

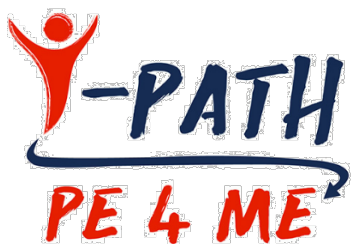


What Makes Programmes Work: The Importance of Teachers in the Implementation of Physical Activity Programmes in Educational Settings



Presenter: Christina Duff MSc

School of Health and Human Performance, Dublin City University



Research Team

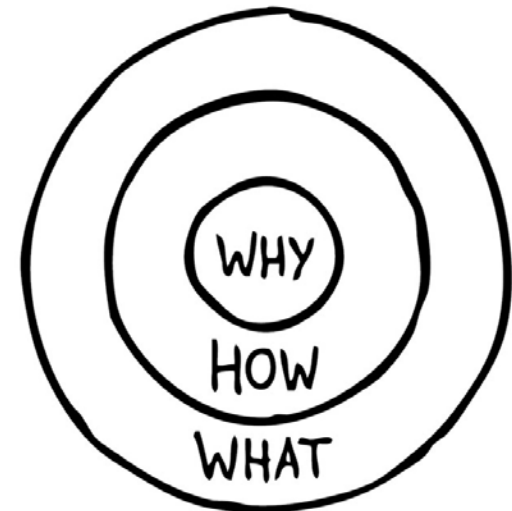
Dr Johann Issartel
Dr Sarahjane Belton
Dr Jamie McGann

Mr Stephen Behan MSc
Mr Cameron Peers MSc
Ms Christina Duff MSc
Mr Nathan Gavigan



Planning for Sustainability of Programmes

- Delivered by educators/teachers
- Upskilling to build own knowledge and confidence for teaching and facilitating development of physical literacy
- Embed within values of whole school



(Sinek, 2009)

Physical Activity and Physical Literacy

What is

Physical Literacy?



physical skill + Confidence + Motivation + Lots of Opportunities = Physical Literacy

(Sport Wales, 2016)

Physical Literacy Programmes in the Educational Setting



Programme

Partners

Early Childhood Care and Education (ECCE)



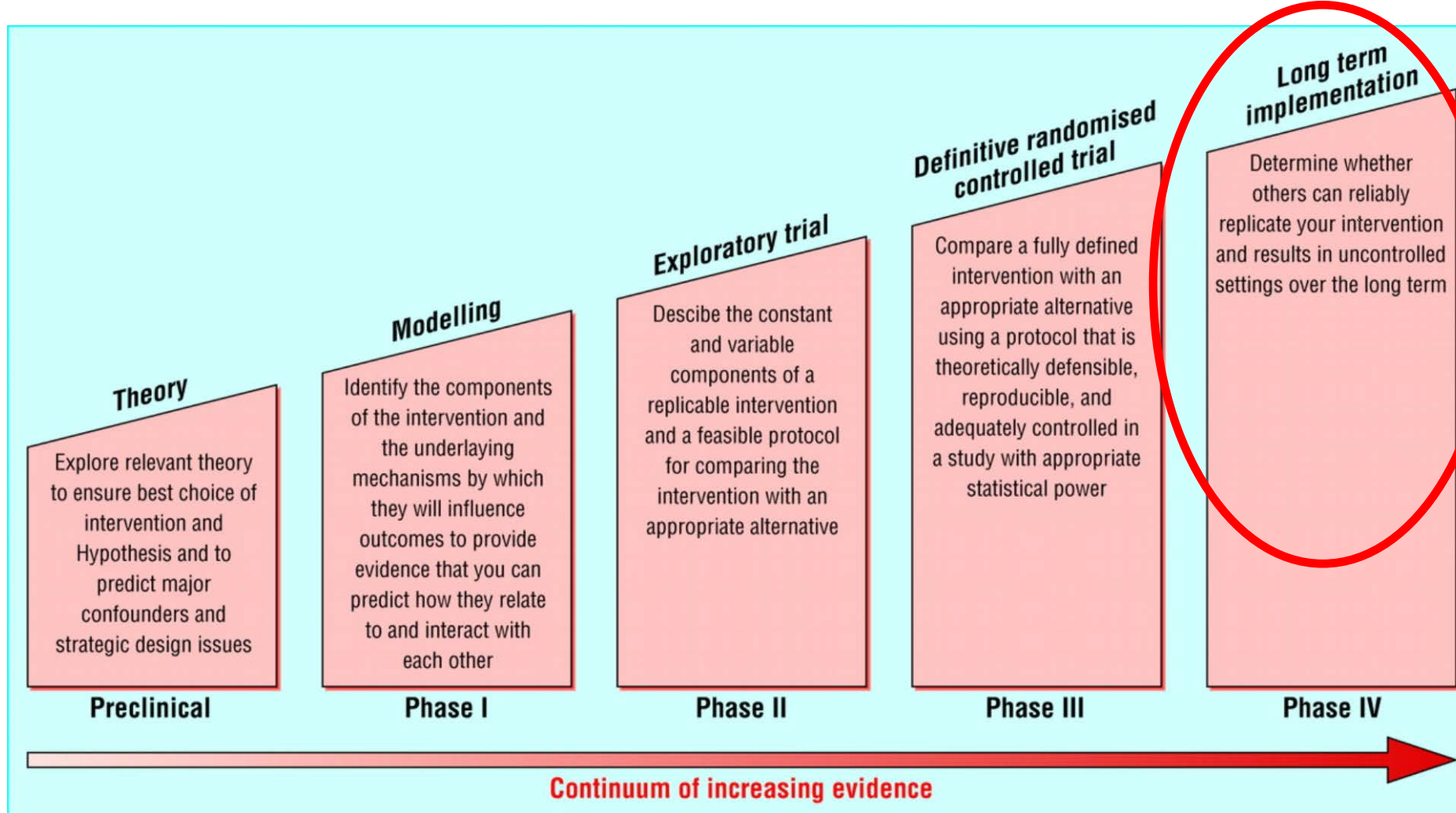
Primary School



Post-primary School



Phases in Development of a Complex Intervention



“Others can reliably replicate the intervention over the long term”

Overview of Measures

Children and Youth

Physical

- Anthropometrics (BMI, waist circumference)
- Daily Physical Activity
 - Subjective* (self-reported or parent-reported)
 - Objective* (accelerometer or pedometer)
- FMS
- Health-Related Fitness (strength, flexibility, cardiorespiratory endurance)

Psycho-social

- Motivation
 - Self-Efficacy
 - Body Image
 - Wellbeing
 - Knowledge and Understanding
 - Attitudes to PA
- (*Quantitative*)
Self-report questionnaires
- (*Qualitative*)
Focus Groups



Teachers

Quantitative

- Perceptions of Physical Literacy
- Confidence to teach PA

Qualitative

- Focus Groups
- Semi-structured Interviews

Weekly Evaluation Sheets





Kids Active (Pilot Intervention)



EarlyChildhoodIreland.ie/
kids-active-programme

N = 161 children (age 3-5)
 N = 32 educators (22 intervention / 10 control)
 9 ECCE services (5 intervention / 4 control)
 6 weeks

- PA (accelerometers while in service)
- FMS (4 skills)
- Educator confidence to teach PA questionnaire

Results

- Increase in educator confidence ($p < .05$)
- Increase in proficiency of overhand throw ($p < .05$)

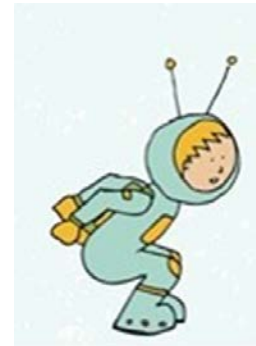
Resource Pack

2 x 2-hour Training Sessions

4 FMS Cards and Posters

6 Themed Activity Cards
(5 suggested activities each)

Private Facebook Group



The Irish Times, February 2017



Kids Active (Pilot Intervention)



Strengths

Positive feedback from educators
 Adults and children enjoyed programme
 Children self-selected to do activities (child-led) and loved FMS characters

Increase in educator confidence to teach PA

Improvement in FMS of intervention group

Challenges

Low engagement with Facebook group

Low response rate for weekly evaluation forms

Difficult to capture fidelity of unstructured intervention

Qualitative research not feasible in timeframe

Dissemination to rest of service?

Facebook Group

Evaluation Sheets



Moving Well-Being Well



Phase 1 – Data collected from 2148 children in 44 primary schools throughout Ireland

Phase 2 – Pilot Intervention



30 minute FMS based class led by coach
Teacher repeats the same class
Coach upskills teacher on the job



Active learning in classroom
5 minutes every day
Skills and activity complexity gradually increases



Home activity once a week
Worksheet to be completed with parent/guardian
Activity and knowledge components

Next Steps:

Exploratory Trial (N ≈ 1000)

Including qualitative data (teachers and children)

Active School Flag

Evaluation of Implementation from School's Perspective



www.ActiveSchoolFlag.ie

Data collected from Active School Flag (ASF) Coordinators (teachers)

Each classified into one of four categories of engagement
(from beginning ASF process to renewing after 3 years for second flag)

- Online Surveys (N = 236) drawing on ASF objectives and success criteria, as well as perceived benefits, challenges and motivations
- Focus groups/ semi-structured interviews (n = 19)

Findings

- Amount of paperwork and time required were considered challenges by the majority of respondents
- Most teachers reported perceived benefits such as improved focus and attention of children and the least active children increasing PA

Results used as inputs to optimise programme going forward and to inform further research

Y-PATH (Youth-Physical Activity Towards Health)



Multicomponent post-primary whole-school physical activity and physical literacy programme

Targets PA, FMS and health-related knowledge, attitudes, motivation and self-efficacy

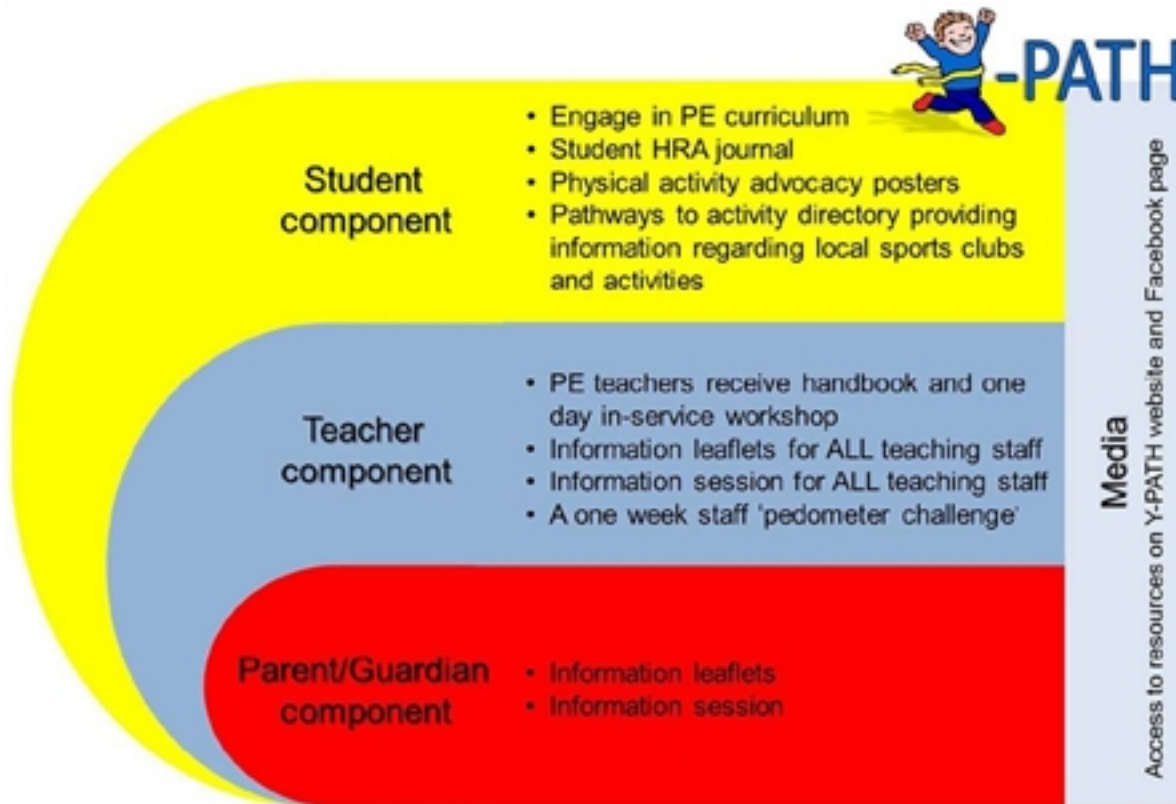
Delivered to PE teachers through mixture of online and face-to-face training

Components:

1. PE component (PE 4 ME)
2. Parent/Guardian component
3. Whole-school component (all teachers)



Y-PATH Randomised Control Trial



- N = 482 (age 12-13)
- 20 post-primary schools (10 intervention; 10 control)
- 1 full academic year (2013 - 2014)

Baseline, post-intervention and 3-months post-intervention

Significant positive intervention effects for total FMS ($p < .0001$) regardless of gender, BMI or PA level

(McGrane et al., 2018)

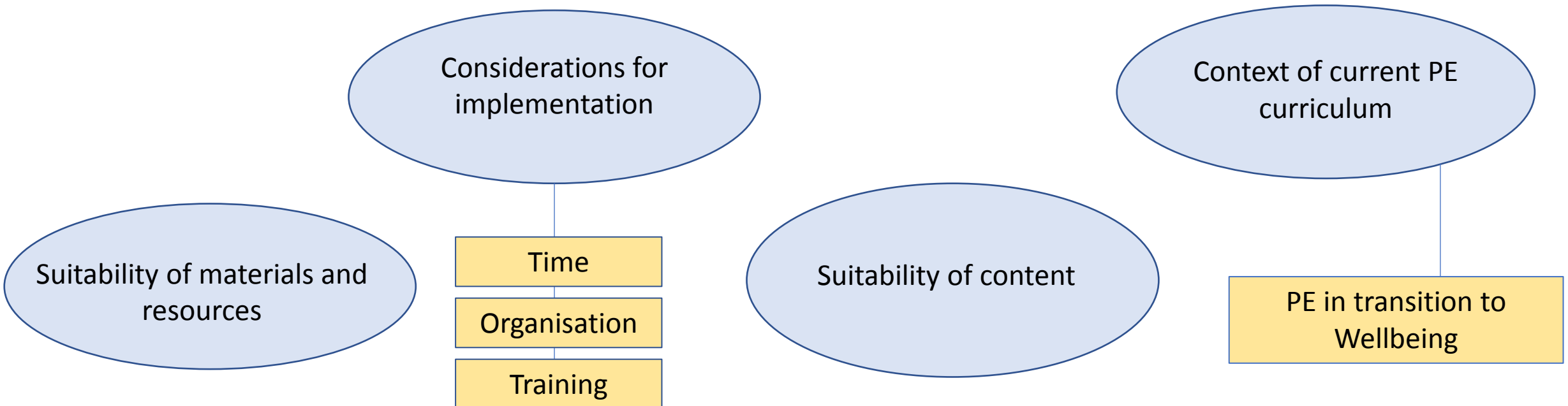


Before wide scale implementation....

Focus Groups and semi-structured interviews with pupils and teachers (2017)

Specialist PE Teachers (N = 15) from 9 schools after 12 weeks of implementation

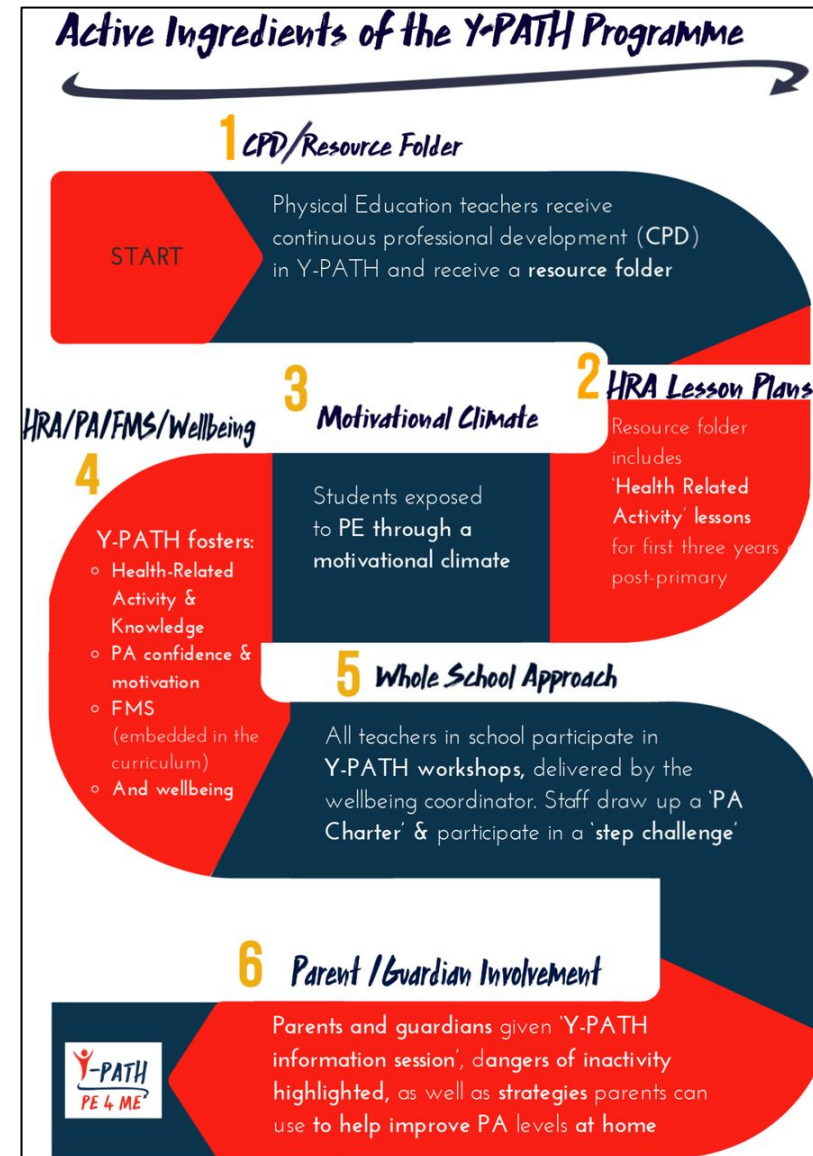
Teachers identified challenges of:





National roll-out launched October 2018 after 8 years of research and development

Two PE teachers in every post-primary school in Ireland will be offered CPD in Y-PATH programme between 2018 and 2021



(Belton et al., 2018)

Capturing teacher perspectives on implementation in (pre)school PA programmes

Learnings and Future Directions

1. Careful selection of measures (outcome and process)
2. Simplify process of data collection from teachers where possible (hard copy or online, time burden, feasibility)
3. Qualitative aspect = crucial
4. Consider how programme facilitates buy-in of all staff members (not just PE teachers or those considered “sporty”)
5. Ensure plan for disseminating messages/training to all staff if delivering programme through cascade model

References

Belton, S., O'Brien, W., McGann, J. and Issartel, J., 2019. Bright spots physical activity investments that work: Youth-Physical Activity Towards Health (Y-PATH). *Br J Sports Med*, 53(4), pp.208-212.

Campbell, M., Fitzpatrick, R., Haines, A., Kinmonth, A.L., Sandercock, P., Spiegelhalter, D. and Tyrer, P., 2000. Framework for design and evaluation of complex interventions to improve health. *Bmj*, 321(7262), pp.694-696.

McGrane, B., Belton, S., Fairclough, S.J., Powell, D. and Issartel, J., 2018. Outcomes of the Y-PATH Randomized controlled trial: can a school-based intervention improve fundamental movement skill proficiency in adolescent youth?. *Journal of Physical Activity and Health*, 15(2), pp.89-98.

Sinek, S., 2009. *Start with why: How great leaders inspire everyone to take action*. Penguin.

Sport Wales, 2016. *What is Physical Literacy?* <http://physicalliteracy.sportwales.org.uk/en/resources/>



UCC

Coláiste na hOllscoile Corcaigh, Éire
University College Cork, Ireland



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Research Team

Dr Johann Issartel¹

Dr Sarahjane Belton¹

Dr Wesley O'Brien²

Dr Jamie McGann¹

Dr Bronagh McGrane³

Dr Danielle Powell⁴

Mr Stephen Behan MSc¹

Mr Cameron Peers MSc¹

Ms Christina Duff MSc¹

Ms Holly Clarke MSc

Mr Nathan Gavigan¹

¹ School of Health and Human Performance, Dublin City University

² School of Education, University College Cork

³ School of Arts, Education and Movement, Dublin City University

⁴ Carnegie School of Sport, Leeds Beckett University

