Improving FMS, increasing physical activity and reducing sitting: what works best in a school environment?

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WHAT WORKS? BEST SELLING Classroom Resources

MAY 5-6
USE CODE: THANKYOU

28% Off
What works best:
Evidence-based practices to help improve NSW student performance

Centre for Education Statistics and Evaluation
NSW Schools Fitness & Physical Activity Survey, 1997
Key Recommendations from 1997

1. “More **time** and **expertise** be made available to improve the fundamental movement skills of primary school students and that secondary school PE and sport in Years 7 and 8 also focus on skill development over the next few years as a ‘catch-up’.

2. That greater efforts be directed toward the needs and interests of secondary school girls with the aim of increasing the proportion of girls **who are active**.
Key Events 1998-2002

- *Get skilled: Get active*
  FMS resource
- *Gold Medal Fitness Program*
Observation Batteries

Get skilled: Get Active

Static balance

<table>
<thead>
<tr>
<th>Name</th>
<th>Overall check</th>
<th>Legs</th>
<th>Head and trunk</th>
<th>Arms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1. Support leg still, foot flat on the ground.</td>
<td></td>
<td>4. Trunk stable and upright.</td>
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<td></td>
<td></td>
<td>2. Non-support leg bent, not touching the support leg.</td>
<td>3. Head stable, eyes focuses forward.</td>
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<td></td>
<td></td>
<td>5. No excessive arm movements.</td>
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</tbody>
</table>

Photographs of the skill

Organisers to provide a focal point for your observations

Introductory components

Fine-tuning components

Record your observations here
# Sprint run

## Hints for observation
- Instructions: "Run as fast as you can from one end to another."
- Observation position: To the side halfway along, and to the front.
- Needed: A flat open area, approximately 20 metres long.

## Table

<table>
<thead>
<tr>
<th>Name</th>
<th>Overall check</th>
<th>Legs</th>
<th>Head and trunk</th>
<th>Arms</th>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>does it look</td>
<td>1.</td>
<td>3.</td>
<td>5.</td>
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<td></td>
<td>right?</td>
<td>lands</td>
<td>high knee</td>
<td>Elbows</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ball</td>
<td>lift (high</td>
<td>bent</td>
<td></td>
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<td>almost</td>
<td>at</td>
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<td>parallel to</td>
<td>90°.</td>
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<td>the ground).</td>
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</tbody>
</table>

- ■ = Introductory components
- □ = Fine-tuning components
NSW Schools Physical Activity & Nutrition Survey 2004 (SPANS)
Changes in FMS among primary school students

Boys

Girls

1997 2004
Advanced skills by socio-demographics and BMI category

- No difference between urban & rural students
- No relationship between skills and SES for boys but positive relationship for girls
- Middle-eastern students (especially girls) had lower skill levels
- For all seven skills, overweight boys and girls had consistently lower proportions with advanced fundamental movement skills
- These differences were greatest for the sprint run, vertical jump, side gallop, and leap
PALDC

• 3-year cluster trial involving 8 primary school/

• 4 schools were allocated to the intervention group and then 4 control schools were matched to them based on school size, demographics, and location

• Baseline assessments conducted on children in Years 1, 3 and 5 from October 2006 to March 2007

• Follow-up assessments conducted on children in Years 2, 4 and 6 from February to March 2010.

• Outcomes assessed:
  ➢ Fundamental movement skill proficiency (Get skilled: Get active)
  ➢ Cardiorespiratory endurance (multistage fitness test)
  ➢ Adiposity (BMI)
Prevalence of overweight (girls)
Prevalence of overweight (boys)
FMS - Sprint Run

NSW 2004 SPANS - Run

Blaxcell St PS

Prevalence (%) Near-mastery Mastery

Boys Girls Boys Girls Boys Girls
Year 2 Year 4 Year 6
(n = 20) (n = 18) (n = 18) (n = 14)

Year 1 Year 3 Year 5
Cardiorespiratory Fitness

**SPANS 2004 Fitness**

- **Year 4**: Students classified as ‘fit’
- **Year 6**: Students classified as ‘fit’

- **Boys**: 50%
- **Girls**: 60%

**Blaxcell St PS**

- **Year 3**: Students classified as ‘fit’
- **Year 5**: Students classified as ‘fit’

- **Boys**: 60%
- **Girls**: 70%
Approach and intervention

• Action Learning approach

• Each school required to form a committee

• Composition of committee

• Committee would then write an action plan for their school

• Researcher act as critical friend

• Researcher used to explain rationale for project to staff
### XXXXX PS Action Plan

<table>
<thead>
<tr>
<th>For students?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Students 1</td>
<td>More students, more active, more often</td>
</tr>
<tr>
<td>Students 2</td>
<td>To be proficient at each of the FMS</td>
</tr>
<tr>
<td>Students 3</td>
<td>Learning of these skills to be transferred into inter/intra school sport</td>
</tr>
</tbody>
</table>
## XXXXX PS Action Plan

<table>
<thead>
<tr>
<th>For staff?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Staff 1</strong></td>
<td>To be familiar with the FMS and being able to adopt strategies in their successful teaching</td>
</tr>
<tr>
<td><strong>Staff 2</strong></td>
<td>Easy access to necessary resources to achieve above outcomes</td>
</tr>
<tr>
<td><strong>Staff 3</strong></td>
<td>Maintain a sustainable program that can be passed on throughout the years from staff to new staff</td>
</tr>
</tbody>
</table>
**XXX XXXX PS Action Plan**

<table>
<thead>
<tr>
<th>For your school community?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Community 1</td>
<td>To understand the importance of students engagement &amp; development in physical activity</td>
</tr>
<tr>
<td>Community 2</td>
<td>Encourage parent participation/assistance in the schools Physical activity programs</td>
</tr>
</tbody>
</table>
1. Formal Curriculum

**Public School**

**Fundamental Movement Skills Scope and Sequence**

**2010**

<table>
<thead>
<tr>
<th>Grade/Term</th>
<th>Early Stage 1</th>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>K</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>1</td>
<td>Static Balance</td>
<td>Hop</td>
<td>Leap</td>
<td>Leap</td>
</tr>
<tr>
<td></td>
<td>Static Balance</td>
<td>Static Balance</td>
<td>Hop</td>
<td>Hop</td>
</tr>
<tr>
<td>2</td>
<td>Catch</td>
<td>Side Gallop Sprint Run</td>
<td>Kick Side Gallop Sprint Run</td>
<td>Kick Gallop</td>
</tr>
<tr>
<td>3</td>
<td>Vertical Jump</td>
<td>Skip Vertical Jump</td>
<td>Two-Hand Strike Skip Vertical Jump</td>
<td>Two-Hand Strike Skip</td>
</tr>
<tr>
<td>4</td>
<td>Sprint Run</td>
<td>Overarm Throw Catch</td>
<td>Dodge Overarm Throw Catch</td>
<td>Dodge Overarm Throw</td>
</tr>
</tbody>
</table>

When skills appear in **BOLD** this indicates focused teaching and learning of that skill.
When skills appear **UNDERLINED** this is the benchmark of when most students should demonstrate proficiency of the skill.
Other indicated skills should be practiced and developed further, fine-tuning the components of the skill.
Side Gallop (Lesson 2)

Revise the teaching points for the side gallop. Teacher demonstrates the side gallop to students focusing on the following components:
1. Smooth rhythmical movement.
2. Brief periods where both feet are off the ground.
3. Weight on the balls of the feet.
4. Hips and shoulders point to the front.
5. Head stable, eyes focused forward or in the direction of travel.
(Introductory components marked in bold)

Have students practice the side gallop using the following cues:
* From side-to-side using bigger steps, then smaller steps.
* Side gallop as quickly as you can. As slowly as you can.
* Facing a partner and traveling in the same direction. Opposite a partner (back to back) and traveling in the same direction.
* Pretending you are towing a car. Pretending you are a fast emu.

Games

a) Relays
- Groups of 4 students at each end. Put markers approximately 10m out opposite the marker lined up behind (see diagram). If one team has more members the first person from the other go twice.

b) Three side gallop challenge
Students find a partner and each one has a marker. Starting from line, they have to do three side gallops in a row trying to make each step as big as possible. When they have finished three, they put the markers down on the spot where they finish. Their partner then does the same with their marker. On the 2nd turn, each student tries to beat his/her previous distance. If they do, they move the marker so it is on the new distance. Repeat three times.

c) Side gallop stuck in the mud
Mark out a space 20m x 20m. Pick five students to be in. These five have to tag the other students. Students are only allowed to side gallop. If they run they are in. When a student is tagged they have to freeze with their legs apart. Students can be released by another student crawling through their legs. Repeat three times with five different people in each time.

d) Side gallop tag
Pick five new students to be ‘in’. In the same 20m x 20m area, these five students each put on an OzTag braid. On the go, they have to side gallop around and tag other students. Once a student is tagged, they have to put on an OzTag braid and join the others in tagging the rest of the students. This game continues until all students are ‘in’ (this should only take 1-2mins).

e) Partner shadow tag
Since all students should have finished the previous game with a set of OzTag braids on, the next activity follows on by having students keep their braids on and find a partner. Once they have done this, get one student in each pair to sit down and the other to stand. On the go, the student who is standing has to side gallop as quickly as possible away from his/her partner. Their partner has to stand up and try to stay as close to his/her partner as possible (also side galloping). When the teacher blows the whistle (after about three seconds), both students freeze. Then the student who was the chaser has to see if they are close enough to their partner that they can take three side gallops or less to reach him/her and pull off one of their tags. If they can, they get to keep this by putting it on their belt. Partners then swap.

f) Steal the braid
All the class start in the 20m x 20m area. On the go, all students side gallop around and try to ‘steal’ as many braids as possible from other students as possible. Once a braid is ‘stolen’, students stick it on their belt. The aim is to finish with as many braids as possible. Note: students cannot protect their braids by holding onto them.

g) Freeze
All the class start in the 20m x 20m area. If you have music, all students side gallop around when the music starts and have to ‘freeze’ when the music stops. If no music is available, teacher can say go and blow the whistle to signal when students are to freeze.

h) Corners
Same rules as for freeze, but when students hear the whistle or the music stops, they have to run to a corner of the 20m x 20m area. The teacher then spins the empty bottle in the middle of the area. When the bottle stops spinning, the students at the corner that is closest to where the bottle is pointing, all receive one point. Repeat several times.
# Kindergarten-ball control

<table>
<thead>
<tr>
<th>Warm Up (Choose 1)</th>
<th>Stretch</th>
<th>Skill Components</th>
<th>Main Activity (Choose 1)</th>
<th>Organisation</th>
<th>Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simon Says</td>
<td></td>
<td>Variety of stretches. Hold each stretch for 10-15 seconds.</td>
<td>Standing with feet stationary, shoulder width apart, holding the ball at waist height. Push ball straight down with both hands. Catch bounced ball with fingers spread and pull the ball into the body.</td>
<td>Hoops spaced at random within the boundaries.</td>
<td>Medium Balls, Hoops</td>
</tr>
<tr>
<td>Ship to Shore</td>
<td></td>
<td></td>
<td>Scatter Bounce</td>
<td>Hoops spaced at random within the boundaries.</td>
<td>Hoops</td>
</tr>
<tr>
<td></td>
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<td></td>
<td><strong>Ball Bounce Change</strong></td>
<td>Hoops spaced at random within the boundaries.</td>
<td>Hoops</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Ball Bounce Change</td>
<td>Student's bounce ball in hoop till music stops, then change hoops.</td>
<td>Hoops</td>
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<td></td>
<td><strong>Bounce Ball Relay</strong></td>
<td>Groups of 3-4 in lines 5-10 metres away from a hoop.</td>
<td>Hoops</td>
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<tr>
<td>Animal Walks</td>
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<td></td>
<td><strong>Bounce Ball Relay</strong></td>
<td>Groups of 3-4 in lines 5-10 metres away from a hoop.</td>
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<td></td>
<td>Bounce Ball Relay</td>
<td>On signal student 1 runs to the hoop, bounces the ball once and returns the ball to next student.</td>
<td>Hoops</td>
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<tr>
<td></td>
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<td></td>
<td><strong>Monster on the Loose</strong></td>
<td>Random</td>
<td>Medium Balls</td>
</tr>
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<td>Monster on the Loose</td>
<td>Random</td>
<td>Medium Balls</td>
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<td>Monster on the Loose</td>
<td>Random</td>
<td>Medium Balls</td>
</tr>
</tbody>
</table>

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*Note: Warm Ups, Stretches, Skill Components and Main Activities should be chosen to suit the needs and abilities of the students.*
# Year 2: Soccer

<table>
<thead>
<tr>
<th>Warm Up (Choose 1 or 2)</th>
<th>Stretch</th>
<th>Skill Components (Teach all skills)</th>
<th>Main Activity (Choose activity to accompany skill)</th>
<th>Pairs</th>
<th>Size 5 soccer ball. 1 between 2.</th>
</tr>
</thead>
</table>
| **Beat the Ball**      | Variety of stretches. Hold each stretch for 10 – 15 seconds. | DRIBBLING  
* keep the ball close to the body.  
* use the inside and outside of feet with small touches of the ball.  
* Keep eyes on the ball and watch where you are going.  
PASSING  
* keep eye on the ball.  
* place non-dominant foot to the side of the ball and lean forward slightly.  
* Push the ball using the inside of the dominant foot.  
* follow through for accuracy.  
DEFENDING  
* keep feet shoulder width apart  
* remain on the balls of your feet for quick direction change | Passing and Controlling Drill  
Pairs stand opposite each other, 5 – 10m away. Practice passing the ball and control. Move further apart as accuracy becomes better, and then try non-dominant foot. | 5 – 6 markers 1 metre apart in a straight line x 30 markers 5 balls (1 per team) |
| **North, South, East, West** | North, South, East, West  
4 cones representing the 4 directions. Students have a ball each and when a direction is called they have to dribble the ball in that direction. | Variety of stretches. Hold each stretch for 10 – 15 seconds. | 30 markers 5 balls (1 per team) |
| **Keep the basket full** | Keep the basket full  
A leader scatters the balls while students try to dribble the balls back to the hoop. The leader tries to keep the hoop empty and the students try to keep it full. | Pass and Controlling Drill  
Pairs stand opposite each other, 5 – 10m away. Practice passing the ball and control. Move further apart as accuracy becomes better, and then try non-dominant foot. | 5 – 6 markers 1 metre apart in a straight line x 30 markers 5 balls (1 per team) |
| **Rats and Rabbits** | Rats and Rabbits  
Students form two even lines, one rats the other rabbits. When rats are called they run 10m to the cone with the rabbits chasing. Whoever is tagged before the 10m goes to the other team. Reverse applies when rabbits are called. | DRIBBLING  
* keep the ball close to the body.  
* use the inside and outside of feet with small touches of the ball.  
* Keep eyes on the ball and watch where you are going.  
PASSING  
* keep eye on the ball.  
* place non-dominant foot to the side of the ball and lean forward slightly.  
* Push the ball using the inside of the dominant foot.  
* follow through for accuracy.  
DEFENDING  
* keep feet shoulder width apart  
* remain on the balls of your feet for quick direction change | Dribbling Relay  
* each team member dribbles the ball through the markers on the way up and back, then push pass to next player. Be creative with variations! | 5 – 6 markers 1 metre apart in a straight line x 30 markers 5 balls (1 per team) |
| **Hospital tag** | Hospital tag  
5 people are in and try to tag others. 1 tag = holding shoulder, Tagged twice = hold shoulder and leg. Tagged 3 times and you become a tagger | 3 players have a ball, the 4th is the piggy. Each of the 3 attacking players stand near a cone. Players pass the balls along the square as the piggy tries to get the balls. One cone is free which means after each pass someone has to run to the free cone to keep the balls in order. Take turns at being piggy. | Groups of 4 | 21 balls (3 per team) |
| **Alphabet Shapes** | Alphabet Shapes  
Students in groups of 5 or 6. Teacher calls out a letter and group has to form that letter using their bodies and working together. | Fruit Salad  
Each student is given the name of a fruit and sits in team file. Leader calls a fruit and those fruits dribble the ball across the line and back to their spot. | Teams of 4 in single file. Seated. Two line 5m apart. Teams line up behind the lines. | 1 ball per player |
2. School ethos
3. School/home/community links
Results: flow of participants

Allocation of schools and matching

Baseline measures (Yrs 1, 3, 5; n=836)

Intervention (n=444)

F/u 36 months (Yrs 2, 4, 6)

Analysed (n=571)

Control (n=392)

F/u 36 months (Yrs 2, 4, 6)

Analysed (n=385)
Results

How successful was the project in increasing teacher’s understanding of the change process in schools?

- Those teachers who were part of the school committee were more aware of the steps required to bring about change in their school.
- Some of the barriers identified by schools in bringing about change were:
  - Support from the principal
  - Staff turnover
  - Staff attitudes
  - Equipment and facilities
How successful was the project in increasing teacher’s understanding of the PDHPE curriculum and fundamental movement skills (FMS)?

- In all schools, staff completed some form of professional learning in the area.
- In three of the schools, a scope and sequence was written for each stage and units of work were developed by the staff.
- In three of the schools, there was evidence that staff were using these units and teaching FMS on a regular basis.
- Staff at these schools were more aware of explicit teaching points relating to FMS.
Results - Changes in FMS, cardiorespiratory fitness and adiposity (BMI)
Changes in FMS (total skills)

<table>
<thead>
<tr>
<th>Year</th>
<th>Control</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 4</td>
<td></td>
<td></td>
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<tr>
<td>Year 6</td>
<td></td>
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<tr>
<td>All Years</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* P<0.05
Changes in fitness

Number of laps on MFT

Year 4
Year 6
All Years

Control
Intervention

University of Wollongong
Changes to the school ethos

• Observation and interview data from schools showed that the following changes were made
  – Introduction of crunch and sip
  – Increased student confidence and participation in athletics and cross country carnivals and PSSA sports
  – Increased student participation in physical activity during recess and lunch
  – One school formed a healthy eating committee
  – In three of the schools, greater resources and profile for FMS (Inclusion of photos in school newsletters and year in review DVD, participation in Premier’s Sporting Challenge etc)
Changes to home/school/community

• Observation and interview data from schools showed that the following changes were made
  – Crunch and sip reminder notes
  – Healthy food ideas in the newsletter
  – Use of community parks to cope with space issue
  – Parent nutrition lessons and healthy cook book
  – Homework – physical activity component
  – More parents involved in school sport and fitness activities
  – More information provided to parents around healthy eating and physical activity
Yr 2 Home Learning
Due Week 8 Friday 19th March 2010

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>2G Library</td>
<td>Scripture</td>
<td>Sport</td>
<td>Community Languages</td>
<td>2L Library</td>
</tr>
<tr>
<td>2R Library</td>
<td></td>
<td></td>
<td>1:45-2:45pm</td>
<td>25 Library</td>
</tr>
<tr>
<td>Community Languages</td>
<td></td>
<td></td>
<td></td>
<td>*Assembly for</td>
</tr>
<tr>
<td>1:45-2:45pm</td>
<td></td>
<td></td>
<td></td>
<td>2L/2E/2R Odd Weeks</td>
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<tr>
<td></td>
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<td></td>
<td>*Assembly for</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td>20/25 Even Weeks</td>
</tr>
</tbody>
</table>

Please colour in the activities that you have completed.

Reading
Read your home reader to a parent or older sibling EVERY night. Try to read it a little faster each night. Using your background knowledge, predict what the book will be about.

Extension: write down what fix up strategies you used to help you read the words. E.g. sound it out, read ahead.

Writing
Do look, say, cover, check, with your Phoneme Words each night. We are revising the phonemes:
1) ss, ff, zz
Extension: Use a dictionary to find the meanings of unknown Phoneme Words.
Challenge: How many words can you make by blending the following phonemes? (Hint: Every word must have 'a' and 'o' in them).
E.g. s-a-t makes sat.

Art
Make a necklace or bracelet out of pasta shells. Thread the pasta onto a piece of string or elastic. Paint the pasta different colours for added effect!

Maths
*Record in your book:
1) What are all the friends of ten? I.e. What numbers add together to make 10?
e.g. 1 + 9 = 10.
2) Put these numbers in order from smallest to largest: 34, 16, 8, 22, 49, 48.
3) Put these numbers in order from largest to smallest: 99, 62, 74, 90, 26, 33.
*Count forwards (out loud) by twos (2s) until you get to 50.

X Tables
Practise 10x tables for 10mins each night.

Listening
Stop and listen to the sounds around you. What can you hear inside? Can you hear any noises outside?

Social
Make a new friend at school and find out about their likes/dislikes.

Computer
Listen to stories online and play literacy and numeracy games at
http://www2.scholastic.com/browse/learn.jsp

Housework
Sweep the floor.

Physical
Exercise 3 times a week for 30 minutes

Child's name: ____________________________
Parent's signature: ________________________ Date: ____________________________
Barriers to change

1. Community – students are more likely to watch TV and use the internet.
2. Unhealthy food on the way to school
3. Equipment
4. Staff turnover
5. Language barriers with parents
Sustainability
Future directions

1. Using this model to bring about healthy eating changes (canteen, information for parents)
2. Review of current FMS programs and improving them
3. Training up new teachers
4. Increasing equipment for FMS
5. Involving pre-service teachers
# 2010 K-2 Sport Proposal

In 2010 K-2 would like to trial an organised sport program. This program would include a rotation of games that utilise Fundamental Movement Skills for K-2. The organisation of the sport program would run in a similar way as 3 – 6 sport; however there will be no paid sports or sport off school grounds. All classroom teachers will be involved in a sport. In Term 1 and 2 only Stage 1 will be involved in sport – Term 3 and 4 Kindergarten will join in the rotations.

Sports will run on the oval, in the new and old hall, on the netball court, on the basketball court, in the Yr1 and Newcomb Ball areas, the cola and the Kindergarten asphalt area. The students will rotate through 10 skill based sports. During these rotations, each teacher will provide students with the skills needed to play a game.

In Term 3 Kindergarten will join the program, they will combine with Year 1 and continue with FMSkills and Year 2 will begin the learn the rules and techniques associated with PSSA Sports (Basketball, Soccer, T-Ball, Oztag, Netball, Newcomb Ball, and Cricket.)

## Action Plan and Timeline

<table>
<thead>
<tr>
<th>Term 4, 2009</th>
<th>Done</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey teachers on proposed plan.</td>
<td></td>
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<tr>
<td>Create a trial sports program to present to 2010 K-2 staff and executive.</td>
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<tr>
<td>Begin organisation of sports program and logistics.</td>
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</table>

<table>
<thead>
<tr>
<th>Term 1, 2010</th>
<th></th>
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<tbody>
<tr>
<td>Week 3: Year 1 and 2 begin trial weekly rotational sports program.</td>
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<tr>
<td>Evaluate week 9/10</td>
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<table>
<thead>
<tr>
<th>Term 2, 2010</th>
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<tbody>
<tr>
<td>Week 1: Yr 1 and 2 continue sports program.</td>
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<tr>
<td>Kindergarten begin rotational FMS skills to prepare for the sports program.</td>
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<table>
<thead>
<tr>
<th>Term 3, 2010</th>
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<tbody>
<tr>
<td>Kindergarten join sport program.</td>
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<tr>
<td>K and 1 participate in rotational skills based sport program.</td>
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<tr>
<td>Yr 2 begin to learn specific game skills in the same weekly rotational groups.</td>
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<table>
<thead>
<tr>
<th>Term 4, 2010</th>
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<tbody>
<tr>
<td>Evaluate Sport program and discuss implementation for 2011 (coordinators and general organisation).</td>
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</table>
Gold Medal Fitness Program

- 10 schools from 4 diverse districts
- Matched with 10 control schools
- Whole school change using Action Learning model
- Schools audit their setting and develop action plans
- Process of model standardised but intervention may look different at each school
- Children’s FMS, BMI, Perceived competence, and physical activity assessed
- Parents reported their child’s activity, sedentary behaviour, and perceived skill changes

Funded by NSW Department of Education
10-month follow-up: Fundamental movement skills

Change in overall skill proficiency (components)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
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<td>4</td>
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<tr>
<td>6</td>
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</tbody>
</table>

Control | Intervention

* P < 0.05
10-month follow-up: Physical Activity Winter months

![Graph showing changes in activity energy expenditure (kcal/kg) for boys and girls in organized and non-organized settings.]

Control GMFP

Okely AD et al. Res Q. Exerc. Sport (submitted);

* P < 0.05
Changes in FMS among primary school students

![Bar chart showing changes in FMS among boys and girls from 1997 to 2010.](chart.png)

- **Boys**
  - 1997: 25
  - 2004: 35
  - 2010: 30

- **Girls**
  - 1997: 15
  - 2004: 20
  - 2010: 25
Stand up for health

- 6-month intervention
- 4 high schools
- 8 teachers, 87 students
- 8 x 20min curricula modules (PDHPE)
- Standing desks and standing tables
- Social marketing campaign
- Standing assemblies
Stand Up for Health Results

• There was a significantly greater reduction in sitting time during school day among students in intervention schools (≈30mins/day)

• Compared with baseline, 66% of students in the intervention group had decreased their sitting time and 69% were more active at 6-months (compared with 44% and 38%, respectively in the control group).

• Students in the intervention group also had a significantly greater increase in their executive function scores.
This conference will address the challenges that exist in policy and practice for children, families and educators by exploring current approaches to research in the early years of life and proposing strategies for the future that will both inform and improve work in the field.

**KEYNOTE AND INVITED SPEAKERS:**

- **Professor Catherine Snow** (Harvard University)
- **Professor Iram Siraj** (UCL Institute of Education and University of Wollongong)
- **Professor Edward Melhuish** (University of Oxford, Birkbeck, University of London and University of Wollongong)
- **Professor Michael Wald** (Stanford University)
- **Professor Dianne Ward** (University of North Carolina)
- **Professor Marc de Rosnay** (University of Wollongong)
- **Professor Fred Paas** (Erasmus University and University of Wollongong)
- **Professor Susan Danby** (Queensland University of Technology)

To register, submit an abstract and for further details please visit [earlystart.uow.edu.au/conference](earlystart.uow.edu.au/conference)