning experience for the Year 13 teacher. Reflecting on 2013 she realised she needed to place more emphasis on scaffolding and modelling critical thinking. In 2014 she supported students to examine different perspectives and models of wellbeing, and consider how these might fit with the needs of the primary school.

In general, Sport in Education is assisting teachers at Papakura High School to sharpen their thinking about ways to design learning activities that enable students to contribute to their community.

Teachers considered the Year 13 programme was resulting in wider impacts. One ripple effect has been to create relationships that can support transition. Teachers noted that the primary students built confidence as they formed relationships with older students who could act as positive role models. The primary students also gained more knowledge about pathways as they visited their local secondary school and were introduced to the school's PB4L values and sports-related pathways.

"community change is hugely important – there have been lots of ripple effects for both schools..." (Teacher)

Tags: NCEA; PE; student leadership; primary school connections; school values; active learning; team learning

Story 4 – "I hate English, it's boring": Using sports poems to facilitate learning success

Students' sports interests can be used as a hook to engage them in a study of poetic language devices

What was the main aim?

An English teacher at Papakura High School taught a class of Year 9 students who were not motivated in English and who were notorious around the school for pushing boundaries. Teachers considered that students did not try because they were afraid of failure. The teacher wanted to design learning experiences that would engage students and give them experiences of success.

What learning activities were involved?

The starting point for this study of the language feature of poetry was to collect information about students' interests. Most of the class liked wrestling, NRL and basketball, so the teacher searched for poems about these

sports. She managed to find a range of poems that she could use to illustrate language features such as similes, metaphors, and personification. She set up lots of activities to assist students to unpack the poems. For example, she cut up the poems into sections and got the students to order them in a logical flow. The teacher also incorporated kinaesthetic activities into lessons such as the use of runners to get answers to questions. To make stronger links to the local community, an ex-student who is a commonwealth boxer supported some lessons when the class explored poems about boxing.

How did teachers know these activities had an impact?

The teacher found that most students really enjoyed analysing the poems. She was amazed by their results on a poetry assessment. This showed students were able to transfer their learning to a non-sport context. Most, but not all, students were engaged with the poetry topic. For some students it had provided a catalyst for them to take more risks with their learning. Prior to the unit, one student was vocal about hating English. Following the unit, he wrote a poem which was published in the school magazine and gained one of the top English assessment results.

In addition, over the year, a number of students made greater than the expected gains on asTTle reading. The teacher considered her use of a range of sports contexts that students were familiar with had hooked students into learning and assisted them to access key English concepts. By the end of the year students' behaviour was a lot more settled in English classes.

Tags: *English; sports-themed learning; active learning*

Story 5: “Playing touch with ideas” to support students’ writing

A metaphor based on the roles in a touch rugby team supported students’ English learning

What was the main aim?

A teacher of a Year 10 English class observed that students found writing difficult and tended to give up quickly. She wanted to support students to move past the idea that it's OK to be challenged on the sports field and continue playing, but not with an idea. Her aim was to support students to structure their thinking so they would be better able to write the literary essays that are required in the senior school.

What learning activities were involved?

Following a discussion with students about touch rugby, an English teacher devised a learning game called “Playing touch with ideas”, which was loosely based on the roles in a touch team. This metaphor creates a game-like context to support students to structure and verbalise their thinking in small groups. A “runner” begins the play by expressing an idea. The “supporter” backs this up by adding clarification or additional details. The “challenger” looks for the holes in the idea (“I don’t agree because ...” ‘Have you thought about ...’ etc). If there are four people in the group, the challenger also has a supporter. The teacher introduces new words and English terminology to the game from time to time by asking questions such as “What are the implications of ...?”

The teacher commented that “even the shy kids get into it” when she invites them to “play touch”. She considered that playing this game built students’ confidence in talking about their ideas, structuring their writing to express these ideas, and in using English terminology.

How did teachers know these activities had an impact?

The teacher reported that most students had developed their ability to make verbal inferences, though some with lower levels of writing skills were still struggling to show this on paper. However, many students had shown greater-than-expected gains in e-asTTle writing. Some students now had higher e-asTTle writing than reading levels, which was unusual.

Students stated they really enjoyed “Playing touch with ideas” and could describe the strategy quite clearly. They commented some people got quite argumentative, but generally in a “fun” way. They thought the strategy helped them “go deeper” and aided their understanding. One commented that she was more confident using English words. A number were surprised at how well they were now doing in English.

Tags: *English; sports-themed learning; team learning; learning dispositions*

Queen's High School

Te Kura Tuarua O Kuini

IGNITING PASSION FOR LIFE AND LEARNING



Why Sport in Education?

Making sure no students fall through the cracks is a key priority at Queen's High School (QHS). For a number of years the school has been focused on increasing the retention rates and achievement of Māori and Pasifika students through initiatives such as He Kakano and PB4L School-Wide, and a whānau home room and senior mentoring programme.

Staff saw Sport in Education (SiE) as an opportunity to build on their current directions and develop into new initiatives. Staff realised that extra-curricular activities such as sport play an important role in engaging students, and in creating a sense of belonging within the school community. These activities also foster the sorts of values the school is promoting through PB4L School-Wide. For this school, SiE is providing an opportunity to explore new ways to harness the potential of sports-related experiences to develop a sense of belonging, along with students' learning capabilities, leadership skills, and involvement with the school community.

About Queen's High School

This decile 5 girls' school is located in south Dunedin. The school serves a diverse community and has a high proportion of Māori students in comparison to other South Island schools.

Queen's High School aims to create learning environments that are safe, caring, and accepting of diversity. Meeting individual needs and supporting all students to fulfil their potential is also an important focus.

He waka eke noa: A canoe which we are all in – no exceptions

Putting learning in the centre of the frame for all students is an important priority for staff at Queen's High School. Staff realise that different triggers engage different groups of students. For teachers this means looking carefully at the students in front of them and designing relevant and engaging contexts that support learning.

The following 'success stories' were shared by teachers at Queen's High School to represent the flavour of SiE as it is playing out in their school. Staff are attempting to use sport pedagogy to find new ways of supporting students to learn. They are creating new courses for students who find it hard to engage with school. These courses use physical activity and sports contexts to connect students to school and with learning (**see QHS story 1**). Other teachers are using sports contexts and ways of working to design new learning experiences for junior students (**see QHS stories 2 & 3**).

SiE is also supporting Queen's staff to consolidate their focus on building students' leadership capabilities in ways that foster connections with the surrounding community (**see QHS stories 4 & 5**).

Story 1 – Play at school, stay at school

Combining active learning experiences with extra learning support can act as a hook to engage students who are at risk of leaving school without qualifications

What was the main aim?

In 2014 Queen's High School identified a group of Year 11 and 12 students who lack motivation and direction at school. This hindered them achieving their full academic potential. The school wanted to develop a programme that would engage these students, improve attendance, and build their capabilities and achievement. Staff were aware that any programme that aimed to do all these things needed to start from a basis of strong relationships and foster a sense of belonging to the school community.

What learning activities were involved?

Looking at the needs of students, and their interests, teachers realised they needed to provide opportunities for students to:

- enhance personal decision making and take responsibility for their own learning
- respect individual differences and show compassion for others
- work with peers and take on leadership roles
- increase knowledge and skills while taking part in physical activities



Putting these factors together, an Active Leadership through Participation in Sport (ALPS) course was designed for Year 11 and 12 students. Students were shoulder tapped for ALPS or chose the course as one of their curriculum options. The course included Achievement and Unit standards based around activities (e.g., *US: 505 Manage personal physical fitness with guidance; AS: 90859 Demonstrate ensemble skills in a dance*). ALPS students were all encouraged to play a sport for the school.

ALPS was designed so teachers can provide extra support to students across a range of curriculum subjects. The ALPS teacher was also the students' mentor teacher (who offers academic support). This provided time for a more in depth pastoral and curriculum focus.

In 2014, over half of the students in the ALPS class were Māori and part of a multi-level whānau home room class, so the ALPS teacher worked closely with the teacher from this class. She also made vital links with all of the students' curriculum teachers. This team of teachers worked together to develop strategies to assist the students with their learning. The ALPS teacher had a support teacher who was also the sports coordinator.

In the first term the ALPS teacher focused on developing relationships and laying the foundations for success. She realised that "trust is huge" and she needed to have a strong relationship with students. A class basketball team, which most of the class joined, contributed to students' sense of belonging. The ALPS teacher coached the team, and a parent provided support. In addition, all students played a range of other sports at the school. In class students learnt about managing their fitness and how to set goals about their attendance and achievement. Seven of the students also did Year 11 PE and were involved in coaching fundamental skills at a primary school and early childhood centre. Four of the students did Year 12 PE and were responsible for designing activities at Year 9 camps.

Once teacher and class relationships were developed, the ALPS teacher focused on working with other teachers to support the students to stay at school and gain NCEA credits.

How did teachers know these activities had an impact?

The teacher collected data about the 15 students in the 2014 ALPS class. This was compared to students' prior records from 2013. This data showed some pleasing results. Students' average attendance rate increased from around 75% to 80% and students had fewer referrals out of class (a total of 29 in 2014, compared to 100 in 2013). The data for some students showed big changes.

Results from the engagement section of a student survey also showed that students' engagement had increased over the course of the year. A snapshot of some responses is shown here.	SURVEY STATEMENT	March 2014		November 2014	
		Agree %	Strongly Agree %	Agree %	Strongly Agree %
<p>Four students left during the year to attend alternative education programmes. The rest of the class all achieved Level 1 NCEA. In past years, students with a similar profile tended not to achieve qualifications in Year 11.</p> <p>In combination, this data all suggests that the ALPS class was meeting its multiple aims. This view was confirmed by students.</p>	I always try my hardest	47	13	57	29
	I am always on time and organised	20	0	57	29
	I'm really interested in what we learn	33	13	57	29
	I have surprised myself with what I have achieved	33	7	57	29
	I always want to go to class	33	20	29	43
	I learn things I can use outside of school	40	20	43	43
	My culture is respected and valued	40	40	43	43
	I want to tell other people what I learn in class	20	0	43	29
	I have fun	40	20	29	57
	I work well with others	67	33	29	57
<p><i>"I love it! Miss XX and Mrs XX rock! Love the activities that we did and how they helped me be more focused in my other classes and made me want to come to school." (Year 11 student)</i></p> <p><i>"I like how ALPS helped with my other classes." (Year 12 student)</i></p>					
<p>Reflections</p> <p><i>"The success of this programme should be attributed to several factors and people involved with this group of students; the ALPS programme, whānau home room class, community mentoring programme, senior mentoring programme and PB4L. What the ALPS programme accomplished was to give these students two more teachers that they learned to trust and respect, the opportunity to have extra support for their curriculum subjects and use physical activity and sport to further connect them with the school and their learning." (Teacher)</i></p>					
<p>Tags: PE; NCEA; active learning; learning dispositions; community connections</p>					

<p>Story 2 – Maths for the real world</p> <p>A ski jumping scoring system provided a real-life context to assist students to understand maths</p> <p>What was the main aim?</p> <p>A teacher wanted to improve students' engagement with maths by assisting them to see the real world relevance of the maths they were doing.</p> <p>What learning activities were involved?</p> <p>Capitalising on the fact that the winter Olympics were on, a teacher used this as a context for learning. She decided to focus on some of the lesser known sports to show her classes how they used maths.</p> <p>As a starting point, a Year 9 class watched a YouTube clip of the Winter Olympic ski jumping event. This grabbed students' attention. The class then looked at how the event was scored and how the winner was decided. The complicated scoring system, which the teacher provided, was an ideal context to explore the use of negative numbers and ordering.</p> <p>The ski jumpers start with a certain amount of "jump" points and then they gain or lose points depending how far in front or behind the allotted line they land, so students added and subtracted points and used negative numbers. The ski jumpers also gained or lost jump points depending on whether there was a head or tail wind. The teacher used this to design an extension activity to challenge some students.</p> <p>Three judges then give the ski jumper "style" points which get added to jump points, so the girls had to do some</p>

more adding.

Students then had to order numbers to rank the athletes to say who had won. The skiers do two jumps and get a combined score, so the class looked at who would have won if they only did one jump compared to who actually won.

How did teachers know these activities had an impact?

The teacher could see that students were engaged in what they were doing. This unit was not part of a formal assessment; however the teacher was pleased that students from this mixed ability class were clearly able to do the necessary calculations.

"The students were engaged and interested in what they were doing. They were fascinated by the ski jumping which most hadn't seen before and how far they jumped. They asked lots of questions about the scoring and they were adding, subtracting and ordering numbers without thinking about doing maths and they could rank the athletes and say who won." (Teacher)

Reflections and plans for the future

The teacher continued on to use other Winter Olympic sports to provide contexts for a measurement unit.

Students ordered athletes scores with decimal numbers. The teacher considered the scoring for some Olympic events was an ideal context to explore decimal places – an aspect of maths students often found hard to grasp.

In the future the teacher planned to use similar approaches. She had seen that watching the sports clips was an engaging starter activity. Another next step was thinking about how she could differentiate tasks to provide more extension opportunities for students.

Tags: Mathematics; sports-themed learning

Story 3 – A Year 9 English class goes SOLO

Using a coaching model that includes specific feedback, and a self-assessment resource based on the SOLO taxonomy (a model which shows how students' understanding progresses from surface to deep and then to conceptual), is assisting in developing students' assessment capabilities

What was the main aim?

At the start of the year a Year 9 English teacher observed that the work of many students appeared "slapdash". Students had difficulty identifying the key parts of a question or task, and did not complete tasks fully or skimmed over the surface. Students' self-assessed on whether they "enjoyed" the task, rather than on the work required.

The teacher designed an inquiry to explore ways to build students' interest and ability in reviewing and improving their work. She wanted students to develop the belief that their actions could make a difference to the end grade for the work they submitted.

As a starting point she surveyed the class about what level they wanted to achieve in assessments. Students' responses told her that most wanted to gain merits or excellences, but they did not feel confident that they could identify whether their work was pitched at the required level. In addition, most students stated that they did not habitually do drafts or edit their work prior to submission.

What learning activities were involved?

The teacher decided to use a coaching model to give feedback and assist students to self-evaluate so they could lift their achievement. This model focused on three things:

1. The use of frequent, brief feedback about a particular element of a larger skill

The teacher set up frequent feedback conferences in class and through Edmodo (an online learning network). For all marked work a "Where to from here?" comment was added to assist students to focus on improving specific skills. Peer feedback was also part of the process.

2. Encouraging the learner to self-monitor the skill they are developing

The teacher used a range of strategies to increase students' agency. These included using sports

metaphors based around “training” for an event to show students how they had control over their work and how performance could be improved through practicing skills and self-monitoring. A guide to assist students to self-monitor was developed (see below).

3. The use of ‘best practice’ models as the main focus of guidance

To provide a ‘best practice’ resource that students could use to self-evaluate, the teacher adapted the Structured Outline of Learning Outcomes (SOLO) taxonomy so each level corresponded to an achievement grade. She produced a marking guide based around these levels called EMAN (**E**xcellence, **M**erit, **A**chieved, **N**ot achieved). Along with each piece of work, students were required to submit a self-assessment. They could use the guide to assist them with the work and the self-assessment.

How did teachers know these activities had an impact?

Building students’ ability to self-evaluate took more time than the teacher expected. Her observations showed that, by late Term 2 when students presented speeches, they were able to give feedback to their peers using the language of the topic. They could also offer their peers “where to from here?” advice that reflected the SOLO guide. By the time of the last essay assignment in Term 4, many students had improved their ability to plan and review their work in class. However, the teacher could also see that most had not transferred these skills to their homework.

At the end of the year, the teacher surveyed students to gather their feedback. Most students reported they felt more confident in their work and ability to identify the skills they had developed or improved. The majority of the class (21 out of 26 students) reported using the SOLO guides. Most used the guides in an ongoing way to improve their work. A couple only used the guides at the start of assignment or had not used them. Those who were more able, or who had high aspirations, placed more value on being able to self-assess and having a clear sense of what they needed to do to achieve the level they desired.

Although students were developing their ability to self-assess, most also wanted teacher feedback and valued the opportunities for conferencing and specific “where to from here?” comments.

Reflections and plans for the future

Although students were developing the ability to self-review and gauge the level of their work, the teacher felt they had not developed the confidence in their own judgement to the extent she had hoped. Her next step was considering how the approach could be improved to work better for all students. Next year she planned to have shorter feedback cycles and increase the focus on peer assessment because this appeared to be a useful scaffold to build self-evaluation language and skills. She also planned to simplify the rather complex language of the SOLO guide so that it was more accessible to all students.

Tags: *English; team learning; learning dispositions*

Story 4 – Fun with fundamental skills

Working with children from an early childhood centre provided an opportunity for a wider range of students to shine

What was the main aim?

In Year 11 PE students usually complete the requirements of the NCEA standard PE 1.5 (90966) by learning coaching skills. They put these into practice as they coach programmes funded by Kiwi Sport at a local primary school.

Usually students learn coaching techniques by taking part in several prior practical sessions run by a teacher and coaches from local community sports organisations. Despite this, teachers found that students tended to adopt traditional skill-based coaching approaches when they visit local primary schools. Rather than focusing on “the sport” teachers wanted students to build their ability to interact and use hands-on approaches that built the younger children’s fundamental movement skills. Teachers also wanted students to use Teaching Games for

Understanding approaches.

What learning activities were involved?

Following their introduction to coaching techniques, students worked in small groups to research and plan fundamental movement activities suitable for three and four year olds. Students found aspects of the “Growing Coaches” resources and “Activity Cards for Under 5” helpful in assisting them to plan.

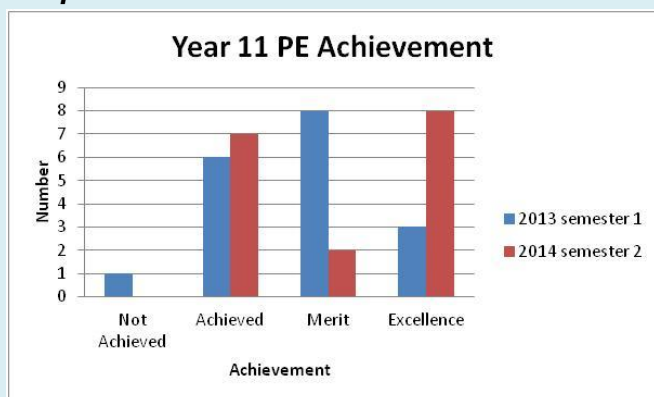
The students worked in small groups to teach the skills to the preschoolers. Due to the open and honest nature of 3 and 4 year olds, the girls could see straight away if their chosen activity was not going well. They quickly realised that they couldn’t just give instructions – they had to use a combination of strategies and change these quickly if things weren’t working. They used their initiative and problem-solved on the spot.



When teaching (and also as part of the planning process) the girls were required to choose at least two interpersonal skills to demonstrate and reflect on. The girls were observed and given verbal and written feedback and feedforward on the use of these skills and their teaching. Observers were other staff members, and/or peers.

How did teachers know these activities had an impact?

A combination of improved achievement standard results, positive student and observer reflections, and feedback from the preschool, showed this new context was very successful. All the students gained the achievement standard. About half gained excellences (see Semester 2 on the graph). This was a much better result than previous groups working with primary age students.



Observers noted that, compared to the prior groups who taught Kiwi Sport funded programmes, these girls were much more interactive. They chose innovative activities and used more varied equipment. The students’ teaching was more hands-on, rather than standing on the side-line giving instructions or demonstrating. They got down at the children’s level, joining in the activities and communicated with individuals as well as with the whole group. They weren’t afraid to sing or dance or do actions. They also involved the children in the decision-making process, asking them what activities they would like to do.

Reflections and plans for the future

Teachers were surprised by the difference the early childhood context appeared to make. Working with preschool children seemed to have had a profound effect, not only for the Year 11 students, but also for the observers. It provided a context for some students, who were not always engaged in other settings, to excel and be positive role models.

“We really saw a different side to them [the students]. They were smiling and working positively with the children. They were fully focused on their teaching and communicating effectively”. (Observer)

The school planned to build on the stronger connections with the preschool. Next year, students will work with preschool children first before coaching Year 3 and 4 students. Teachers hoped that this will assist students to become more interactive coaches who promote Teaching Games for Understanding.

Tags: PE; NCEA; active learning; team learning; student leadership; community connections

Story 5 – Starting early to build student leaders

Offering a range of leadership roles to junior and senior students is strengthening students' leadership capabilities

What was the main aim?

School leaders at Queen's know that PE students and sports leaders are a core part of the student leadership culture at their school. Queen's staff want to capitalise on the leadership opportunities offered by physical activity and sports. They aim to build a more coherent approach to student leadership that starts in the junior school and consolidates in the senior school.

What learning activities were involved?

Teachers start identifying junior students with leadership abilities at a 2-day Year 9 camp at the start of each year. Some students are then selected for a junior leaders' camp. In Years 9–10, as well as building skills through PE, students are now able to teach skills and referee events for local primary students through a Sports Development class. This class is part of the 25th hour options programme.

Students in Years 11–13 and PE classes run health-promotion and coaching activities at local primary schools. Senior student leaders also support junior camps. At the Year 9 camp, Year 12 PE students lead adventure-based learning activities, and Year 13 PE students, who are class buddies, run entertainment activities. For many senior students, these leadership roles contribute to PE and health achievement standards.

Student leaders also coach sports teams at Queens and local primary and intermediate schools, and contribute to community sports club events. They also promote school values and sports participation in assemblies. Students who are members of sports clubs run coaching sessions for other students during 25th hour options time.

How did teachers know these activities had an impact?

One result of Queen's focus on student leadership is that school leaders are looking more closely at students' strengths, and giving them leadership roles to match. In 2014, Queen's had 75 different student leaders. This meant that 20% of all students were in leadership roles. Many of the students from the Years 11–13 PE classes have a range of leadership roles, including senior roles such as head girl. In 2015, 11 of the 16 senior student leaders had taken senior PE. A similar pattern is evident in recent years. In 2013, 11 of the 12 senior leaders, and in 2014, 14 of the 24 senior leaders, were PE students.

These leadership opportunities also support students' achievement as they can gain NCEA achievement standards from their leadership work. For example, in 2014, 28 students submitted work for AS 2.6: *Evaluate leadership strategies that contribute to the effective functioning of a group*. Of these students, most gained merit (10 students) or excellence (8 students). Only 3 did not achieve the standard.

School staff consider that leadership opportunities enable students to build self-confidence and become more aware of their abilities. This perception is supported by evidence from a student survey and focus groups. Junior students reported their school was offering more opportunities to develop leadership capabilities: *"The programme this year [2013] is really good, last year there were none of these activities"*. Students considered their leadership experiences were assisting them to build a range of capabilities. Those capabilities commented on by students in a focus group about coaching included:

- self-management and organisation
- knowledge of effective coaching strategies and PE content knowledge
- development of personal sports skills
- self-confidence and willingness to take risks
- problem-solving when things did not go as planned
- ability to lead and motivate younger students and relate to broad range of people

"It gives you a drive—I did that ... so ... why can't I do that [a new challenge] as well?"

"Speeches—I used to be a really shy person ... after speaking in front of little kids I'm so much more confident with people." (Students)

Students reported they were transferring the benefits gained from coaching into other aspects of school life, and

considered the capabilities they were developing to be relevant for their future careers and life.

Reflections and next steps

The school is now starting to broaden their approach to developing student leaders. One next step is to develop targeted approaches to support disengaged students to connect with school (see the example in **Story 1**). The school are also developing a Rangitahi Fitness Leadership programme with contributing primary schools, and Community Coaching Clinics run from the school in conjunction with Sport Otago.

Tags: *student leadership; school values; PE; active learning; community connections*

Tauranga Boys' College



Why Sport in Education?

Tauranga Boys' College has a well-established sporting culture. Staff at the college saw Sport in Education (SiE) as an opportunity to make stronger connections between students' interest in sport and the curriculum programme.

The school is aiming to build a more integrated junior curriculum. Given the interests of many students, the SiE emphasis on contextual learning and the use of engaging sports contexts seemed a good place to start designing new approaches in the junior school, especially for students who might struggle with learning.

The school is also part of PB4L School-Wide, so school leaders saw SiE as a way of exploring how sports values and contexts could be further harnessed to contribute to the values base of the school.

About Tauranga Boys College

This decile 6 single-sex school is located in central Tauranga. Around 57% of the 1900+ students identify as NZ European and about 27% as Māori.

Challenges for this large school include developing a shared sense of values and balancing the needs of high achievers with struggling learners.

Engaging and supporting struggling learners

The following 'success stories' were shared by teachers at Tauranga Boys' College (TBC) to represent the flavour of how the curriculum workstream of SiE is playing out in their school. The key focus for this team of teachers is on designing approaches that assist learners in low-band junior classes to experience success. In previous years staff had noticed a pattern for these boys to leave before they got to the senior school. A team of teachers from five core subject areas are working together to find ways to engage these students with their learning, decrease behaviour incidents, improve attendance, and encourage the boys to stay at school until the senior years. One way teachers aim to increase students' engagement and sense of belonging at school is through supporting the boys to become "decent young men" via role modelling and a shared focus on values, team building, social behaviour, and self-management.

In 2013 the SiE lead PE, Mathematics, and English teachers were all timetabled to teach the same low-band class of Year 9 boys. In 2014, two Year 9, and one Year 10, low-band classes were the focus. Social studies and science teachers joined the team. The first two stories describe aspects of the

organisation and focus of the classes, and stories 3-7 provide examples of the team's shared approach from the perspective of teachers from different subject areas.

Story 1 – A tight team of learners and teachers

A team of teachers use engaging sports contexts and a team focus to support struggling learners

What was the main aim?

The main focus for a team of SiE teachers is designing a learning programme that engages the students in low-band classes with learning. These teachers want students to develop a sense of connection to school, so they stay at school. Teachers are offering extra pastoral support and building a team culture in classes. The aim is that boys will live the school values and become “...good men, with a sense of belonging, pride, self-respect and a concern for others” (school website).

What learning activities were involved?

The lead SiE PE, Mathematics, English, science and social studies teachers and other interested staff were timetabled to teach the same low-band classes of Year 9 and 10 boys. They aimed to build students' literacy and numeracy skills, and interest in possible pathways, through the careful selection of contexts relevant to students. Many of the boys enjoy sports, PE, and teamwork – so teachers wanted to place these interests in the centre of the classroom programme across a range of subjects.

Teachers jointly planned one integrated unit a term that connected to a shared sports context. They included opportunities for students to be active and learn in groups. In 2014 the shared contexts included big wave surfing, rugby league, and American sports. Each unit ran for about 4 to 5 weeks.

Using Google drive helped with shared planning. So did using an integrated learning template to plan. This encouraged the team to think about the big picture understandings they wanted the boys to focus on. One “Aha moment” for teachers was realising they could use shared assessments. Students could research and produce one product, such as a video, that could be assessed for content relating to different subjects (**see TBC Story 4**). Developing a process for shared assessment planning at the start of each unit made it clearer what students needed to learn, and therefore what skills they needed to build in class. This assisted teachers to see how they could make connections between subjects.

Teachers also capitalised on the allocated time staff had to meet in teacher inquiry groups. The inquiry groups were structured so that the SiE teachers who taught the target Year 9 and 10 classes were organised into two groups. This gave them time to develop shared inquiries about the classes.

Teachers formed a “tight team” as they worked together. They built relationships with students and each other, communicated about the classes, and problem-solved around any issues that arose. All the teachers in the team were young men with similar sporting interests to their students. Their enthusiasm for sport helped them engage and connect with students. They acted as role models and provided extra pastoral support if needed. They were careful that their discussions were about supporting students and not labelling them as “behaviour problems”.

One common focus was working together to create a team culture in each class. For Year 9 students, teachers made sure the sports classes got a camp slot early in the year. All teachers attended the camp and designed team-building activities that supported teachers and students to get to know each other and build a sense of each class as a team.

Once students were back at school from camp, teachers developed a collective focus on behaviour and team work by making use of Hellison's Teaching Personal and Social Responsibility model (**see TBC Stories 3 and 5**). At the start of the year their main focus was getting students to class, assisting them to self-manage their behaviour, and supporting them to learn how to get on with each other. Later in the year teachers focused more on developing the boys' team and leadership behaviours.

How did teachers know these activities had an impact?

For teachers, working as a “tight team” to support the same classes enabled them to better reinforce similar group

norms and behaviours. By the end of 2013 and 2014 the target classes had more positive cultures than similar classes in past years and most students appeared settled at school.

Teachers said students liked the way their teachers worked together. This gave students a sense their teachers were interested in them.

Teachers collected a range of data (see insert) which supported their view that students were more settled and engaged. In past years, many of the Year 9 students in similar low-band classes had left the school by the end of the year. In 2013 and 2014 the target classes had higher retention and attendance rates, and higher average end of term maths test results and PAT stanine scores than comparison classes. Students were working at higher levels of the Hellison's model by the end of the year, and most behaviour incidents were low level.

"...for these boys, it's about keeping them engaged and at school... so they have a better shot at getting NCEA level 1..." (SIE lead teacher)

The Stats (Yr9SiE)

	SIE class 2014	2012 equivalent	2014 two classes above
Attendance:	90% attendance rate	81% attendance rate	87% attendance rate
Pastoral: *	Fewer incidences Greater retention Low level pastoral	High Pastoral Greater suspensions Large school drop out	Low level incidences Truancy Low level pastoral
Math: Average <u>Term 3</u> test %	41% (Year9 average: 58%)	22%	35%
English: Reading comp <u>PAT</u> **	Average PAT score: Mid year avg: 4.0 (Year9 average: 5.3)	Average PAT score: End of year avg: 3.14	Average PAT score: Mid of year avg: 3.15

Low level pastoral refers to minor behaviour incidents.

** Progressive Achievement Test (PAT) reading comprehension stanine scores.

In combination, this evidence suggests that the use of sports contexts, and the focus on developing a team culture, was assisting students to engage at school and become "decent young men".

Feedback from focus groups of students confirmed teachers' views.

Students felt they had good relationships with their SiE teachers and valued the way they could go to them for support.

"our class were mates....the class has matured us..." (Year 9 students, 2013)

Students said they found many features of their learning experiences engaging. One aspect that stood out was how classwork often involved teamwork, competitions, and rewards. Students liked competing with each other and this helped them "learn the basics" like Maths timetables. In general, students valued the way their teachers supported them, worked together to design their learning around sports contexts that interested them as a group of boys, and gave them more opportunities to be active and learn outside.

*"[We learnt to] be a team in the classroom, don't put each other down... be a good sportsman".
"it's not the same old writing all the time...we did things differently – sports contexts. They [other classes] just did normal work."
(Year 9 students, 2013)*

Students thought the start of year camp and team games helped them get to know each other and bond. When they got back to school, teachers reinforced these bonds by mixing up friendship groups, using a lot of group work, and promoting the idea that working well together was one way of demonstrating school values.

Reflections and plans for the future

For teachers, the most successful topic in 2014 was based around the Warriors Rugby League team. This context really grabbed the boys' attention. To select contexts like this, teachers considered it was very important to spend time getting to know each class of students and their interests.

Teachers said supporting struggling students was very rewarding. However they did not want to be pigeonholed as someone who was always given challenging classes. This could be career limiting. They suggested that school leaders needed to make sure all teachers had opportunities to teach a range of students and adapt their content and ways of working to suit different needs.

Another tension for teachers was that the school has a relatively set curriculum model with common end-of-term assessments for junior classes. This restricts teachers' freedom to design a curriculum and matching assessments to suit their students. These students responded better to internal forms of assessment. For teachers this meant they were juggling selecting learning activities that suited students' levels with making sure they were not watering

down the curriculum and restricting students' access to pathways in the senior school. Teachers said they were finding ways to navigate these tensions. They would continue to build on these approaches as they designed a new programme for the target Year 9 and 10 classes in 2015.

Tags: sports-themed learning; integrated learning; active learning; team learning; school values

Story 2 – Visual diaries and common assessment tasks promote understanding

A visual diary helps students keep track of assessment results, and set goals, across core subjects

What was the main aim?

The lead SiE/PE teacher developed a visual diary for use by students in sports-focused classes across 5 core subjects. One aim was to engage students by using a visually appealing resource that drew on primary school approaches to learning. Another was to better prepare struggling students for NCEA by assisting them to develop pride in their work and a belief that they could set goals and improve their results. The teacher wanted to address the fact that students had experienced a lot of past failures with assessments and tended to “switch off” for formal assessments and when getting results.

What learning activities were involved?

The visual diary is an A3 art portfolio book. Students are able to personalise the first page of the diary to their own interests and sports – which gives teachers information about students' interests.

The diary brings together: learning tasks and requirements; key concepts; and assessment results from common sports-related units as well as other core subjects. To support students to track their successes and set goals for subjects such as English and maths they receive printouts each term outlining their assessment results. These are put in their diaries. Successes are highlighted and acknowledged and areas to work on are identified. Students then set goals to improve on these areas.

In 2014, the teachers trialled using an integrated assessment across five core subjects. One common assessment task was designed by the teaching team for each sports-focused unit (see TBC Story 4). Information about these assessments was also located in students' visual diaries.

How did teachers know these activities had an impact?

Feedback from students suggested they were very proud of their diaries and wanted to share them with their parents. They valued the way they could personalise information in the diary and how the core concepts they were studying were located in the diary.

*“We can set it out how we want it... The first page is about us, what we like to do... it represents what we like...”
(Students, 2013)*

“You can see where you can improve...it’s better to set goals to know what you can improve on”. (Students, 2013)

Students also supported the more explicit focus on assessment, which appeared to be motivating them to want to do better. In 2014, students particularly valued the new integrated assessments.

Reflections and plans for the future

Teacher feedback was mostly positive about the shared assessments even though this meant extra work as they were creating new units as well completing existing set junior units. For teachers it was vital to have dedicated time as a group to plan common assessments. A key added benefit from this joint work was that teachers knew what was going to happen in other subjects, therefore they could assist students in their work from these subjects.

“The 2014 trial [of the integrated assessment] seemed to work well as students were constantly focusing on each subject area in each class, therefore talking about their science work in PE or English etc... and relating it to a common context.” (PE teacher)

Tags: integrated learning; learning dispositions

Story 3 – Assisting boys to become decent young men

A shared focus on Hellison's Teaching Personal and Social Responsibility model, and providing extra pastoral support, is assisting boys' self-management and social development

What was the main aim?

Teachers of the Year 9 and 10 sports-focused classes wanted to develop a shared approach to building students' ability to get on with each other, work in teams, and self-manage their behaviour.

What learning activities were involved?

To make sure their focus was consistent across classes, teachers decided to use Hellison's Personal and Social Responsibility levels as a basis for developing a shared language and model for learning behaviours. They developed their shared approach as part of a group teaching inquiry.

As a starting point the boys were asked to come up with the descriptors for the Hellison's levels (see the final version below). Each teacher had a poster in their room which showed the levels and descriptors (Ranging from 0–Not self-managing to 5–Leadership). Teachers referred to the posters in class and gave students feedback relating to the levels. Every lesson each boy was given a grade from 0-5. A summary of weekly results were stored on Google drive and discussed by teachers at their inquiry PLD sessions.

Alongside their use of Hellison's model, teachers worked together to share information about students. If an incident occurred in class or break-times, teachers would share this information. Later in the day, when the student had calmed down, another teacher would have a chat about the incident. This meant that students gained a sense that teachers cared about what was happening to them, incidents were followed up, and students were supported to think about ways to manage their behaviour.

How did teachers know these activities had an impact?

Teachers said their shared use of Hellison's and their team approach to supporting students had made a difference. Changes were particularly evident for the Year 10 class. Many of these students had been in sports-focused classes for two years. Their Hellison's data showed that they were moving to higher levels by the end of the year.

"We've seen the curriculum improvements that come from engagement. But over the two years, particularly with the Year 10 class, a lot of them have become functional young men who you can have conversations with. I have been enjoying watching them change". (Teacher)

By the last two terms of the year the whole class of boys could use gear such as iPads for independent team work out of class (such as when they filmed the videos described in **TBC Story 4**). Teachers considered this would not have been possible at the start of the year.






One particular example stood out for an English teacher. At the start of the year, one student got into fights with the smallest provocation. By the end of the year he had more self-management strategies. He was able take a deep breath and walk away from situations that previously would have triggered a fight.

Reflections and plans for the future

The group of teachers reflected that students would have matured to a certain extent as part of their normal development process. Pastoral data showed some still had difficulty self-managing. However, being supported by a group of teachers who were all on the same page and skilled at managing behaviour, was making a difference. The class culture, and many students' ability to self-manage, was improved compared to the students from low-band classes in previous years.

Tags: team learning; learning dispositions; school values

Tauranga Boys' College Model of Social Responsibility

Level	Level of Social Responsibility	Skills
5	<p><i>Beyond the classroom</i> GOODMAN</p> 	<ul style="list-style-type: none"> • Good mentor • Honest • Confident • Uses initiative
4	<p><i>Helping others and leadership</i> LEADER</p> 	<ul style="list-style-type: none"> • Lead by example • Be helpful • Encourage others not to be 'clowns' • Treat everyone as equal • Be a role model – do the right thing • Have the courage to stand up for people
3	<p><i>Self-direction</i> BE YOUR OWN MAN</p> 	<ul style="list-style-type: none"> • Stay on track • Think for yourself • Set your own goals • Self motivation • Don't let your mates put you off your work • Good to your mates
2	<p><i>Participation and effort</i> 100% EFFORT</p> 	<ul style="list-style-type: none"> • Finish your work • Get involved • Don't 'sack it' when something is hard • Don't copy • Be yourself • Don't do something just because someone else does it • Follow instructions
1	<p><i>Respect for the rights and feelings of others</i> RESPECT</p> 	<ul style="list-style-type: none"> • Don't take other people's stuff • Keep hands and feet to yourself • Be kind / no put downs • Listens • Don't talk smack (lie)

Story 4 – Communicating science ideas in sport through a shared assessment

Science, mathematics, and English teachers worked together to develop a shared assessment that enabled students to showcase their learning

What was the main aim?

The students in low-band classes at Tauranga Boys' often have a history of failure in formal written assessments. This is one factor that contributes to them "switching off" for tests or other assessments. The team of teachers wanted to assess the boys' learning in ways that gave them a feeling of success, built their confidence, and enabled them to showcase their skills. The teachers worked together to develop a Year 9 and 10 assessment task that drew on the knowledge and skills of different subject areas. This was their first experimentation with a shared assessment.

What learning activities were involved?

For the science teacher, the focus was on communicating a science idea. The backdrop was the Commonwealth games. Students in his Year 10 class were required to choose and research a sport and select a science concept relevant to that sport. Students then had to work cooperatively in small groups to produce a short video that clearly communicated their science idea.

The students selected some potentially challenging contexts. Some communicated ideas about projectile motion using drop-kicks from the Sevens Rugby or clay target shooting. Some explored the top, back, and side spins of table-tennis players. Another group used weight lifting as the context to explore forces.

This integrated unit tied in with maths and English, and linked with a focus on bio-mechanics in PE. Students needed to find a way to physically demonstrate their idea as well as use measurement skills or diagrams to illustrate it. For English, students were expected to showcase their oral presentation skills in their video.

Students were shown clips of ESPN sports videos to provide a model they could adapt.

How did teachers know these activities had an impact?

Teachers were pleased with the assessment results across the three subjects. Several of the final videos were of a very high standard. Three groups stayed after school to complete their videos – this was unheard of!

Reflections

Teachers reflected that this shared unit was a useful context for students to build teamwork skills and learning dispositions. There were a lot of hurdles to overcome, mostly to do with the technology. Students had to make iPad videos then transfer the files. Most of the boys "battled through" any difficulties - this was a good context to foster perseverance.

Students also had to work cooperatively. Some groups struggled but most came together and worked really well. Teachers were impressed with students' ideas and the way they had overcome a range of challenges to produce a polished final product.

For teachers, working together to integrate content and assessments enabled them to build on each others' ideas and successes. They considered this assessment model worked better for the boys in their classes. One challenge for them was preparing the boys for the external assessments they would face in NCEA level 1.

Tags: Science; Mathematics; English; PE; integrated learning; sports-themed learning; team learning; learning dispositions

"it was a really ambitious task but overall there were some very positive things that came out of it..."

"They chose quite ambitious topics...It was amazing what they came up with."
(Teacher)

Story 5 – Using a carrot and a real world context to build English skills

Breaking English skills into small chunks, and linking lessons to real experiences, assists in developing Year 10 students' English skills

What was the main aim?

An English teacher knew going out of class was a “carrot” that he could use to engage students and encourage on task behaviours. He aimed to use this “carrot” to build students' English skills.

What learning activities were involved?

The shared context was a unit on the Warriors Rugby League team. This unit was positioned at the start of the year, so the teacher saw it as an opportunity to explore sports values and link these with school values and the Hellison's levels teachers were promoting in class (see **TBC Story 3**).

The English aspect of the shared unit required students to pick a player they considered worthy of being a captain. They wrote a short essay outlining the rationale for their choice. As a starter activity students selected two players from the Warriors team. They looked at each player's attributes and characteristics, and what values they upheld. The teacher gave the boys a list of values and they reflected on their own beliefs and how these connected to the players.

If the class reached Level 4 on the Hellison's scale then every 3rd Friday they were able to go outside and take part in learning related to the current sports focus. For example, to practice some of the skills they would need for their essay, one Friday the class explored parts of speech, and specifically, adverbs and adjectives. The teacher printed off lists of adverbs and adjectives, and took the boys outside with their books. He explained that they were going to have periods of playing league, interrupted with periods of writing complete sentences using the adverbs and adjectives to describe how they were playing. The catch was that every time they stopped, every person had to write three complete sentences and get them checked before play continued.

The boys enjoyed the writing but rushed through their first attempt. This meant they had to spend time re-drafting their sentences before the game resumed. For the second attempt they paid closer attention to their writing. The teacher used the game time as an opportunity to also talk about their prior work on values.

How did teachers know these activities had an impact?

The teacher did other similar activities during the year. He observed that students were more likely to engage and complete work if they had direct experience or knowledge of the context. For this task, students clearly enjoyed writing sentences about their own and their friends' performance as it occurred. As a result, students had gained a solid understanding of adverbs and adjectives and how to use them for their essay.

“...while you are out there playing the game you can talk about the values associated with sport and also the role models we are trying to show the boys” (Teacher)

“My favourite topic this year has been learning about nouns and verbs because we were learning them through sport.” (Student survey, Year 10, 2014)

Reflections and plans for the future

Students' English skills improved over the year but these experiences did not accelerate students' learning to the extent the teacher hoped for. Some students arrived at the school 3-4 years behind expected levels for reading, comprehension, and writing. Next steps included considering how to better provide support over a number of years, and how assessment measures might be changed to fit the boys' needs. For example, the school relied on end-of-term tests for assessment results. For the students in this class, assessments that were nearer the time of a unit were a better assessment of their skills.

Tags: *English; sports-themed learning; active learning; school values*

Story 6 – Calculating speed: A real reason to estimate and measure

Having a real purpose to take measurements assists students to build their ability to estimate and measure

What was the main aim?

To assist a class of Year 10 students to engage with, and therefore better understand, maths concepts.

What learning activities were involved?

The teacher wanted to take the class outside to actually experience maths activities such as measuring, but felt pressure that maths is a “stay in the classroom” subject. The class needed to do measurements for their video project (see TBC Story 4). This gave the teacher and the boys a real purpose. The teacher designed an estimation and measuring unit to assist the boys to time accurate speeds to use for their videos.

The class went out to the basketball courts to estimate and measure set distances they could use to time their running speed. From one starting point they had to estimate how far each distance was. It was clear that students found estimation hard and did not have a concrete sense of distances.

Next students used a tape to measure the distances and they were given the task of recording their speeds over 5, 10, and 40 metres. They could walk, run, or sprint.

Some did not want to try, but other students supported and encouraged them. Students took over the task – and the teacher found himself observing on the sideline.

Back in the classroom the class talked about the data and how to use it. This led to more discussion about measurement units and about what km/h means.

How did teachers know these activities had an impact?

Many students stayed after the bell to continue their speed calculations – for the teacher this was evidence that students were engaged with the task.

By the end of the unit students could accurately estimate different distances. The teacher said that having a real experience had given students a yard stick to use.

Reflections and plans for the future

This teacher often taught students who needed extra learning support. He was aware that going outside to do maths tasks with these students could be hard to manage. However the teaching team’s shared focus on building students’ self-management skills, in combination with students having a purpose for doing maths that was meaningful to them, had worked very well. He planned to build on this unit next year by getting students to develop a plan to explore how important speed is to different athletes for example, motor racers, runners, or surfers.

Tags: Mathematics; integrated learning; sports-themed learning; active learning

“...[the boys] had to estimate where 5 metres was. You had some guys standing at 1 metre, and some guys standing at 20 metres...”

“...Once the actual measurement was made they then had to reflect on where they were and work out the difference between the actual and estimated.” (Teacher)

“They took over the lesson in the end ...They kept going, they were enjoying it, they were timing, they were re-trialling...”

“...Highlights were students discussing more accurate measures and future ideas.... some found out the difference in units as some measured in feet, and other metres. This allowed them to further focus on accuracy and correct units.” (Teacher)

“In the next lesson... they could speak about different people’s speeds.... When I asked ‘how long is the classroom?’ their estimations were all within a couple of metres...” (Teacher)

Story 7 – Sport as a pull factor to hook students into a study of migration

Exploring the movement of baseball players to and around the USA was an ideal context to cover key migration concepts

What was the main aim?

The Social Sciences department at Tauranga Boys' uses a unit on migration as a taster to introduce the boys to geography concepts. All Year 10 classes do this unit. Usually the focus is on migration to Australia. Many students find the unit boring. The teacher wanted to find a context that would engage students.

What learning activities were involved?

The shared theme at the time for the sports classes was American sports. The teacher decided to focus on the migration of baseball players to the USA. As a starter activity another teacher, who was a massive fan of USA baseball, dressed up as a player and visited the class to talk about the sport.

The class looked at the migration of players from countries such as Cuba, the Dominican Republic, Mexico, and Japan. They explored push and pull factors and some of the barriers the players experienced in moving from their home country to the USA (e.g., different languages and cultural practices). Then they explored the factors that contributed to internal migration as the players moved teams and locations (e.g., better pay or being nearer to family).

The class studied a well-known player, Albert Pujols, from the Dominican Republic. To get the class interested they first looked at his play statistics and background. Then they studied the factors that influenced his move to the USA, and between teams within the USA.

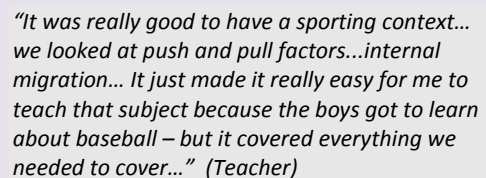
How did teachers know these activities had an impact?

The teacher found the boys were fascinated by the players' experiences. The end of unit test included a short essay on migration which around 75% of the class passed. This was a better than expected result. Students' essays showed they had grasped the core concepts such as push and pull factors.

Reflections and plans for the future

The teacher attributed the test results to the memorable context, and the way students could easily recall the experiences and choices of Albert Pujols as examples. The migration of baseball players was an ideal context to illustrate the core concepts of the unit.

Tags: Social sciences; sports-themed learning



"It was really good to have a sporting context... we looked at push and pull factors...internal migration... It just made it really easy for me to teach that subject because the boys got to learn about baseball – but it covered everything we needed to cover..." (Teacher)



Why Sport in Education?

The principal of Te Kuiti High School regards sport as a vehicle for building the confidence and aspirations of students. Many students are good at sport and enjoy it. The school wanted to leverage this success to increase engagement of students in more formal learning, build their confidence to take new steps and extend their horizons for the future beyond the town itself. Using sports contexts to building connections between subject-based learning and students' lives was seen as one concrete way to do these things.

Sport is a strong cultural influence in the community, so SiE also provided an opportunity to strengthen the culture and values of the school. The school joined the PB4L School-Wide initiative in 2014, once the principal was convinced that it would fit well with SiE and other initiatives already in place. The SiE emphasis on sports values as metaphors for engaged learning created useful synergies with what PB4L aims to achieve. The school values, summarised as RESPECT (Relationships, Expectations, Self-reliant, Participation, Environment, Communication, Thinking) are interwoven within SiE activities.



About Te Kuiti High School

Te Kuiti High School is a coeducational, decile 3, year 9-13 school, with a roll of around 350 students, of whom 60% are Maori.

The rural town of Te Kuiti is located in the heart of the King Country. The town's employment opportunities centre around a freezing works and agricultural pursuits. Many students work in agricultural roles when they leave school, close to their families and community.

Te Kuiti High School has been involved in a social sector trial in the town, with the aim of increasing attendance across all the schools. Staff could see the synergies between the activities already in place for the trial and SiE. They are strengthening both initiatives by building stronger primary-secondary links (see **TKH Story 1**) and by further increasing the profile of the sport of ki o rahi within the school setting (see **TKH Story 6**).

Learning in context: Making learning 'real' for students

The following 'success stories' were shared by teachers at Te Kuiti High School to represent the flavour of Sport in Education as it is playing out in their school.

One important focus has been using sports contexts to engage students and build their confidence in their learning (and in themselves as learners). Contexts help make the learning 'real' by building more explicit links between school subjects and students' lives beyond school. Working with primary schools had provided an important context for senior PE students to develop their confidence and leadership capabilities. This SiE initiative has helped form a stronger community between the high school, the local primary schools, and the wider community.

Some contextually-based units of work have been developed collaboratively to link several curriculum areas (**see TKH Story 2**). Others have been developed within individual subject teams (**see TKH Story 4**). In the first year the focus was on adapting work for Year 9 students, expanding to encompass both Year 9 and 10 in the second year. In the third year of the project a Year 11 cross-curriculum Sports Studies class is planned. This will be taught by a small number of teachers who work closely together to develop synergies between subjects in the various sports-related contexts they choose.

Form teachers have been using the idea of working in teams as a coaching metaphor to build a culture of high aspirations and effort in learning. This is one way in which the influence of SiE has spread to all students in the school. Other ways coaching and team metaphors are being used to support learning are shown in **TKH stories 3 and 5**.

Story 1: Developing students' leadership capabilities

Senior students in a sports leadership class worked with primary school students in a range of highly successful physical activity programmes

What was the main aim?

The Year 11 and 12 Sports Leadership classes provided opportunities to build students' leadership skills, and raise their levels of self-confidence and hence their learning aspirations. At the same time, the PE teachers saw an opportunity to build stronger links with their feeder primary schools, and to pave the way for smooth transitions into the secondary school environment. (Before SiE there was only limited contact between the high school and the primary schools.)

As part of this initiative the PE students had opportunities to be assessed in four NCEA achievement standards and two unit standards in year 11 (in sequence: AS1.8; AS 1.9; AS 1.1; US 9677; AS 1.7; US 9681). The year 12 course was assessed with five achievement standards (in sequence: AS 2.7; 2.10; 2.9; 2.8; 2.3).

What learning activities were involved?

Students in Year 11 and 12 Sports Leadership classes organised and delivered programmes of physical activity negotiated with neighbouring primary schools. In 2014 students were involved in:

- 'Golden time' at one primary school, which provides a programme of diverse physical activity options led by secondary students
- 10 sessions of sports activities in three different schools, using TGFU (Teaching Games for Understanding) as the overriding delivery model. TGFU emphasises development of players'

awareness of their learning as well as their skill development, so this was a challenging assignment for the students leading the sessions.

- Teaching Ki-o-Rahi to Year 7 and 8 students, then hosting and running a one-day tournament on the high school grounds. Students organised and also officiated on this day. This provided many positive opportunities for them to complete their year's learning in their leadership course.

How did the teachers know these activities had an impact?

80% of the students surveyed indicated that doing the leadership course had given them increased confidence and that this had transferred to other areas of their school learning.

"I got confidence from having to speak in front of crowds at the primary schools". (Student)

As well as increased confidence that they could achieve NCEA, students described how they had transferred some of the confidence or capabilities they gained from sports leadership experiences to other school experiences, such as completing speeches in English.

Students also gained the confidence to take on other leadership roles at school, for example to be house captains or lead during school sports. In 2014, 8 boys applied for the role of head boy – more than in the past. Six of these candidates came from the Sports Leadership class. In the end, 8 of 10 students with defined leadership roles had come through the Sports Leadership course.

Feedback from some parents indicated that they had noticed the difference the course had made for their children.

Feedback from the primary schools was also very positive. They liked the emphasis on a variety of healthy activities, and that no-one was left out. They noted the development of strong positive relationships between the older students and their children – as one teacher noted the younger students really did have a "golden time".

"It has been great to see [name] come out of her shell. She has always been a quiet shy girl but it is awesome to see her making the most of her opportunities. All this has been from the confidence she has gained in sports leadership. She talks about the things she has done and she loves working with the primary kids." (Parent)

The high school teachers have noticed the positive impact on transitions into secondary school. It helps that year 9 students already know some of the school leaders and are confident to interact with them.

"The organisation and management of the 'stadium games' never disappoints. The TKHS year 13 students show the right mix of maturity, skill and humour when delivering the program. They create an environment rich in learning, positivity and enjoyment." (Primary school leader)

In 2013 39% of Te Kuiti High School Year 11 students gained excellence awards for their internally assessed PE achievement standards, compared to 14% of students across all decile 3 schools. A further 34% of Te Kuiti students gained merit awards, compared to 25 percent of students from across all decile 3 schools.

"The feeder primary schools really enjoy having our students going into their schools and taking sports activities. The benefits are not just one way but are gained across the board." (PE Teacher)

Reflections and plans for the future

The teachers commented on the logistical challenge of getting students to and from schools during class time. Timetabling classes just before lunch or at the end of the school day allowed them to be more flexible. Their experiences suggested that leadership opportunities needed to be offered to students in blocks or short sessions because of the demanding nature of the learning.

Teachers noted the possibility for primary schools to become too reliant on high school students taking PE for them, which was not what they were aiming to achieve. However the positives of the stronger connections between primary and secondary schools far outweigh the negatives.

"It is awesome to see the growth of the students, and to see their confidence develop. This approach has definitely raised the profile of our school within the community" (SiE leader)

Tags: PE; NCEA; student leadership; primary school connections

Story 2 – Redefining the impossible: The four minute mile

During a cross-curriculum Commonwealth Games unit students designed a new athletic track for the school and carried out a range of planned mathematical activities related to athletics

What was the main aim?

The maths teacher in the SiE team wanted to model learning in context, and cross-curriculum learning, for his colleagues. He aimed to show them that this type of learning could successfully engage students from across the ability spectrum and help them see links between the maths they were learning and their lives beyond school. He had been experimenting with using real world contexts since the inception of the SiE project and hoped to convince the other maths teachers of the benefits he and his students had experienced.

The chosen context was athletics. Year 9 and 10 students were challenged to use their maths to design a new athletics track for the school. A range of other activities related to athletics also aimed to ignite students' interest and link their maths and PE learning more closely together.

What learning activities were involved?

Designing the athletics track allowed students to use their mathematical knowledge of shapes such as semi-circles, for example by applying simple formulae to calculate area and circumference. Building students' ability to work in teams was a shared focus across SiE classes. Students worked as teams to do tasks such as measuring the existing track in the preliminary design stages.

In maths students explored the length of a mile and investigated how fast they would need to run to achieve a four-minute mile. This also involved application of a simple formula ($s = d \times t$). In PE they attempted to sustain the pace they had calculated to be necessary. Rather than trying to do this as individuals they ran the race as relay teams – which helped reinforced team metaphors for learning.

During this unit students also discussed how athletes reach for goals that had once seemed impossible to attain, using the metaphor of 'redefining the impossible' to think about their own learning efforts (see also **Story 3**).

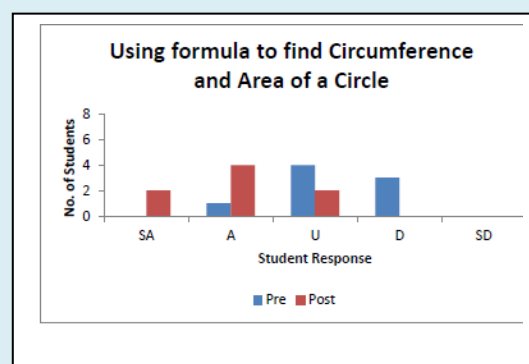
The HOD maths was so impressed with the initial results for the unit that she designed an extension task for year 10 students involving simple algebra. In this task, students completed their track design by calculating where to place the lane markers for staggered starts.



How did teachers know these activities had an impact?

All the students completed the design task and gained a grade for completing the unit.

Some students had been unwilling to try and apply formulae before the unit but all of them became comfortable with doing so in the context of the set tasks. The HOD Maths asked eight students in her Year 10 class to complete an attitudinal survey pre- and post the unit. (This was part of an inquiry for a Masters paper that she was completing through the nearby University of Waikato and the students were chosen for a spread of ability levels.)



The graph shows the shift in their perceptions that they were good at using formulae. The HOD's report includes similar graphs showing a positive shift in attitudes for a range of items.

Results of asTTle maths testing show the large achievement shifts made over the course of Years 9 and 10 by the lower-band students in the SiE maths teacher's class. They began Year 9 with an average asTTle maths level of 3A. By the end of that year the average had lifted to 3P, which these students sustained into the beginning of Year 10. By the end of Year 10 their average had lifted again to reach level 4B. By contrast the average for students in the higher-band classes tended to fluctuate, across the course of the two years, around much the same level as where they began.

Reflections and plans for the future

Both the HOD and the maths teacher who designed the unit noted how much students enjoyed being out of class and active for some of the learning time. The task also allowed for differentiation, and some students worked really hard to extend their design beyond the basic requirements of the task.

The maths teachers were mindful that contexts need to be meaningful for students if they are going to continue to achieve the strong engagement they saw in this unit. They intend to keep experimenting with new contexts, one at a time. The SiE maths teacher noted how helpful it had been to build strong connections with a maths teacher who was trying similar ideas at one of the other SiE schools. He hoped to extend the experimentation to a Year 11 NCEA class, but wanted to wait until he had taught the whole year once, so he had a better idea of how best to pace and sequence the learning.

Tags: Mathematics; sports-themed learning; active learning; team learning

Story 3 – ‘Play the Game’: Sport as a metaphor for learning success

A series of ‘Play the Game’ posters were prominently displayed around the school to encourage students to transfer sports values into learning effort

What was the main aim?

The SiE maths teacher wanted to employ coaching principles to support students to put in the necessary effort to gain NCEA. The school had a group of students who might not otherwise have been successful and for whom a sports focus would be appealing. He designed a series of posters to remind these students that NCEA achievements can be boosted with sustained effort. He aimed to generate a sense of competing for personal best performances and to contribute to building a strong positive ‘pedagogical ethos’ across the school.

What learning activities were involved?

G.A.M.E. stands for **Get Achieved...Merit...Excellence**. The metaphor of ‘play the GAME’ positions NCEA assessments as the ‘opposing team’. Students are encouraged to think about how they prepare to meet sporting opponents, and then to put that same strategic thought and effort into getting ready for NCEA assessments. Students do ‘skills development’ (extra coaching and study) if they need more support with aspects of learning. ‘Coaching’ sessions outside of class time include ‘warm ups’ (to prepare students for the intensity of thought needed) and ‘drinks breaks’ when coaches ‘reset’ thinking (use tactics to keep the team of students on a productive learning trajectory).

In class, teachers remind students about the posters and the values they illustrate. Popular sports stars and a range of sports are used to ensure the posters appeal to the widest range of students.



How did teachers know these activities had an impact?

Teachers who used the posters commented the improvement in students’ attitudes to NCEA. They believed that “taking away the fear factor” by relating NCEA to familiar sports contexts had provided a confidence boost for some students and helped them to believe they could achieve.

Reflections and plans for the future

With the endorsement of the athletes in each poster, this idea is to be developed by Sport NZ. The plan is to give the published posters to all secondary schools in New Zealand.

Tags: *learning dispositions; sports-themed learning; school values*

Story 4 – Getting active in English

Year 11 boys were more motivated to apply their reading of *The Hunger Games* after they had taken part in similar combative sports experiences

What was the main aim?

The English teachers identified a group of Year 11 boys in one class who had an interest in sport and were active kinaesthetic learners. The teachers were concerned that they were underperforming in English. *The Hunger Games* was selected as a novel that was likely to appeal to this group of students. Their teacher experimented with a practical approach to engage them and hopefully increase in their attainment.

What learning activities were involved?

Once the students had read the novel they were taken to an adventure games provider in Hamilton to take part in paintballing and archery. The teacher then used this fun and engaging experience, especially the 'thrill of the chase', to encourage the students to relate to the novel and to work harder at their assigned tasks.

How did teachers know these activities had an impact?

The boys all enjoyed the experience and learnt the skill of archery, which was new to them. Because this practical activity was close to the context of the book, their teacher considered that they were better able to relate to the novel. They all created sound pieces of work and demonstrated a higher level of enthusiasm than they had previously displayed in English.

All the Year 11 English students completed the Me and My Class survey shortly after the completion of this unit. They were asked to think specifically about their learning in English. Responses of students from this class showed evidence of their high engagement and enjoyment, especially given that teachers had previously been concerned about their lack of engagement. The figures below compare this class's averaged responses for three selected items from the survey to those of the overall cohort (shown by the position of the red triangle).

6. We work with people from outside school (like students from other schools, scientists, writers, sports people or other experts).



19. We learn ways to work out problems or challenges together.



24. We talk about how we could use our learning in new situations.



Tags: *English; sports-themed learning; active learning; team learning*

Story 5 – Building personal responsibility via regular feedback and incentives

Hellison's Personal and Social Responsibility model is used to gather data about trends in the development of students' personal responsibility for their work and behaviour

What was the main aim?

The SiE lead teacher aimed to spread some of the team- and capability-building practices the SiE teachers had been trying out across the whole school. He worked with the middle leaders to create a 5-point scale to allow Year 9 and 10 students to self-assess, and form teachers to assess, how well students are taking responsibility for their own learning and behaviour.

The scale is based on Hellison's Personal and Social Responsibility model, but with more generic descriptors so that it is not just about PE. These descriptors are also linked to the school values. A selection of the criteria at each level is shown in the box to provide an indication of the expectations that differentiate the levels.

What learning activities were involved?

Students self-assess at the start of the year. This forms a base line level, with the results recorded on KAMAR. Each term, the form teacher also judges each student, using the same scale. Students with improved ratings generate house points. If they already rate at the top of the scale they are expected to step up as leaders and support others in the house to gain additional points.

The school is using the KAMAR data to track leadership development of students and classes.

How did teachers know these activities had an impact?

The 2014 data for both Year 9 and 10 students show an increase in ratings from the first to the second term. These higher levels were mostly sustained in Term 3.

L5: Beyond the classroom

- Tries all these goals in other areas of school and life
- Assists others in reaching this level

L4: Caring/leadership

- Self-starting, initiates tasks/ asks for work
- Helps others when they want help or need it
- Shows inner strength (the ability to resist peer pressure and step up as a leader)

L3: Self-direction

- Demonstrates on-task independence (can do the task without the teacher standing over them)
- Sets goals and self-standards/ self-motivated
- Shows the courage to resist peer pressure (focus on achieving what's best for them)

L2: Respect

- Tries new things and persists when the going gets tough
- Redefines success (it may be achieving a goal, it may be winning a competition)
- Can take part as directed and improves efforts to contribute independently

L1: Self-control

- Does not disrupt class/has basic equipment
- Listens, but does not actively participate

L0: Irresponsibility

- Disruptive-Negative
- Makes excuses/ Blames others



Reflections and plans for the future

Looking ahead the SiE team plan to revisit their use of the Hellison's model, and the set of school values developed in PB4L School-Wide, and the values that have come to the fore in their SiE work. They want to streamline the values and make sure that the synergies between the different initiatives are effectively leveraged.

Tags: *learning dispositions; school values; student leadership*

Story 6 – Strengthening community connections with whānau and iwi

Local sports tournaments and clubs are being used to forge stronger school- community connections

What was the main aim?

Many people in Te Kuiti are involved in sports, but they may not have connections to the school. The school wanted to build on the community interest in sport by focusing on ki o rahi, a sport which is popular with local whānau. The idea initially came out of the social sector trial. The SiE teachers have run with it, and developed it further.

What learning activities were involved?

On Friday afternoon, the school hosts ki o rahi games for members of the wider community. These games are well supported by whānau teams that participate regularly. Other activities that leverage this connection include:

- A skills-training module offered at the school that any community members can attend
- Using students in the Sports Leadership course to teach ki o rahi skills to students from local primary schools (see Story 1).

- Setting up high school students to organise and referee at a ki o rahi tournament for primary schools hosted by the high school.
- Hosting local Tainui competitions in the sport.

The school is also working to build a stronger community network with Sport Waikato and local sports clubs. The extensive grounds are offered to local teams for their use and more emphasis is placed on supporting school teams to play in local weekend community club competitions. One aim is to assist students to form connections with clubs that they can continue when they leave school.

How did teachers know these activities had an impact?

Teachers commented that these multiple efforts are raising the profile of some sports in the school, especially ki o rahi, whakaama, and basketball/mini-ball. Building a stronger connection with local clubs is resulting in offers of equipment and coaching time from these clubs. In combination with the influence of other activities that are part of SiE, sports participation rates are rising. In 2012, 52% of students took part in a specific sport, rising to 60% in 2013, and 64% in 2014.

Reflections and plans for the future

The SiE leader commented on the new opportunities for students that had been created and the positive relationships with the community that had been developed. The aim now is to develop further community connections. The school is currently in the planning stages of developing a community sports facility on the school grounds. The actual development will take place as a school community partnership, and the facility will be run by a trust set up to oversee usage.

Tags: student leadership; community connections

5. Conclusion

Sport in Education is an approach that uses sport as an authentic context to teaching and learning, and one that shows consistent and often dramatic improvements in student engagement, retention and attendance, and academic performance.

It is entirely consistent with good teaching practice and can be implemented by any school with the will to improve outcomes for students using this context – this report outlines some of the critical success factors, and some examples of how it is being implemented in the 8 project schools.

Sport New Zealand will continue to provide support for the approach in the 8 project schools, and welcomes any interest from other schools who wish to adopt the Sport in Education components. We now have a group of skilled school leaders, subject matter heads, principals and external advisors that can assist you with this approach.

For more information please contact Roger Wood, Sport New Zealand at roger.wood@sportnz.org.nz, or view the resources and information available on our website at <http://www.sportnz.org.nz/managing-sport/programmes-and-projects/sport-in-education-project->

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