1000's children active every day through technology

inoves

Creating happier healthier children, who are all-round stronger learners

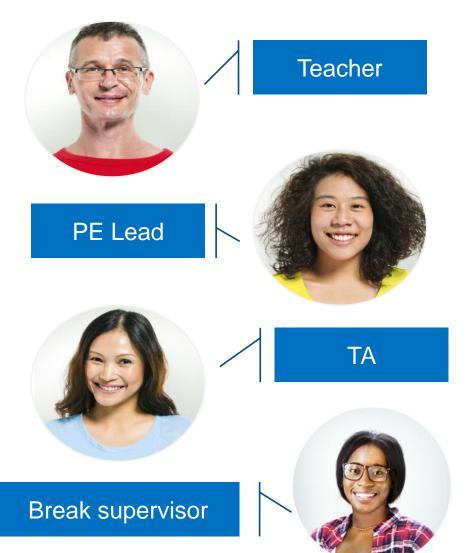




Confident workforce

Who can facilitate active lessons from PE to Science





Today's Journey

- 1. A PE Lead's role in becoming an Active School
- 2. The effect of exercise on the human brain.
- 3. Strategies to develop a truly Active School.
- 4. How to create **step change** in teaching methods.

Active Schools

Sports Premium Funding

Interventions that make the whole school day more active:

- Active blasts
- Active lessons
- Active structured play
- Active travel





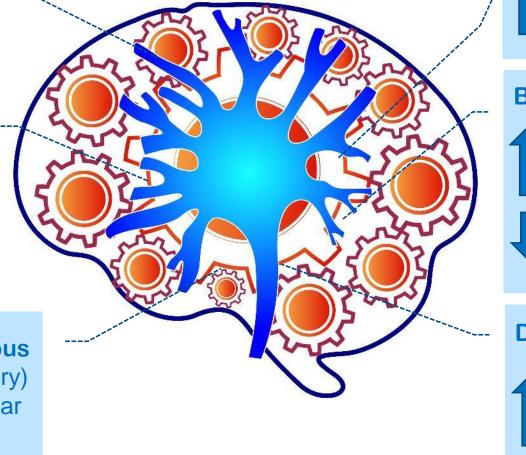
Noradrenaline

Attention Perception Motivation

BDNF Grows cells Improves mood and mental clarity

The Hippocampus (learning / memory) grows with regular exercise

When You Exercise



Blood flow Oxygen **Nutrients** Toxins Dopamine Focus **Motivation** Learning

Serotonin

enhances

mood

"Exercise elevates Miracle-Gro (BDNF) throughout the brain!"

John Ratey, MD

The Science of Exercise and the Brain



BDNF

Brain Derived Neurotropic Factor

BDNF is a protein released into the brain after exercise

- Improves the function of neurons
- Encourages new neurons to grow
- Protects them from stress and damage

Spark: The Revolutionary New Science of Exercise and the Brain by Ratey, John J. (2013)

Sprinkled on neurons in a petri dish, BDNF causes brain cells to sprout the structural branches required for learning

... like fertilizer for the brain

Proving a DIRECT BIOLOGICAL LINK between MOVEMENT

and COGNITIVE FUNCTION

Physically Active Math & Literacy Lessons Improve Academic Achievement

1 Objective

To investigate the effects of physically active lessons on academic achievement of children.

2 Results: After 2 years children had significantly greater gains in mathematics and spelling equating to 4 months!

3 CONCLUSION: Physically active academic lessons significantly improved performance, therefore is a promising new way of teaching.

Mullender-Wijnsma MJ, Hartman E, de Greeff JW, et al. Pediatrics, 2016

Academic Achievement and Physical Activity A Meta Analysis

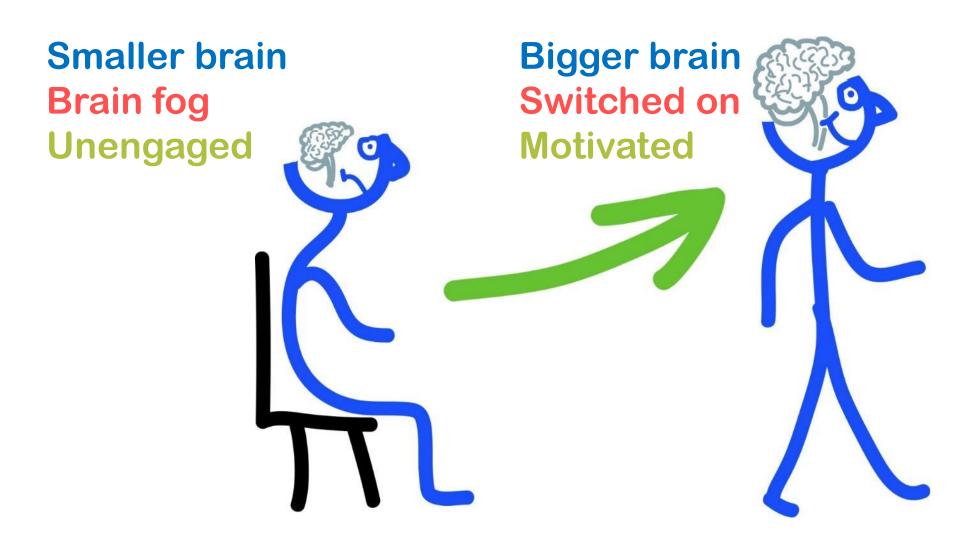
Objective

To assess the effect of physical activity on academic achievement and classroom behaviours in 4 - 13 year olds (10,000 from 11 countries pooled data)

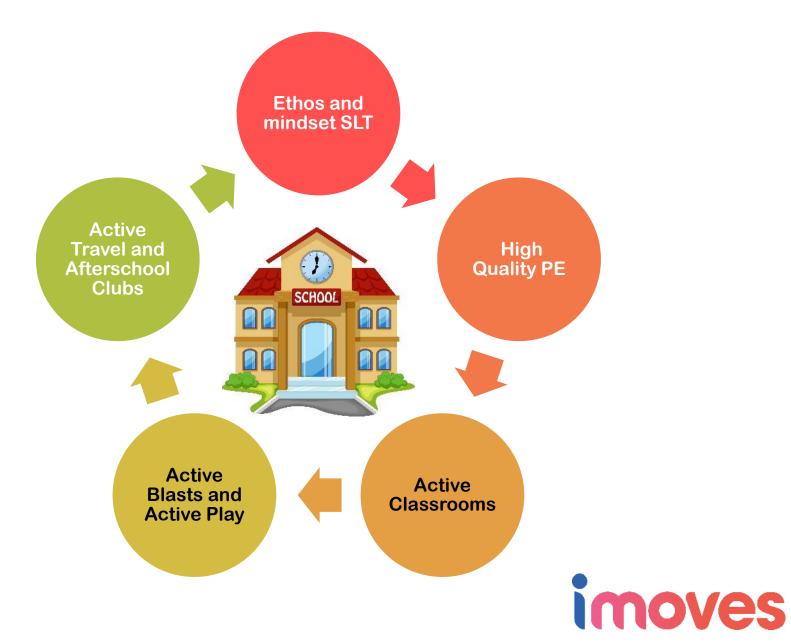


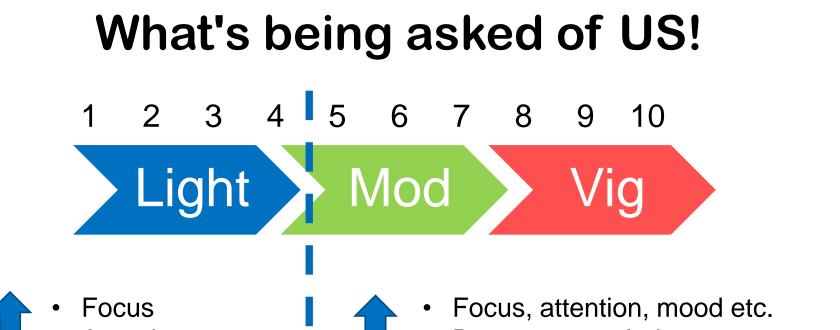
Ref: Alvarez-Bueno, Celia; Universidad de Castilla-La Mancha et al, Pediatrics, (2017)

In a nutshell



Assess the 5 areas of an Active School





- Attention
- Mood
- Blood flow to brain

- **Burns more calories**
- Cardio fitness
- Strength and muscular endurance
- **Stimulates BDNF**

Declutter Create Space

Chairs and tables

Floor space

Standing Desks

Chairs and Tables

Floor space



Movie (plug and play)

Chosen Between

Teaching Concepts Round up

Word and Actions

Top and Tail

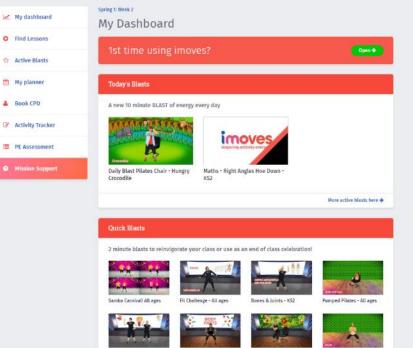
Music and Drama

Team Games

Circuits



Plug and Play Easy to Facilitate





Body Parts - KS1

Jungle Pilates - KS1

Yoga Part A - All ages



Words and Actions KS2 Agile Adverbs

Moderate

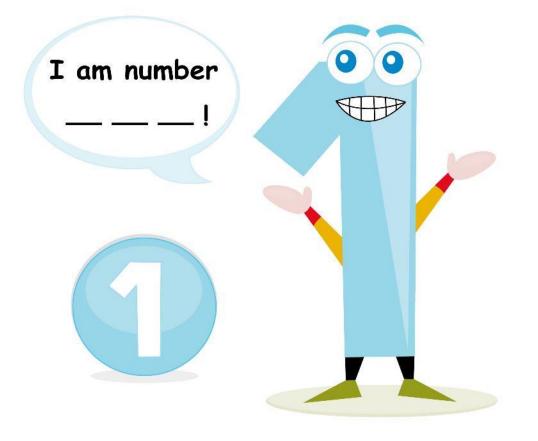
ACTIONS	ADVERBS	
Run on the spot	Gracefully	Disco Dance
Do star jumps	Awkwardly	
Hop on one leg	Briskly	Precisely!
Climb a ladder	Leisurely	
Shadow Box	Lightly	Shadow Box
Disco Dance	Heavily	Sloppily
March (on the spot)	Sloppily	Sloppily
Clap hands above head	Precisely	T.
Spin around	Cautiously	Star Jumps
Touch the ground	Determinedly	
Stretch up	Rigidly	Determinedly
Stand still	Loosely	The second secon

Word and Actions KS1 Literacy and Maths

Power Point



Spell the number and do the movement



MOVEMENT:

- Stand up tall
- Arms in the air
- Balance on tip toes
- Stretch your body!



Spell the number and do the movement



MOVEMENT:

Join up to a partner using

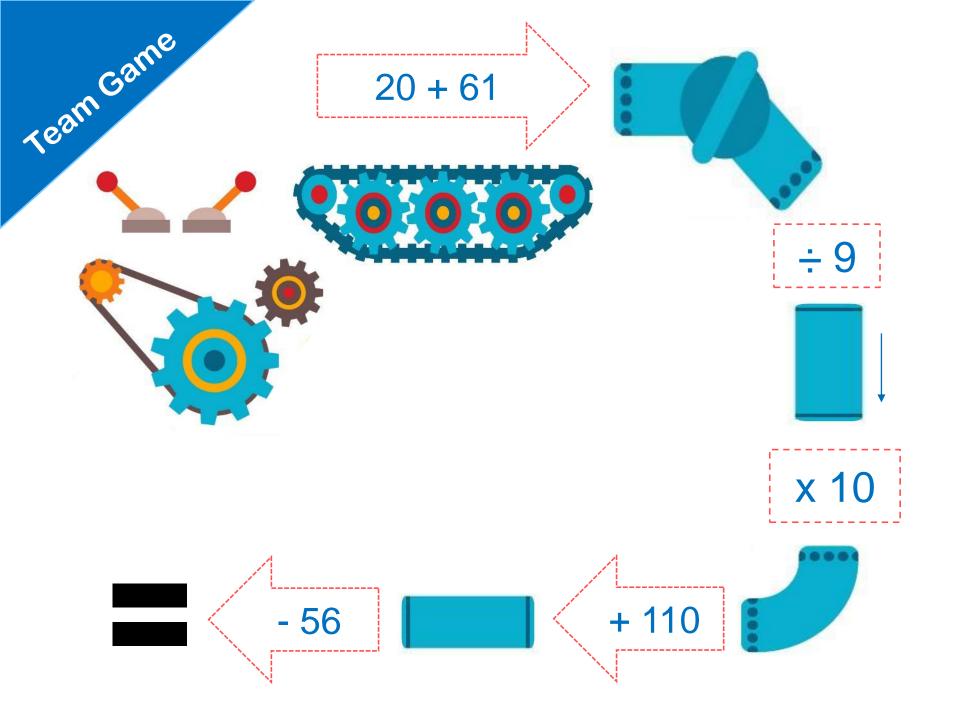
- 2 body parts ONLY!
- Elbow
- Knee
- Forehead
- \circ Hands
- Foot



Top and Tail







Choose Between



Prefix and Suffix

- In pairs (A and B)
- A is facing the board and reads the words on the board
- B has their back to the board and jumps either FORWARD or BACKWARD to demonstrate their understanding of a root word that has a PREFIX or a SUFFIX



Provider

Prefix and suffix

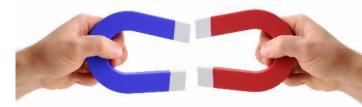
Prehistoric Anticlockwise Bicycle **Automatic** Supermarket Unhappy **Multicultural** Cyberspace **Overwork**

Elevation Provider Medication Greatest Soundly Smaller Harshly Fastest Rarely

Science Music based



Positive and Negative



Choose to be a Positive OR Negative force

Move around to the music:

- Positive forces should skip, smile and wave!
- Negatives forces should stamp around, hunched over with a grumpy face!

Music stops - pair up with person nearest to you.

- Positive with Negative = HIGH FIVE then fizz and sizzle in unison or dosey-doe
- Pos + Pos or Neg + Neg = BELLY BUMP, jump away... repeat!

Circuits

Literacy

Apostrophe Circuit

Maths

Friends around the world







Akiko the girl From Japan

Flying Time	Distance
from London	from London
11 hours 40 minutes	9,600 km

Temperature 8°c





Music and Drama



Teaching Concepts Round up

ves

IMO



Chosen Between





Top and Tail





Round up





DATA AND RESEARCH

ACTIVE SCHOOL PRACTICAL IDEAS

ROLL OUT AND SUPPORT

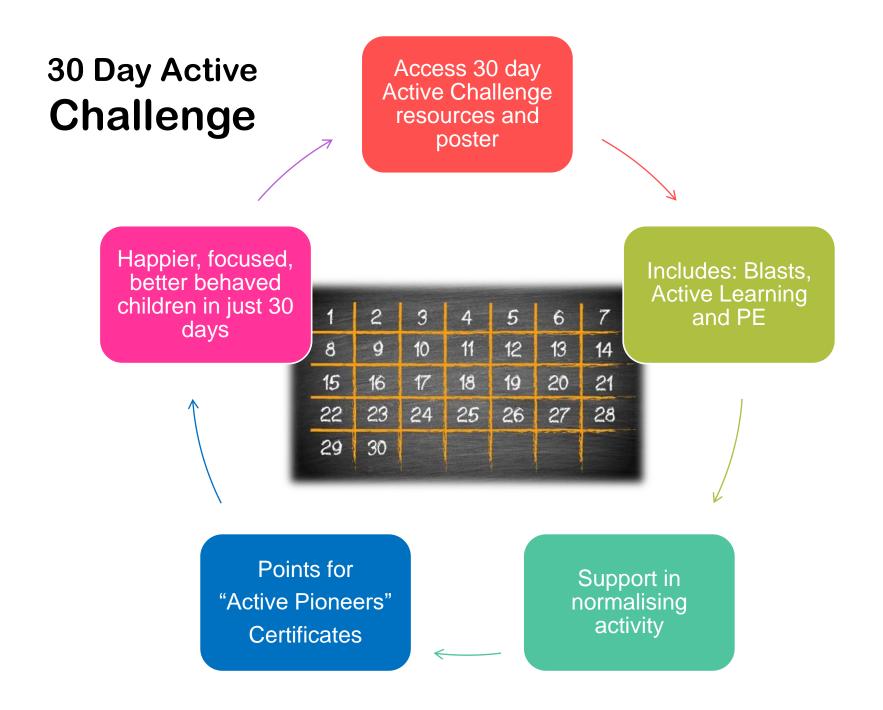


Imoves Active Learning Evaluation Sheffield Hallam University Sept 2018

Reduces Sedentary Behaviour by 13 minutes in every hour!

Increase Mod to Vigorous by 5 minutes in Literacy and Maths Improved Mood & Behaviour in children who participated





30 day challenge resources

PE interactive schemes

- Dance
- Gymnastics
- Pilates
- Fundamental Skills for Games KS1
- Football, Basketball and OAA

Maths

- Number and Placement
- Add, Subtract, Multiply and Divide
- Fractions Measurement
- Statistics & Geometry

Literacy

- Reading
- Spelling
- Poems
- Punctuation

Active Blasts

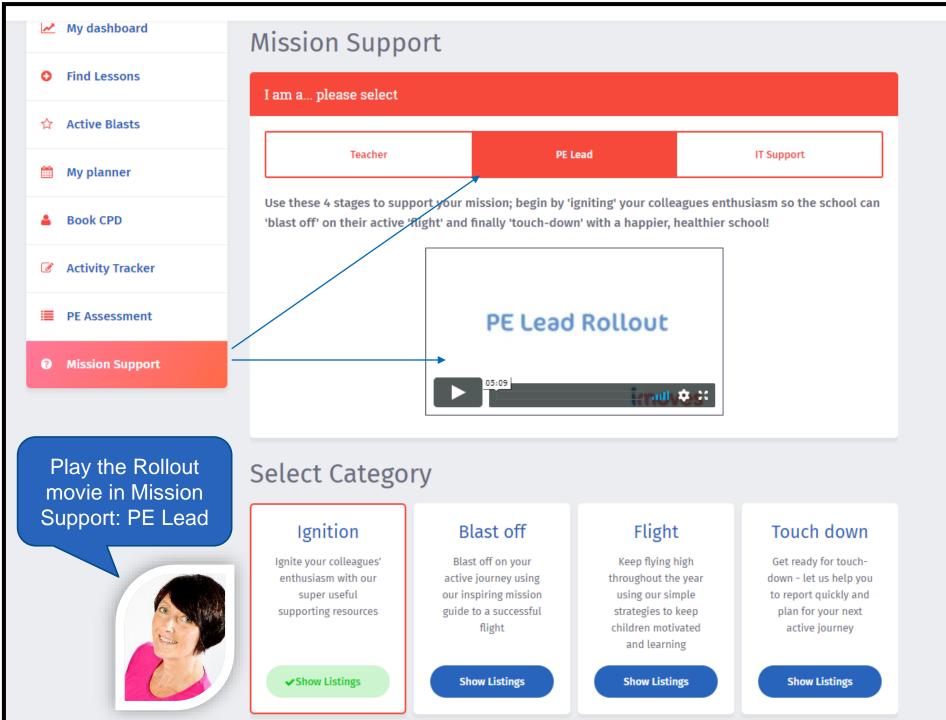
150 interactive blasts from 2 – 12 minutes

Mindfulness

- Resilience
- Confidence
- Relationships
- Anxiety

Science and Humanities

Interactive classroom and hall based activities



Changing Course Takes Time





Choose Ambassadors Trial over 30 days

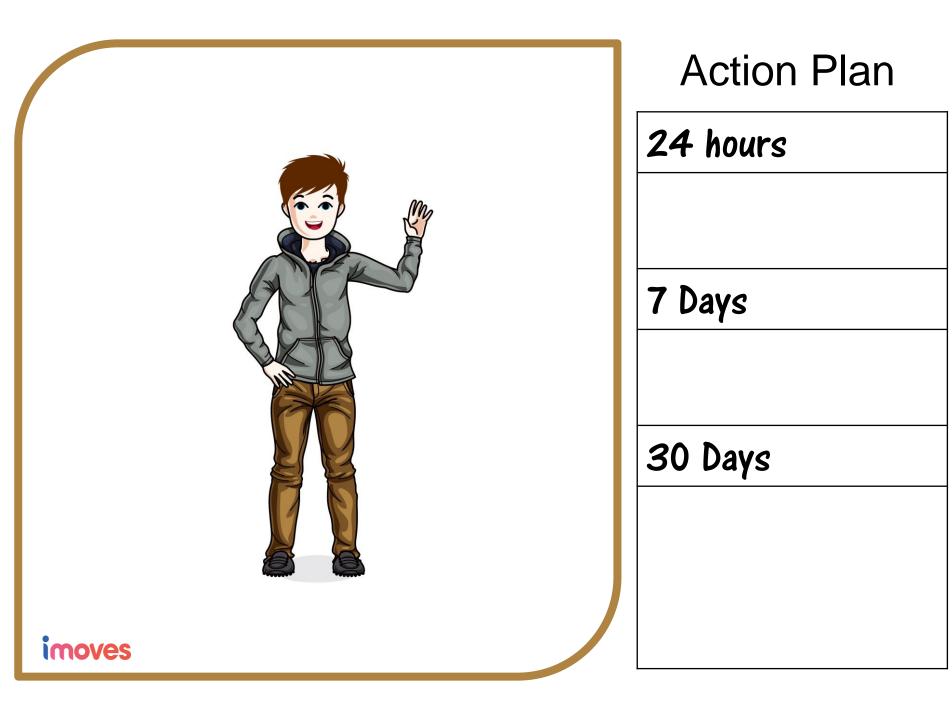


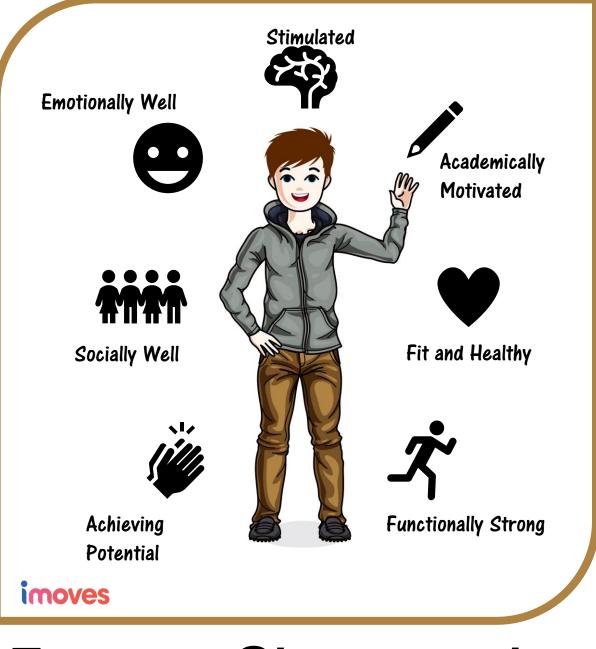
Evaluate for SLT



24/7/30 Action plan







Tweet us @imovesactive

Action Plan

24 Hours

Choose Ambassadors to work with. Declutter classroom.

7 Days

Look at Mission Support video to help any PE lead at any stage start to make an impact. Start to use Active Blasts with class.

30 Days

Organise meeting with SLT.

Feedback to imoves.