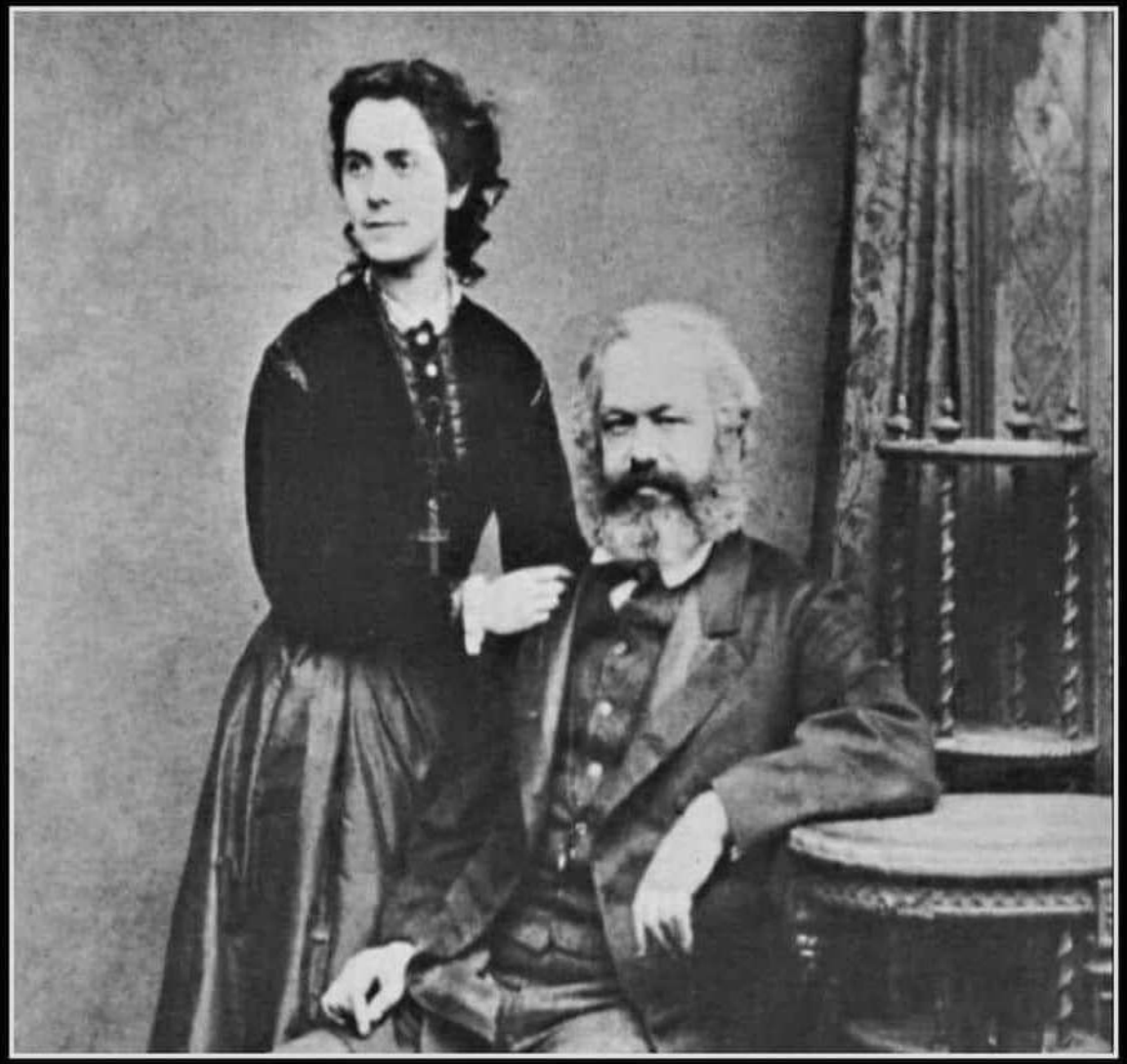
Most people have heard of Karl Marx the philosopher but few know of his sister Onya the Olympic runner. Her name is still mentioned at the start of every race.



Medicina Gymnaſtica:

OR, A

TREATISE

Concerning the

POWER of EXERCISE,

With Reſpect to the

ANIMAL OECONOMY;

AND

The Great Neceſſity of it,

IN THE

Cure of Several Diſtempers.

By *FRANCIS FULLER*, M. A.

The FOURTH EDITION.

LONDON:

Printed for ROBERT KNAPLOCK, at the *Biſhop*'s-*Head* in St. *Paul*'s Church-Yard. 1711.

CHALLENGING PE CHALLENGES

Integrating developmental PE physical activity-based challenges.

Paul Ford

ACHPER Conference - Impact on tomorrow.

November 23-24, 2023. Clayton, Vic.

JOURNAL OF SPORTS SCIENCES
2022, VOL. 40, NO. 5, 571–582
https://doi.org/10.1080/02640414.2021.2004703

Routledge
Taylor & Francis Group

PHYSICAL ACTIVITY, HEALTH AND EXERCISE

What do adolescents and young adults strive for in sport and exercise? An explorative study on goal profiles in sport and exercise

Vanessa Gut, Achim Conzelmann and Julia Schmid

Institute of Sport Science, University of Bern, Bern, Switzerland

ABSTRACT

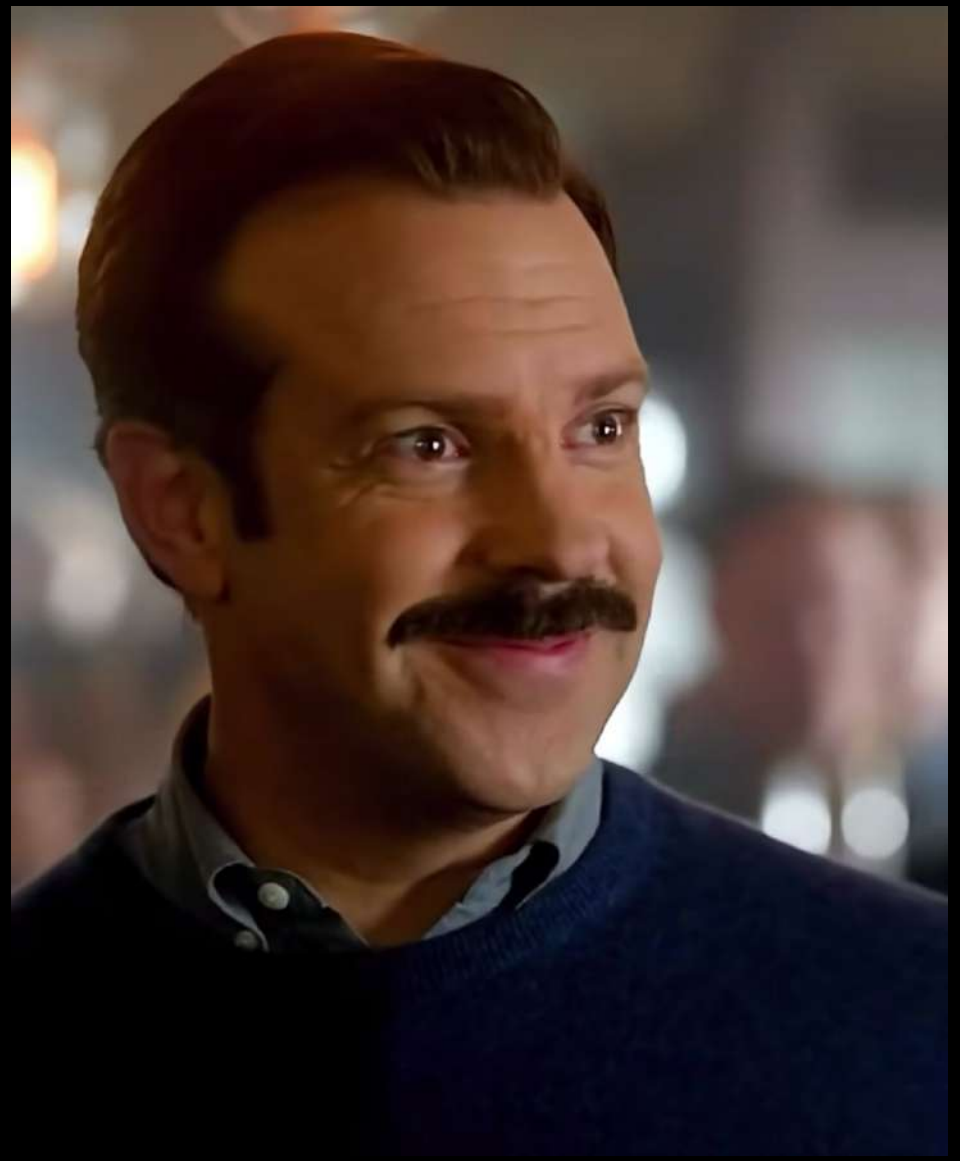
In sport and exercise promotion, it is important to consider goals because achieving these goals leads to a sense of well-being and behaviour adherence. Individuals often pursue multiple goals simultaneously. Therefore, it is also important to not only consider each individual's combination of goals but also to identify so-called "goal profiles". Taking a developmental-psychological perspective, the goal profiles of adolescents may differ from those of young adults. Furthermore, goal profiles might differ concerning the self-determined motivation, sport and exercise behaviour, and gender. Therefore, both age groups, 966 adolescents and 636 young adults, were questioned by self-report on their goals in sport and exercise, self-determined motivation, sport and exercise behaviour, and gender. A multiple-group-analysis for latent-profile-solutions was conducted resulting in six goal profiles for both age groups. As expected, the shape of these profiles differed qualitatively for the majority of adolescents and young adults: In adolescents, goals such as contact and the perception of challenge were more prominent, whereas in young adults, health, figure/appearance, and distraction/catharsis were dominant. Validation analyses support the profiles identified as they differ in self-determined motivation, sport and exercise behaviour, and gender. To more efficiently tailor interventions, an age-specific focus on goal profiles seems promising

ARTICLE HISTORY
Accepted 5 November 2021

KEYWORDS
Motivation; physical activity; person-oriented approach; latent profile analysis; youth

BE CURIOUS?

"Be curious, not judgemental."
Walt Whitman

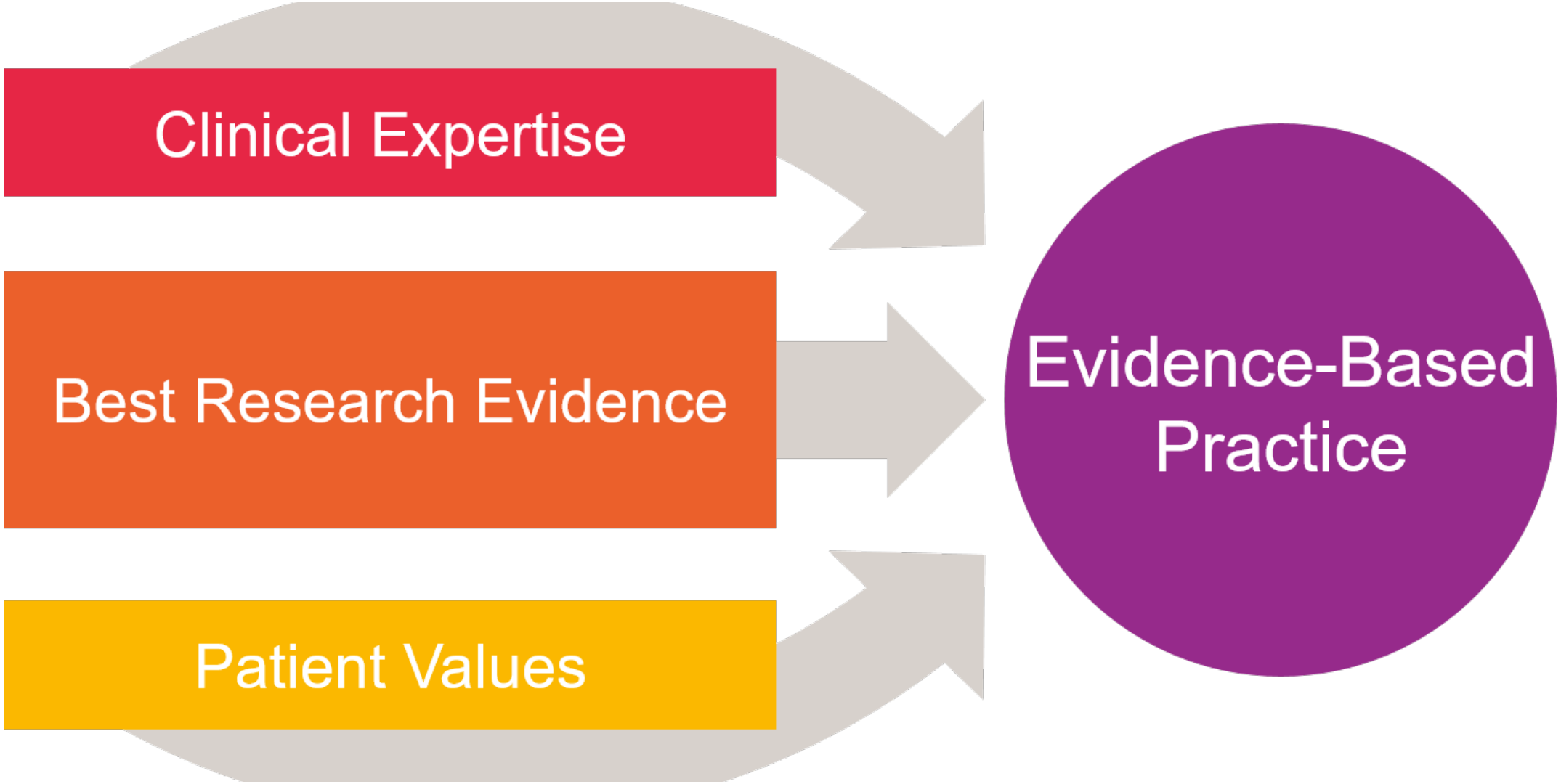


https://www.facebook.com/reel/746759773638771

LEARNING OBJECTIVES:

At the end of this session delegates will be able to:

- ***outline the characteristics of a (PE) challenge in context(s) of developing literacy***
- ***differentiate between educational PE challenges and commercial-fitness challenge strategies***
- ***construct integrated cross-domain/subject, intra- and inter-class challenges as meaningful (physical) educational activities***


Clinical Expertise
Best Research Evidence
Patient Values
Evidence-Based Practice

frontiers | Frontiers in Sports and Active Living

TYPE Conceptual Analysis
PUBLISHED 28 July 2023
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Approaching physically active learning as a multi, inter, and transdisciplinary research field

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nutrients

MDPI

Article

Classroom-Based Physical Activity as a Means to Improve Self-Efficacy and Academic Achievement among Normal-Weight and Overweight Youth

Francesca Latino [1], Francesco Tafuri [2], Emma Saraiello [3] and Domenico Tafuri [3,*]

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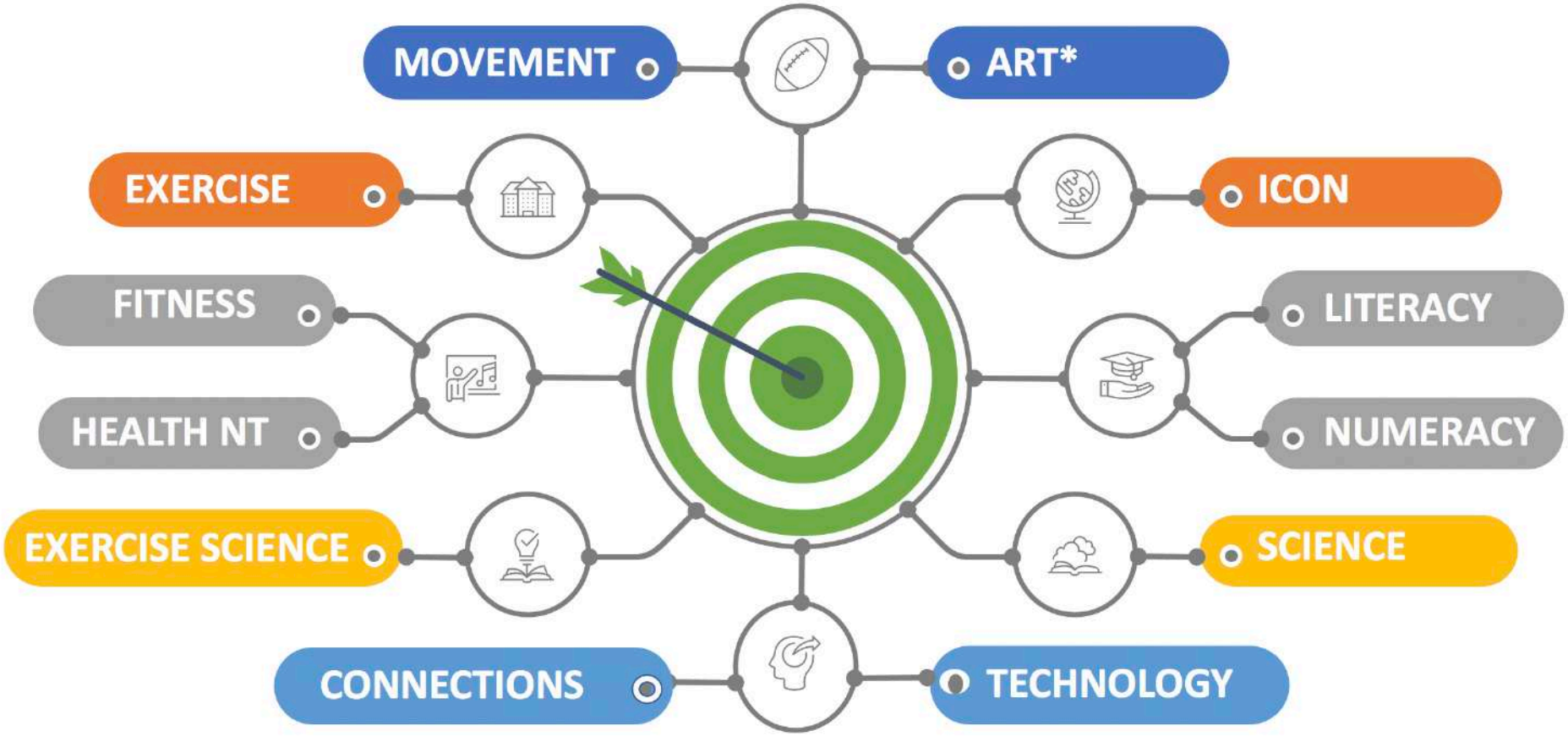
THE CHALLENGES

X-FACTOR



GOOD CHALLENGES ARE CHALLENGING.

5 MAIN CHALLENGES - CHARACTERISTCS

MOVEMENT

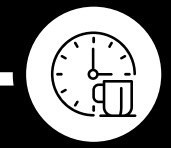
- movement (LM, NLM/BC, MAN/OC)
- exercise (BC, OC)
- fitness* (program)
- exercise science (process)
- gamification*
- x-factor

LITERACY

- verbal*, numeracy
- health, wellbeing*
- science* (procedural)
- communication*
- technology

EDUCATIONAL

- outcomes / objectives (S&S, standards)
- integrated, scaffolded/progressive
- high impact strategies (T, WB, E)
- understanding by design*
- student voice, agency



CONNECTIONS

- within; intra-class
- external; inter-class
- community
- family
- global

CREATIVE

- “street data” – real; engaging
- agile; flexible; adaptable
- evidence* -based
- self-generative

10* Cs

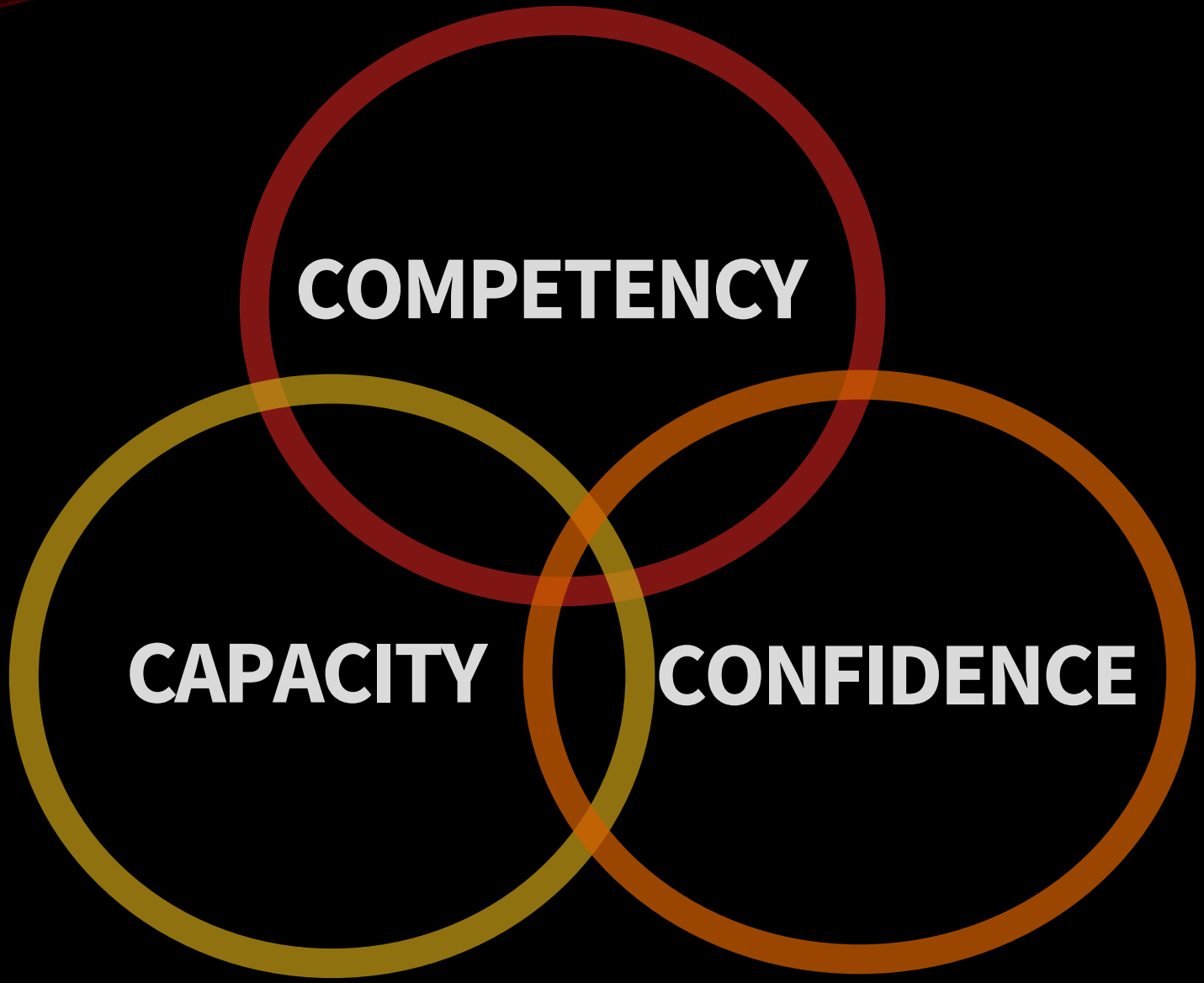
CHALLENGES' 7-17 Cs

CULTURE & CONTEXT
- VALUES
- EXPECTATIONS
- EXPERIENCES*

CHOICE(s)
CREDIBILITY

CREATE (build in success)
CUE (make it known)
CRAVING (attractive)
COMPLETE (reward)

MEANINGFUL



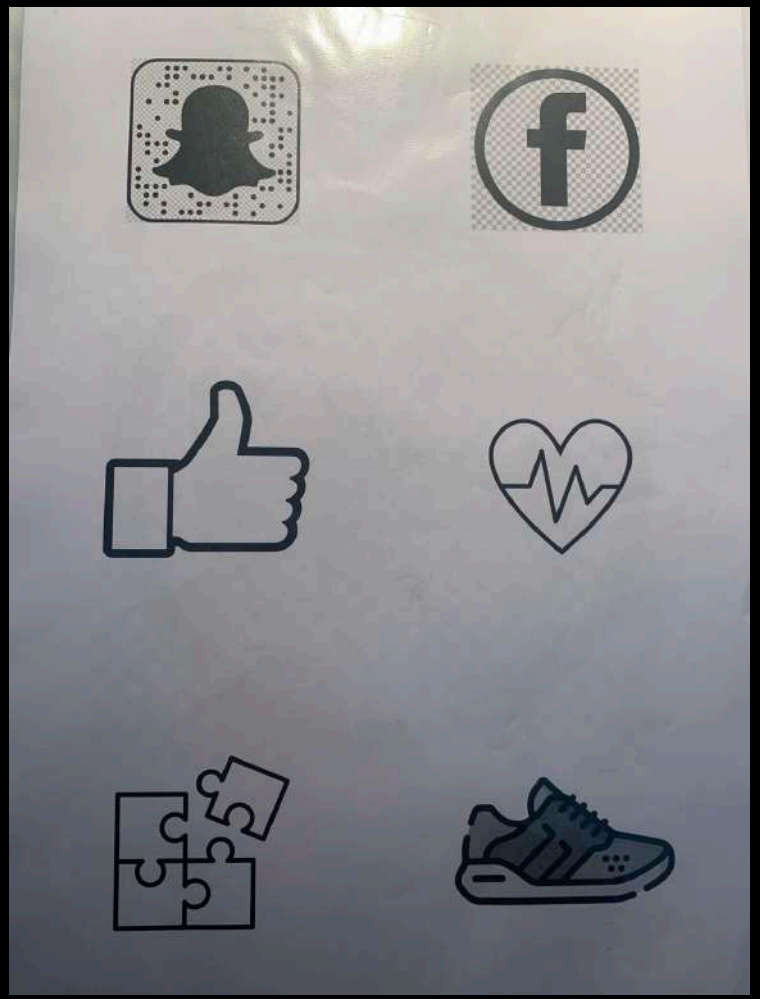
COLLABORATION
COMMUNICATION
COOPERATION

CONNECTIONS
COMMUNITY

COMPLEXITY
- **Quality vs**
- **Quantity**

1. ICON CHALLENGE: simple, swift, symbolic*, success; seeds

1. KNOWN



2. CURIOUS

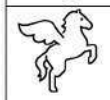
My Fitness Icon Challenge 2

Name:

An **icon** is a picture or symbol. In modern technological times it's picture or symbol that appears on a screen and is used to represent a file, program, account, 'app', a capability, or some other concept or specific entity. As a **metaphor**, an icon can also symbolise a (famous) person or thing considered as representing a set of beliefs, behaviours or a way of life.

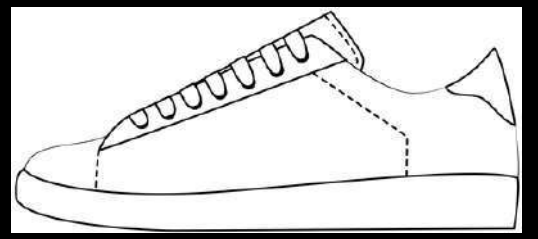
There are six (6) icons below. For each one, write what you think it is literally a picture or image of, **and** what it may or could represent as a metaphor. The first one (two feet) is an example.

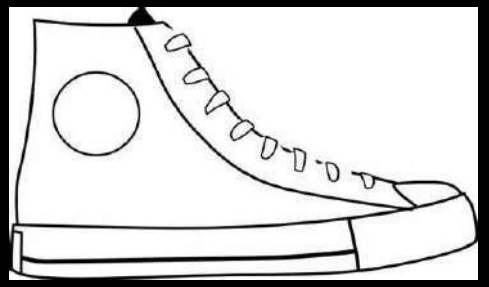
You may like to create an icon that represents *My Fitness*. Explain why you chose/created it.

ICON	It "is" an image of...	What it may symbolise and why?
	• feet • human feet • human left & right feet	• *balance*, because staggered feet makes us more stable • *walking*, because one foot is continuously placed in front of the other when walking, and... • *running*, because...? • *a journey or trip*, because it can symbolise moving from one place to another; or, show a person traveling through their country, hunting or at a ceremony
	• kangaroo • wallaby • m • a • v	• Australia • Connection with the land • •
		
		
		
	• horse with wings • •	

Sources:
https://www.techtarget.com/whatis/definition/icon
https://www.merriam-webster.com/dictionary/icon

3. CREATIVE





2. MOVEMENT CHALLENGES

- Foundation, core > progressions
  - within sessions
  - between sessions
- Formative assessment
- Movement as problem-solving

- "build in success"
  - Confidence
  - Competency
  - Capacity?
- Connections
  - procedural
  - people

https://www.youtube.com/watch?v=CVf_HGoY-1E

frontiers | Frontiers in Sports and Active Living

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CITATION

(Re)conceptualizing movement behavior in sport as a problem-solving activity

Shawn Myszka[1]*, Tyler Yearby[1,2] and Keith Davids[2,3]

[1]Emergence, Minneapolis, MN, United States, [2]School of Natural, Social and Sport Sciences, University of Gloucestershire, Gloucester, United Kingdom, [3]Sport & Physical Activity Research Centre, Sheffield Hallam University, Sheffield, United Kingdom

The use of the term *problem-solving* in relation to movement behavior is an often-broached topic within kinesiology. Here we present a clear rationale for the concept of problem-solving, specifically pertaining to the skilled organization of movement behaviors in sport performance, and the respective processes that underpin it, conceptualized within an *ecological dynamics* framework. The

2B#. SIT-DOWN-STAND-UP (SDSU+)

- introductory movement/exercise > POT "progression"
- formative assessment (R/L, mobility, problem-solving, competence)
- "successful" students > confidence
- connections and "competition"
  - people
  - movement transitions (sit-to-stand; sitting & standing [SB])
  - "fitness" challenge

Alexander, N. B., Ulbrich, J., Raheja, A., & Channer, D. (1997). Rising from the floor in older adults. Journal of the American Geriatrics Society, 45(5), 564-569.

Klima, D. W., Anderson, C., Samrah, D., Patel, D., Chui, K., & Newton, R. (2016). Standing from the floor in community-dwelling older adults. Journal of aging and physical activity, 24(2), 207-213.

Ardali, G., States, R. A., Brody, L. T., & Godwin, E. M. (2022). The relationship between performance of sit-to-stand from a chair and getting down and up from the floor in community-dwelling older adults. Physiotherapy theory and practice, 38(6), 818-829.

Burton, E., Hill, K. D., Davey, P., Ng, Y. L., & Williams, S. A. (2023). The Biomechanics of Healthy Older Adults Rising from the Floor Independently. International Journal of Environmental Research and Public Health, 20(4), 3507.

Rising from the Floor in Older Adults

Neil B. Alexander, MD, Jessica Ulbrich, BS, Aarti Raheja, and Dwight Channer, MS

OBJECTIVE: The primary goal was to determine the ability of older adults to rise from the floor. A secondary goal was to explore how rise ability might differ based on initial body positions and with or without the use of an assistive device.

DESIGN: Cross-sectional analysis of young, healthy older, and congregate housing older adults.

on the differences between groups in time to complete the rise, determining the differences in rise strategies, and the underlying biomechanical requirements of rising from different positions with or without a support would appear to be useful. These data may serve as the foundation for future interventions to improve the ability to rise from the floor.
J Am Geriatr Soc 45:564–569, 1997.

2C. MOVEMENT CHALLENGES CONT'D

- Lay-Down-Roll-Over (LDRO)
  - Half rolls: L/R and F/B
  - Full rolls: L/R and F/B
  - Scoop rolls: L/R and F/B

- **Differentiate#** ***(Movement Analysis 1)***
  - Hop, step and jump?
    - J = 2>2, 2>1, 1>2
  - Step, leap and bound?
  - Walking, skipping and running?

2D. MOVEMENT CHALLENGES CONT'D

- Squats/squatting*
  - Sit-2-stand > sit-tap-stand (2L/1L)
  - Squat-2-balance
  - Combinations >> EXERCISE CHALLENGES
    - Other exercises (WB, LB, UB)
    - *Progression/s over time (explicit)
  - "Contests" - *gamifying*

- Evaluate the key relationship/s between (MA2)
  - arms & legs in LM activities (crawl, walk, run, skip)
  - arms & legs in MAN/OC 1 : underarm, sidearm/strike, overarm
  - arms & legs in MAN/OC2 2: kicking v punting
  - trunk/torso or "core"

2E. MOVEMENT CHALLENGES CONT'D

- Gamifying
  - Principles*
  - Scaffolding & layering
  - Scoring – relative points
  - Progressive challenges
  - "Rewards"
- Connections
  - Within class (teams & individuals)
  - Inter-class & interschool
    - same year level
    - other year levels (2 benefits)
  - Urban & rural; interstate
  - Global / international (language?)

- Kingsley, T. L., & Grabner-Hagen, M. M. (2015). Gamification: Questing to integrate content knowledge, literacy, and 21st-century learning. *Journal of adolescent & adult literacy*, *59*(1), 51-61.
- Zainuddin, Z., Chu, S. K. W., Shujahat, M., & Perera, C. J. (2020). The impact of gamification on learning and instruction: A systematic review of empirical evidence. *Educational research review*, *30*, 100326.
- Ling, L. T. Y. (2018). Meaningful Gamification and Students' Motivation: A Strategy for Scaffolding Reading Material. *Online Learning*, *22*(2), 141-155.
- Figueroa-Flores, J. F. (2016). Gamification and game-based learning: Two strategies for the 21st century learner. *World*, *3*(2), 507-522.

3A. EXERCISE* CHALLENGES

"Exercise is a subset of physical activity that **is *planned, structured, and repetitive and has as a final or an intermediate objective*** the improvement or maintenance of physical fitness" (Caspersen et al 1985)

1. WARM-UPS

- Base "movements"
- 10-14 (+balls/bags)
- Rotate per class/week
- Structured variety
  - HITS: "repetition"
  - students construct or lead
- Resources?

2. UNIT / SESSION

- Structured (routine?) and Progressive
- Focus with Outcomes – physical/fitness?
  - Explicit & 4 Rs: reflect, repeat, review, re-work
  - Connect/ion
- "Accumulator" and "Circulator"*
- "D-day" (Dice)
- Project / Mini-assignment
  - Principles of Training

3. FOUNDATION*

Physical Activity, Exercise, and Physical Fitness: Definitions and Distinctions for Health-Related Research

CARL J. CASPERSEN, PhD, MPH
KENNETH E. POWELL, MD, MPH
GREGORY M. CHRISTENSON, PhD

Dr. Caspersen and Dr. Powell are epidemiologists and Dr. Christenson is an evaluation researcher in the Behavioral Epidemiology and Evaluation Branch, Division of Health Education, Center for Health Promotion and Education, Centers for Disease Control, Atlanta, GA 30333.

Tearsheet requests to Dr. Caspersen.

Synopsis .....

"Physical activity," "exercise," and "physical fitness" are terms that describe different concepts. However, they are often confused with one another, and the terms are sometimes used interchangeably. This paper proposes definitions to distinguish them.

Physical activity is defined as any bodily movement produced by skeletal muscles that results in energy expenditure. The energy expenditure can be measured in kilocalories. Physical activity in daily life can be categorized into occupational, sports, conditioning, household, or other activities. Exercise is a subset of physical activity that is planned, structured, and repetitive and has as a final or an intermediate objective the improvement or maintenance of physical fitness. Physical fitness is a set of attributes that are either health- or skill-related. The degree to which people have these attributes can be measured with specific tests.

These definitions are offered as an interpretational framework for comparing studies that relate physical activity, exercise, and physical fitness to health.

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Journal of Sport and Health Science 00 (2022) 1–6

Opinion

Why people should run after positive affective experiences instead of health benefits

Silvio Maltagliati [a,*], Philippe Sarrazin [a], Layan Fessler [a], Maël Lebreton [b,c,d,†], Boris Cheval [c,e,*,†]

[a] University of Grenoble Alpes, SENS, Grenoble 38000, France
[b] Paris School of Economics, Paris 75014, France
[c] Swiss Center for Affective Sciences, University of Geneva, Geneva 1202, Switzerland
[d] Laboratory for Behavioral Neurology and Imaging of Cognition, Department of Fundamental Neurosciences, University of Geneva, Geneva 1202, Switzerland
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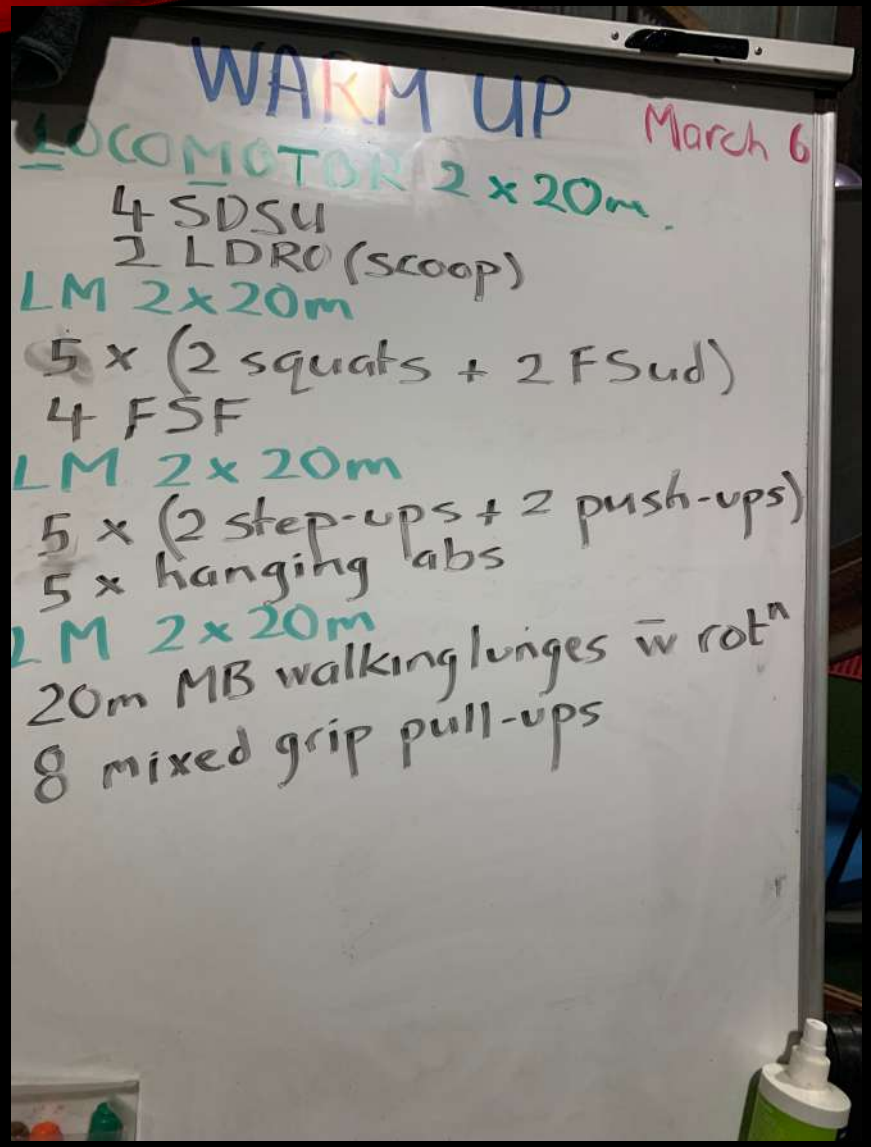
Received 19 August 2022; revised 15 September 2022; accepted 8 October 2022

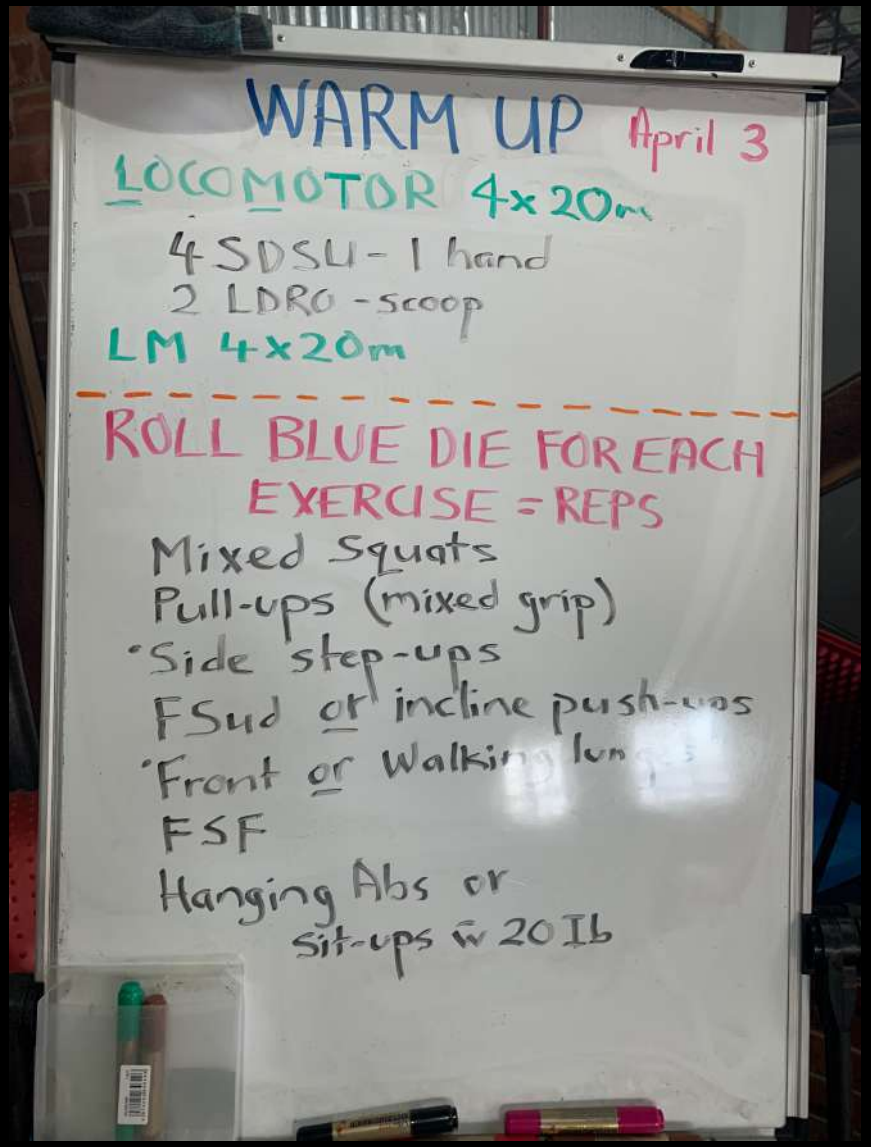
Over time, physical activity (PA) has shifted from being a necessity to being an alternative. As a result, levels of PA have sharply decreased.[1] Today, we are facing a worldwide pandemic of physical inactivity, with one death every 6 s attributed to insufficient PA.[2] To counteract this trend, a tremendous effort is being made to promote regular PA across the lifespan, mainly through the dissemination of knowledge about the health benefits of accumulating sufficient PA.[3] The success of these campaigns is evident, as the vast majority of people are now aware of these health benefits and report the intention to be physically active. For example, in an Australian

crossroads between decision-making sciences (economics, psychology, neurosciences), and we introduce theoretically grounded arguments to explain why highlighting health benefits is necessary but insufficient to foster a regular engagement in PA. To further support our argument, we offer a formal decision model illustrating how decision-making features jointly sway individuals' choices away from physically active options[8] (Box 1).

1. Why health benefits are insufficient for promoting PA

3B. Exercise Challenges: Warm-Ups#





3C. Exercise Challenges: *Warm-Ups* - LITERACY

Read the *entire* passage about '*The Warm-up'* below.
Answer: what part of the session is the warm-up – first, second, third, other?
Complete: there are 25 spelling errors in the first 3 paragraphs – find and correct them
Outline the 4 aspects of an effective warm-up.

The Warm-Up.

After the intorduction of an exercise or training sesion the warm-up is the initial activ part of a seshion. Its like the Do-It-Now activitee of a clasroom sesion.

Then purpose of a warm-up is to prepar you for the mane part of the exercise or training session or competition – to prepear your physicall, mental, technical (or technike) and tactical qualities for wot is to follow.

A warm-up should fowl easily into the main part of the session with rellevant activitys and exxercises. Relevent activitys will depent upon your age, experiens and goals, and the tipe and porpoise of the session.

3D. Exercise Challenges: *Warm-Up* - CONNECTIONS

Review & Reflect:

1. What is the purpose of a warm-up?
2. List >3 ways a warm-up effects your body
3. How do LM and NLM activities differ? Are these "good" activities for a warm-up? Why/not?

Home Activity:

1. Continue your *Fitcabulary*: perhaps include the terms – LM, NLM, control skills (and give examples)
2. Create a 2-minute "Combo (LM & NLM) Obstacle Course" for someone at home or a friend – (with permission) record them doing it

"LANGUAGE MATTERS"

(PE) *LITERACY**

- "text"
- Interpretation
- In context / cultural
- Meaning(ful)
- Influences choice & behaviors
- "normalised" >
  - expectations

Athens Journal of Sports - Volume 8, Issue 3, September 2021 – Pages 173-188

Knowing and Understanding how to Manage One's Physical Activity Practice: Contribution of Language, Thinking and Intelligence to Physical Literacy

*By Paul Godbout**

3E. Exercise Challenges - Circuits

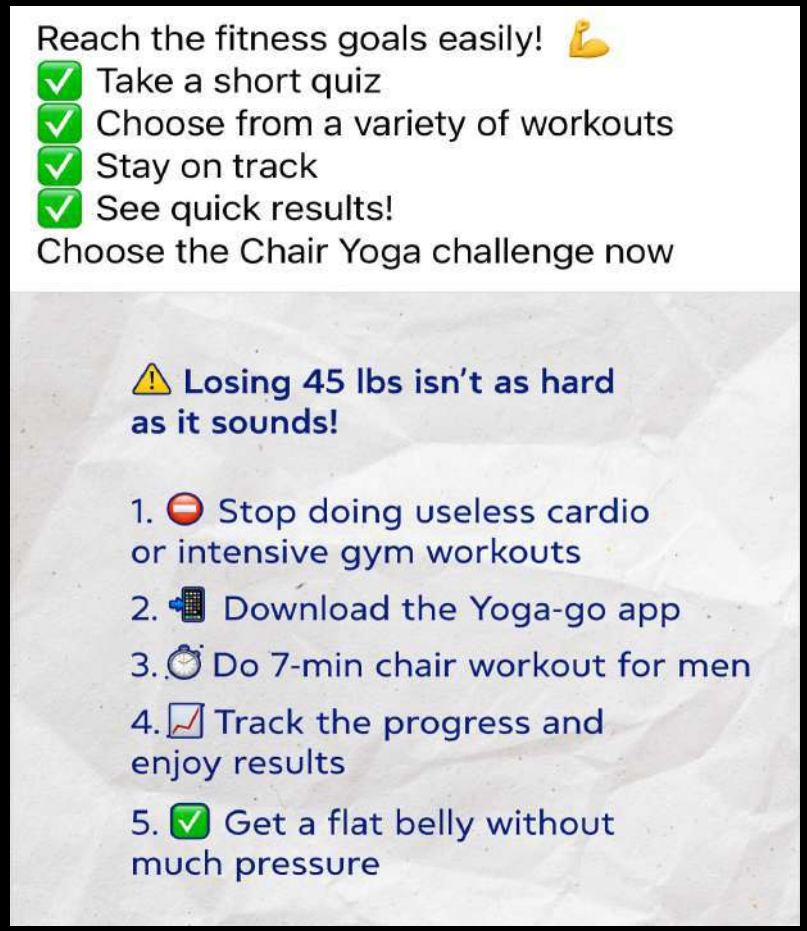
Step-Up	45 secs	60secs	75secs

LOAD & PROGRESSION#						
Week	**1**	**2**	**3**	**4**	**5**	**6**
Number of Circuits	2	3	3	4	3-4	4-5
Rest bn Exercises	20 secs	20 secs	15 secs	15 secs	0 rest	0 rest
Rest bn Circuits	2 min	90secs	2min	1min	2 min	1 min

a. complete general, exercise-specific and individual appropriate warm-up and warm-down
b. seek assistance if required; exercises, starting level, repeat **or** progress; modify if necessary
c. #consider repeating each 'circuit' twice (over a week or two) before progressing
d. exercise **order can altered**/changed each circuit
e. **moderate-fast tempo** (or speed)

3F. COMMERCIAL EXERCISE “CHALLENGES” 1

3G. Commercial Exercise "Challenges" 2



Cai, Z., Quan, M., Huan, M., Sun, G., Herrmann, S. D., Ainsworth, B. E., & Chen, P. (2023). Energy Costs of Chair Sitting and Standing Video Exercises in Chinese Older Adults Over 60 Years. *International Journal of Exercise Science*, *16*(7), 814.

3H. COMMERCIAL EXERCISE "CHALLENGES" 3

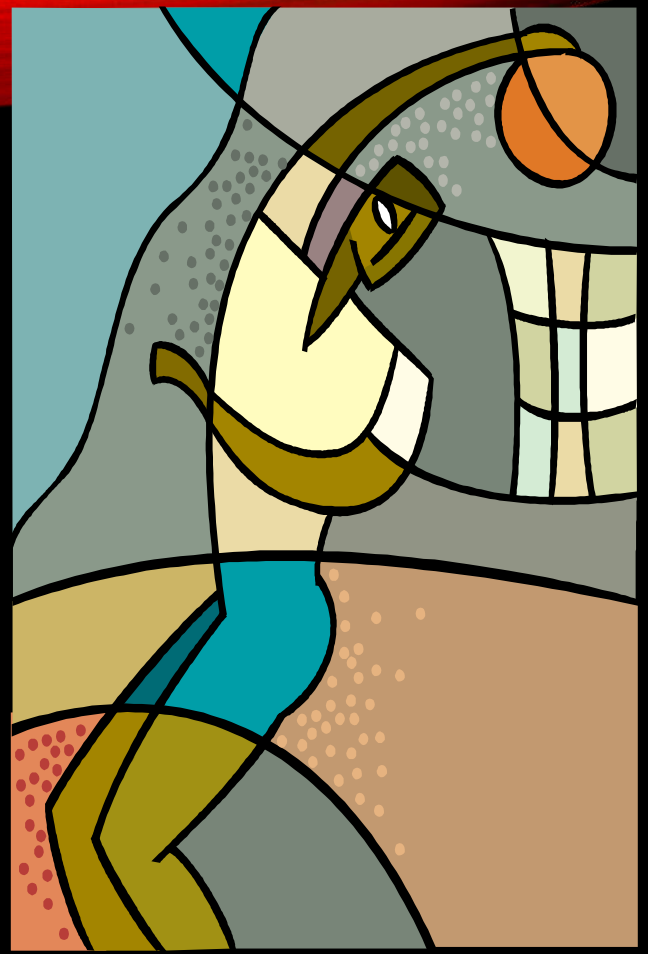
4A. PE NUMERACY CHALLENGES

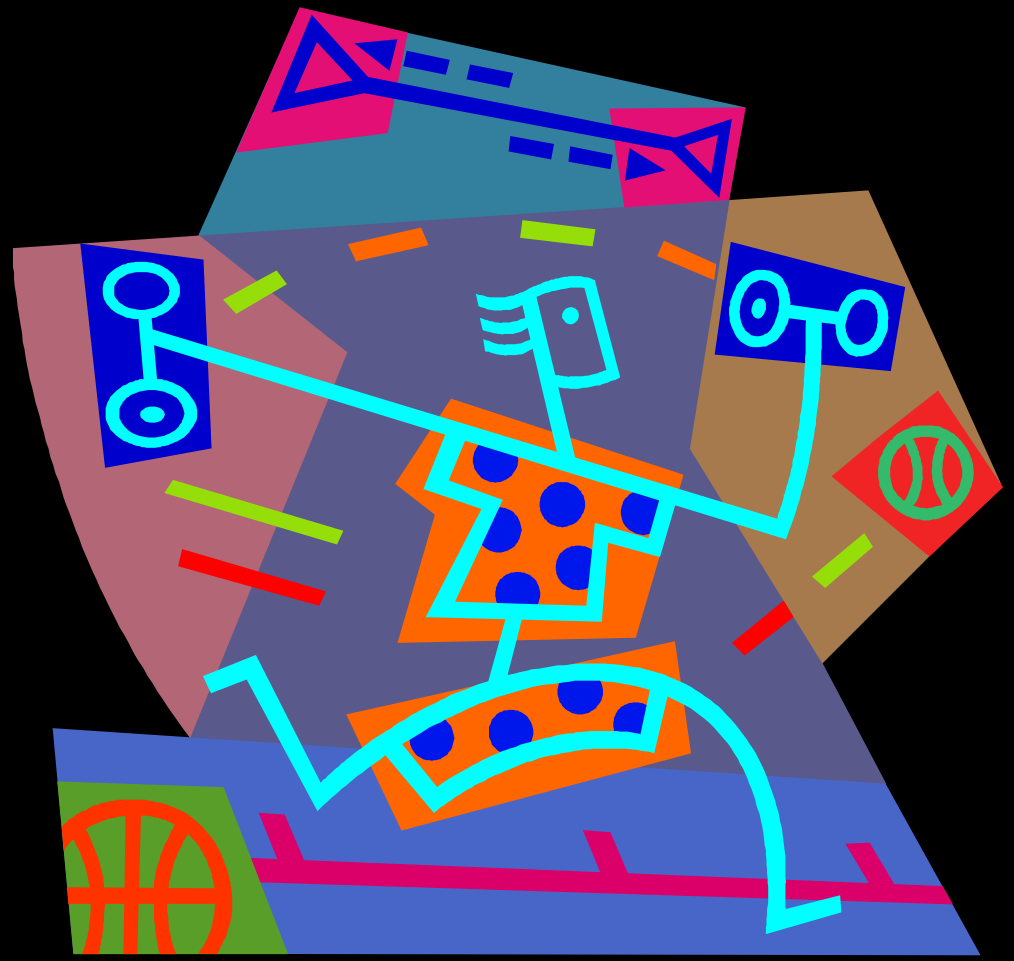
EMBEDDED

- Normalised – regular (L*)
- Gamification / Scoring
  - Exercise Science
- Aligned with Mathematics
- *Strands*
  - *Number & Algebra*
  - *Measurement & Geometry*
  - *Statistics & Probability*
- *General Capabilities*
- *Cross curricular*
- *Science – Understanding & Inquiry Skills*

'PROJECTS'

- "My Angles"
- "Triangulated Cubism"
- "Am I getting Better?"
- How Fast?
- "Can You Outrun a T-Rex"
- All
  - Connections / Competitions
  - Self-Assessment





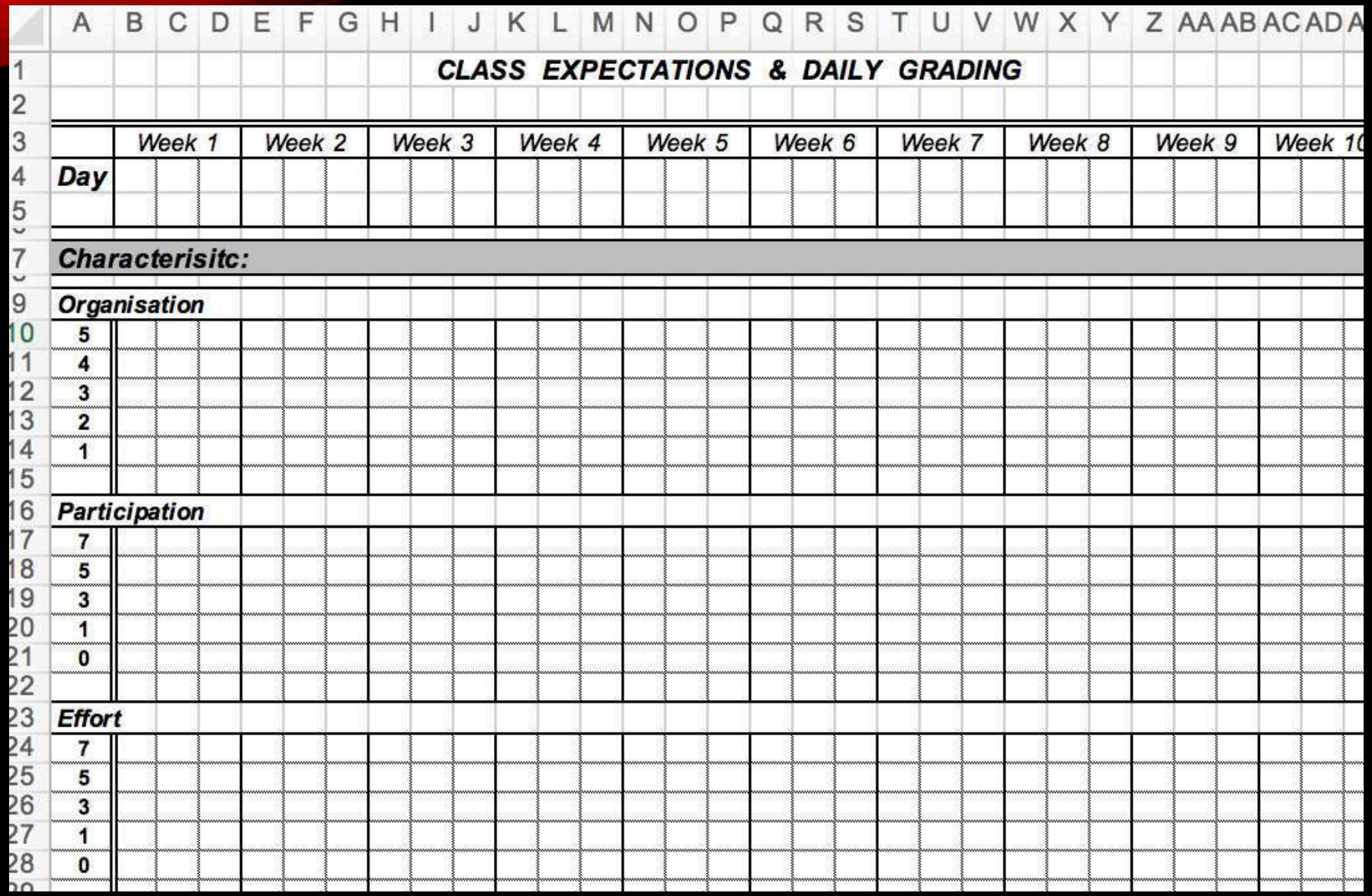
4B. PE NUMERACY CHALLENGES

HOW TO OUTRUN A T-REX

How Fast Can I Go ?

Activity	time per 20m	distance per 1 sec	distance per 1 min	distance per 1 hour	kms per hour
	time (#)	20÷time (#)	x 60	x 60	m > km
example	5.2 secs	3.85 metres per 1 sec	230.1 metres per 1 min	13,846.20 metres per 1 hour	13.8 kms per hour
slow walk					
fast walk					
jog					

4C. PE NUMERACY CHALLENGES



CLASS EXPECTATIONS & DAILY GRADING

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Day										

Characterisitc:

Organisation

5	
4	
3	
2	
1	

Participation

7	
5	
3	
1	
0	

Effort

7	
5	
3	
1	
0	

SMART-C FTNESS CHALLENGE GOALS

SMART

SPECIFIC

MEASURABLE

ATTAINABLE

REALISTC

TIME-BOUND

AIM or END GOAL

- Performance-related
- Health-related
- Progress-related
- Occupation-related

12 Monthly Fitness Challenges to Get Your Kids Up and Moving!

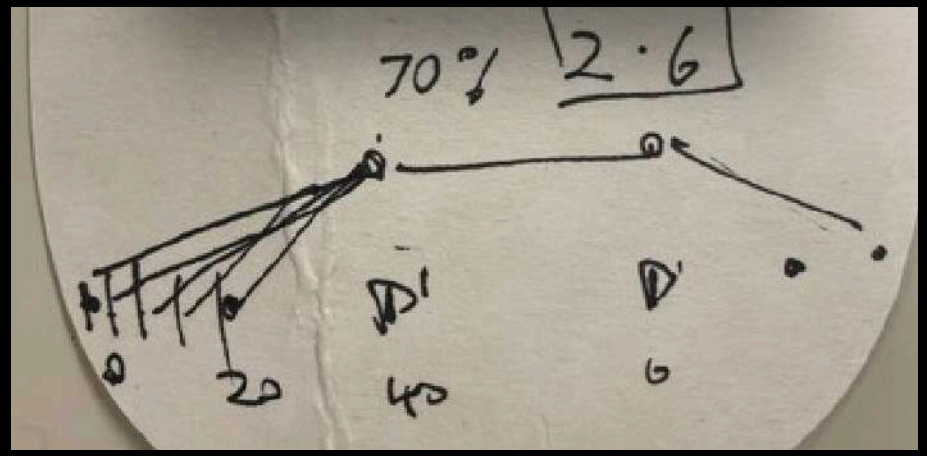
5A. PE EXERCISE SCIENCE - CHALLENGES

CHARACTERISTICS

- **Language Matters**
  - Normalise – frequency
  - Complex Terminology
- **Procedural / Process**
- Movement Analysis
- Data collection, Statistics & Analysis
- Estimations & Measurements
- **Over & Beyond**
  - Teaching **about** EX responses +
  - Teaching **through and "in"** EX

EXAMPLES

- Perceived Exertion (RPE)
  - Broad Jump (LJ)
  - 10-minute run (1min/loop)
  - Throwing for distance ?
- **Perceived Speed**



Thinking through making and doing: sport science as an art of inquiry

Carl T. Woods & Keith Davids

To cite this article: Carl T. Woods & Keith Davids (2022): Thinking through making and doing: sport science as an art of inquiry, Sport, Education and Society, DOI: 10.1080/13573322.2022.2054792

A Manifesto for exercise science – a vision for improving the health of the public and planet

Andy Smith, David Broom, Marie Murphy & Stuart Biddle

To cite this article: Andy Smith, David Broom, Marie Murphy & Stuart Biddle (2022) A Manifesto for exercise science – a vision for improving the health of the public and planet, Journal of Sports Sciences, 40:10, 1110-1115, DOI: 10.1080/02640414.2022.2049083

5B. PE EXERCISE SCIENCE - CHALLENGES

Original Research

the Journal of Strength and Conditioning Research™

Can Team-Sport Athletes Accurately Run at Submaximal Sprinting Speeds? Implications for Rehabilitation and Warm-Up Protocols

Joshua Darrall-Jones,[1] Gregory Roe,[1,2] Eoin Cremen,[2] and Ben Jones[1,3,4,5,6]

[1]Carnegie Applied Rugby Research (CARR) Center, Institute for Sport, Physical Activity and Leisure, Leeds Beckett University, Leeds, United Kingdom; [2]Bath Rugby Performance Department, Farleigh House, Farleigh Hungerford, Bath, United Kingdom; [3]Leeds Rhinos Rugby League Club, Leeds, United Kingdom; [4]England Performance Unit, the Rugby Football League, Leeds, United Kingdom; [5]Division of Exercise Science and Sports Medicine, Department of Human Biology, Faculty of Health Sciences, University of Cape Town, Cape Town, South Africa; and [6]School of Science and Technology, University of New England, Armidale, Australia

Abstract

Darrall-Jones, J, Roe, G, Cremen, E, and Jones, B. Can team-sport athletes accurately run at submaximal sprinting speeds? Implications for rehabilitation and warm-up protocols. *J Strength Cond Res* 36(8): 2218–2222, 2022—The aim of this study is to examine the ability of team-sport athletes to accurately run at a range of submaximal sprint velocities (60–90% maximal velocity; Vmax) under verbal instruction without any objective feedback. Twelve professional male rugby union players (age 19.7 ± 0.9 years, body mass 98.3 ± 13.9 kg, height 184.0 ± 7.5 cm) were verbally instructed to complete three 40-m sprints at each of 60, 70, 80, and 90% of Vmax in a randomized order. Percentage Vmax achieved during each sprint was compared with criterion velocities calculated from Vmax testing undertaken a week prior. Players underestimated (ran faster) their sprint velocity when asked to run at 60% (*very large* to *extremely large* mean bias, 23%; range, 57–88% Vmax), 70% (*large* to *very large*, 11%; 67–93% Vmax), and 80% (*small*, 2%; 71–91% Vmax) of their Vmax, whereas overestimated (ran slower) their sprint velocity when asked to run at 90% Vmax (*moderate*, −4%; 77–95% Vmax). Team sport players may require objective feedback when performing submaximal sprinting to ensure that velocities achieved are similar to those prescribed. This may be particularly important where graded exposure to maximum velocities is required, for example during rehabilitation or warm-ups.

Key Words: return-to-play, feedback, sprint, rugby

5C. EXERCISE SCIENCE - CHALLENGES

THE MAGIC MILE

- Firstly, students complete a series of simple activities to individually calculate how many steps it takes to walk or run a mile. This gives the chance to apply mathematics to real-world problem-solving.
- Secondly, they will individually negotiate with to measure (or log) their steps or miles only in Health & Physical Education classes **or** across the whole day.

Chesham *et al. BMC Medicine* (2018) 16:64
https://doi.org/10.1186/s12916-018-1049-z

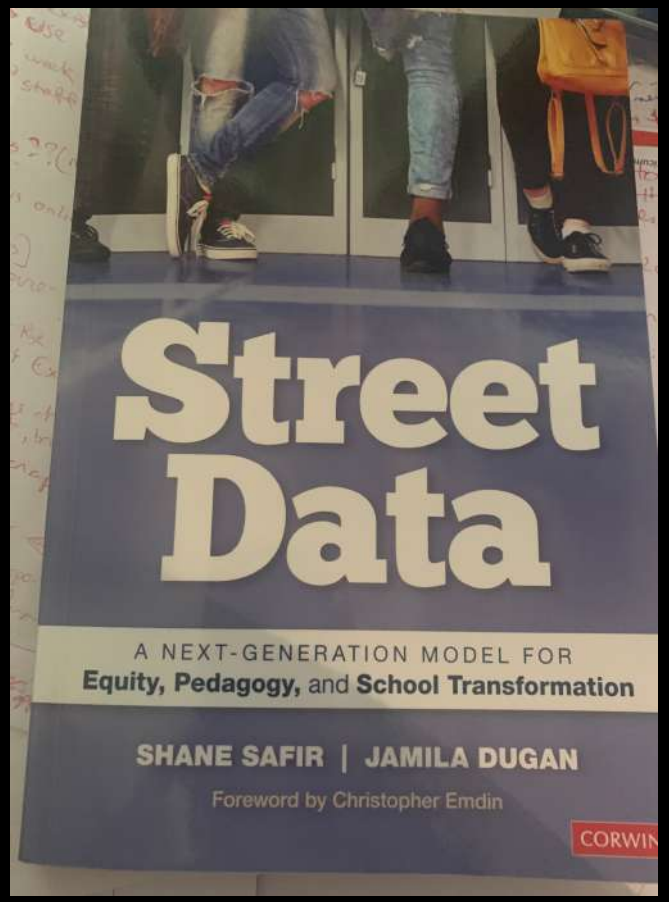
BMC Medicine

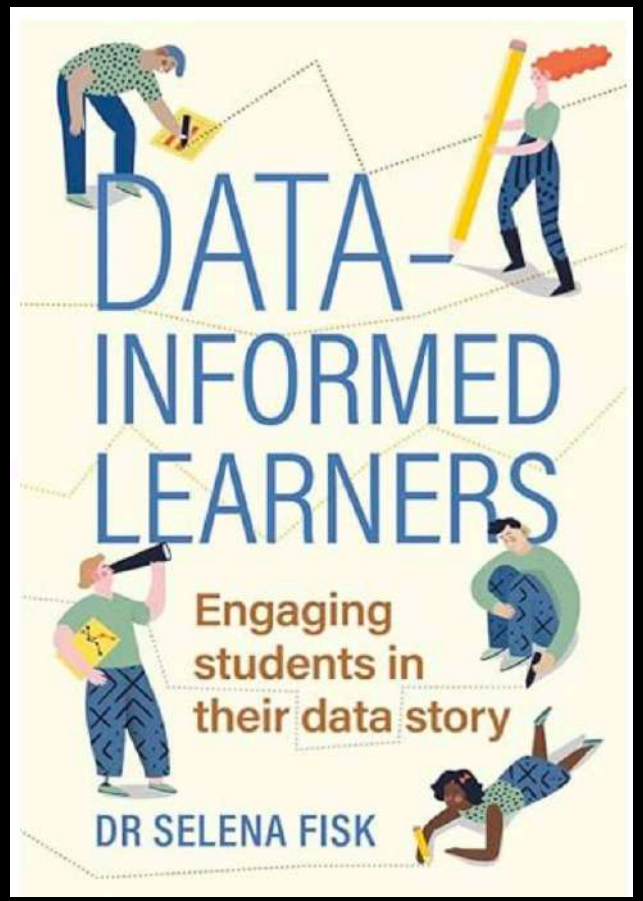
RESEARCH ARTICLE Open Access

The Daily Mile makes primary school children more active, less sedentary and improves their fitness and body composition: a quasi-experimental pilot study

Ross A. Chesham[1], Josephine N. Booth[2], Emma L. Sweeney[1], Gemma C. Ryde[1], Trish Gorely[1,3], Naomi E. Brooks[1] and Colin N. Moran[1*]

6. CHALLENGES – STREET DATA / CONNECTIONS



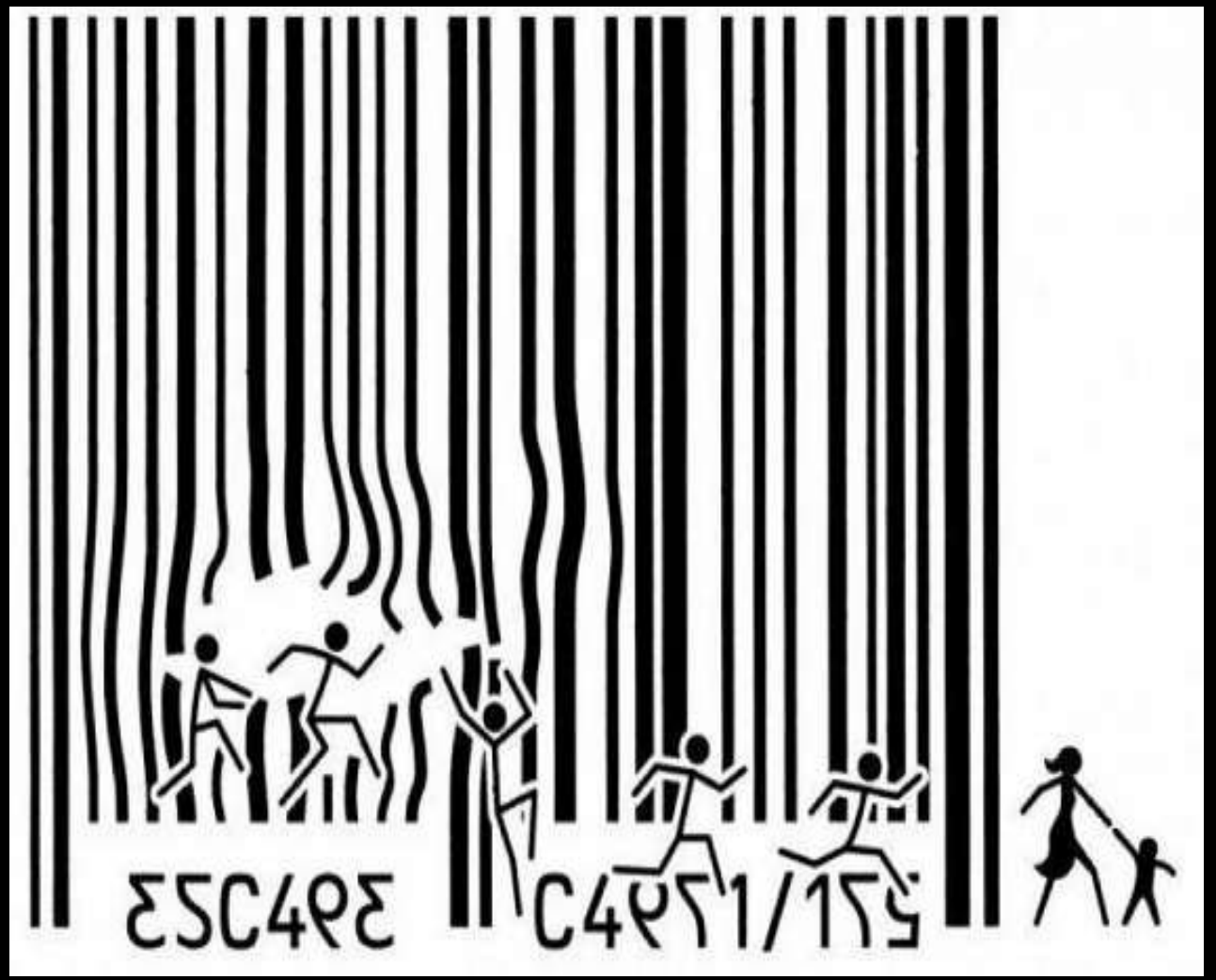


Purposes:

1. Goal setting
2. Learning dispositions
3. Understanding

Modes:

1. Data Walls (collections)
2. Success Criteria
3. Student generated
4. Deliberate conversations
5. Data on wall - Visible


ESCAPE


November 1st
Wednesday morning
Halloween
February 10th
August 19th
Saturday night
September 4th
last night
January 13th
Wednesday night
Sunday afternoon
at lunch time
April 17th
Tuesday afternoon
Friday the 13th
October 23rd
Saturday afternoon
Thursday morning
Easter Monday
Thursday afternoon
late Monday night
at the base of a mountain
in London, England
in the woods
at a toll bridge
in Toronto, Ontario
at a grocery store
in the desert
in the kitchen
at the barn
at a campsite
in Vancouver, B.C.
in a castle
in Ottawa, Ontario
at a farm
at the skating rink
in Calgary, Alberta
in outer space
at a dairy farm
in the forest
at the beach
in the rainforest
at a movie theatre
a werewolf
a mail man
Katniss Everdeen
a king
a giraffe
Mickey Mouse
Iron Man
a soccer team
the princess
Harry Potter
a wizard
a chimpanzee
a tiger shark
Cinderella
Spider-Man
4 cats
a baby elephant
Taylor Swift
the Avengers
the Easter bunny
a mermaid
a prince
won the election
disappeared
met their hero
found $100
ate 30 peanut butter sandwiches
won a trip to Australia
flew a hot air balloon
won the baseball tournament
won a dance contest
learned to drive
won American Idol
planted a vegetable garden
planted a tree
won the lottery
adopted a puppy
rode a unicycle
broke a world record
wrote a song
ran a marathon
won a boat
wrote a play
wrote a book
turned 100 years old


CRAFTSMAN

CONNECTING THE CHALLENGES

HOW DOES / CAN IT ALL WORK ?

PLANNING

- CONTEXT
- OUTCOMES#
- INDEPENDENTLY OR INTEGRATED

PROGESSSING

- OVER TIME: WEEKS, UNITS TERMS, *YEARS*
- STARTING POINT(S)
- LAYERS

‘SELLING’*

- COMMUNICATION
- COLLABORATION

INTEGRATING

- #DOMAINS
- “ACTIVITIES”
- CONNECTIONS

GAMIFYING

Green marketing is a practice whereby companies seek to go.

*“CONNECTING”

- INTER-CLASS – YEAR LEVEL(S)
- URBAN & RURAL; INTERSTATE
- GLOBAL

REBRAND

- EXPECTATIONS
- LITERACY & NUMERACY
- GAMES/SPORTS/UNITS

REFLECT, REVIEW & IMPROVE

- STUDENT VOICE & REVIEW (Likhert)
- PROFESSIONALISM,