

Institution: Canterbury Christ Church University		
Unit of Assessment: Sport, Exercise, Leisure and Tourism (24)		
Title of case study: Delivering Changes 4 Life! Increasing investment, raising physical activity levels, and delivering a long-term embedded systems change in school sport provision for the least active.		
Period when the underpinning research was undertaken: 2010 to 2019		
Details of staff conducting the underpinning research from the submitting unit:		
Names: Professor Mike Weed Dr Abby Foad Dr Suzanne Dowse Dr Ian Wellard	Role(s): Pro Vice-Chancellor, Research & Enterprise, <i>spear</i> Research Director Faculty Director of Quality, <i>spear</i> Researcher <i>spear</i> Associate Director	Period employed: 2006 - present 2007 - present 2008 - present 2004 - 2019
Period when the claimed impact occurred: 2014 to 2020		
Is this case study continued from a case study submitted in 2014? Y/ <u>N</u>		
1. Summary of the impact (indicative maximum 100 words)		
<p>Findings and recommendations from the ground-breaking 2010-2016 evaluation of Change 4 Life School Sport Clubs, the sector's first genuinely national real-world behavioural controlled trial, comprising almost 10,000 participants, have delivered the following impacts:</p> <p>(I) £13.5 million investment in school sport targeting the least active</p> <p>(II) 1.74 million less active young people reached, of whom 1.10 million young people increased their activity levels</p> <p>(III) An evidence-based systems change in the delivery of school sport for the least active, shaping guidance from government departments and agencies, as well as national policy, and defining expectations for future school sport provision for the least active.</p>		
2. Underpinning research (indicative maximum 500 words)		
<p>Despite more than 50 years of research and practice, population levels of physical activity remain stubbornly static [R1]: we still do not know how to deliver physical activity and sport in a way that will shift the curve of population behaviours [R2]. There is disagreement whether the problem is that the underlying body of theory is flawed, that implementation is poor, or that interventions are never properly tested and refined at scale in real world settings [R1].</p> <p>In this respect, the evaluation of the Change 4 Life (C4L) School Sport Clubs (SSC) programme, undertaken between 2010 and 2016 by the Centre for Sport, Physical Education & Activity Research (<i>spear</i>), was ground-breaking. It was the sector's first genuinely national real-world behavioural controlled trial incorporating post-programme follow-up, with a nationally distributed sample (9,094 children in 574 schools) and control group (489 children in 15 schools).</p> <p>C4L SSCs were designed for the least active and most vulnerable children, with evaluation activity embedded as an integral part of programme delivery. The programme was underpinned by celebratory Olympic and Paralympic themes. Previous <i>spear</i> research for the Department of Health (DH) had shown elite sport and elite role models were not effective with the least active, but that festival and celebration effects could leverage and inspire increased physical activity [R3]. The evaluation was designed to capture outcomes, processes underpinning outcomes, and implementation issues, which were addressed and amplified as the evaluation reported each year to inform programme design and re-design for the following year. Over the course of six years, incorporating five programme re-design points, the research found and then subsequently</p>		

confirmed the following [R4, R5, R6]:

OUTCOMES

- **Extensive Reach:** 354,556 children participated
- **Raised Physical Activity:** 70,911 children newly achieved CMO guidelines (av.60min/day)
- **Decreased Inactivity:** 53,183 children lifted out of low activity (<30min day)
- **Individual Development & Wellbeing:** significantly predicted increases in physical activity

PROCESSES UNDERPINNING OUTCOMES

- **Empowerment - Choice, Voice and Peer Leadership:** both physical activity and underpinning individual development and wellbeing outcomes were enhanced when: (a) young people had ownership of clubs and a voice in both how clubs were organised and what activities were undertaken; (b) leaders were perceived to be 'people like me' from the peer group, who would not traditionally be regarded as leaders. Leaders from outside the peer group, or already perceived to be 'sporty', were not effective with the least active.
- **Intervention length:** Although activity levels increased early, a full 12 weeks of participation was needed to impact on the underpinning individual development and confidence that drives and sustains increased activity (this was evidenced by both post-programme follow-up and tracing children who continued to participate in subsequent years). Those that achieved Chief Medical Officer (CMO) guideline levels after 12 weeks no longer found the activities challenging, and so needed appropriate exit routes otherwise they regressed. However, those not yet achieving CMO guidelines benefitted significantly (in terms of confidence and activity levels) from a further 12 weeks, because they still needed the 'safe space' of the clubs and were not yet ready for more challenging activity.

IMPLEMENTATION

- **Effective targeting:** There was an implementation gap between design intentions to target the least active and most vulnerable, and actual recruitment to the programme in schools in which only 23% of programme participants were found to be in this target population. Addressing this in subsequent years had a significant impact on both the number of less active young people reached and the number lifted out of low levels of activity.
- **Development of the school workforce to promote inclusion:** Due to a skills and knowledge shortage among the school workforce, many schools used programme funding to sub-contract external providers (a recurring annual cost), rather than investing in training to enable school staff to deliver (a one-off cost). This impacted negatively on the sustainability, reach and inclusivity of the programme, on opportunities for young people to adopt leadership roles, and on the intended integration of the programme with cross-curricular themes, each of which significantly improved when this was highlighted and addressed in future years.

3. References to the research (indicative maximum of six references)

- R1 Hagger, M. & Weed, M. (2019). Do interventions based on behavioural theory work in the real world? *International Journal of Behavioural Nutrition and Physical Activity*, 16(36).
- R2 Weed, M. (2016). Should we privilege sport for health? The comparative effectiveness of UK government investment in sport as a public health intervention. *International Journal of Sport Policy and Politics*, 8(4), 559-576.
- R3 Weed, M. et al: (i) (2009). A Systematic Review of the Evidence Base for Developing a Physical Activity, Sport & Health Legacy from the London 2012 Olympic & Paralympic Games. London: Department of Health; (ii) (2015). The Olympic Games and Raising Sport Participation: A systematic review of evidence and an interrogation of policy for a demonstration effect. *European Sport Management Quarterly*, 15(2); (ii) (2012). Developing a Physical Activity legacy from the London 2012 Olympic and Paralympic Games: a policy-led

systematic review. *Perspectives in Public Health*, 132(2), 75-80.

R4 *spear* (Foad, A., Weed, M., Dowse, S. & Wellard, I.) (2011, 2012, 2013, 2015, 2016) Evaluations of Change4Life School Sport Clubs. Reports to Department of Health & Youth Sport Trust.

R5 Wellard, I. & Secker, M. (2017) 'Visions' for children's health and wellbeing: exploring the complex and arbitrary processes of putting theory into practice. *Sport, Education & Society*, 22 (5). ISSN 1357-3322.

R6 Foad, A. & Secker, M. (2018) The role of evaluation in school sport policy, provision and participation. In: Piggan, J., Mansfield, L. & Weed, M. eds. *Routledge Handbook of Physical Activity Policy & Practice*. London: Routledge. <https://doi.org/10.4324/9781315672779>

R1, R2, R3(ii,iii) & R5 are published in journals with established peer-review standards: R2 & R3(ii) have been submitted to REF2. R6 underwent peer-review at both the proposal and submission stage. R3(i) & R4 comprise reports of research commissioned by competitive tender, with research designs subject to scrutiny and feedback by research analysts in DoH and the Treasury and final reports subject to a process of review, critique and feedback prior to endorsement and release. R4 was endorsed by DoH as a "robust, independent evaluation" to the House of Commons Select Committee on School Sport.

4. Details of the impact (indicative maximum 750 words)

(I) £13.5 MILLION INVESTMENT IN SCHOOL SPORT FOR THE LEAST ACTIVE

In November 2013, Jane Ellison, Minister for Public Health, published *spear's* evaluation of C4L SSCs after their third year [R4], and used the findings, which she stated "*demonstrated the value of these clubs...for those children who would normally be the least active*" to support her announcement of the continuation of the programme and a further **£8.4million** investment across 2014 to 2016 [S1].

In 2015 the Youth Sport Trust (YST) Chief Executive stated: "*This evaluation has shown not only what can be achieved through innovative approaches but also the potential impact of the C4L SSC programme if it were available to all schools*" [S2]. The Head of Health and Wellbeing at YST confirms that *spear's* evaluation '*was a pivotal piece of work that drove the development and implementation of similar programmes from 2016 to 2020*' [S3] whilst the YST Development Manager states '*we used insights of your reports to help shape what we wanted to do in the future, we were able to secure the same level of investment from the DfE [Department for Education] based on the insight you provided*' [S4]. The investment in the 2016-2020 portfolio of '*similar programmes*' totalled **£5.1million**, comprising Active Kids Paralympic Challenge (£1.2m, 2015-2016), Young Ambassador Peer Leaders (£250k, 2015-2016), Targeted Populations Leadership Interventions (£1.8m, 2016-2017), Project Ability (£300k, 2017-2018), Hub Schools (£300k, 2017-2018), Healthy Active Lifestyle Champions (£500k, 2018-2021) and Active in Mind (£750k, 2017-2021).

(II) 1.7 MILLION LESS ACTIVE YOUNG PEOPLE REACHED, OF WHOM 1.1 MILLION YOUNG PEOPLE BECAME MORE ACTIVE

The importance of the *spear* research in relation to the £12.5million investment across 2014-2020 relates not only to the value of the investment, but to its efficiency and effectiveness. The impact, therefore, was not just that the investment was made, but that it was directed at programmes that, according to the YST's Head of Health and Wellbeing, drew on '*both the principles of what worked to increase physical activity in less active children, and the impact on their health and wellbeing*' that had been established by the *spear* C4L evaluation [S3]. Without *spear's* C4L research, this investment would have been made in ineffective programmes that would have continued to cater largely to those that were already 'sporty', and the impacts below on less active young people since 2014 would not have been achieved:

- 2,830,000 young people were reached
...of whom **1,746,000 (62%) were less active** [R4,S5,S6]
...equivalent to 52% of all school-age children not achieving CMO activity guidelines [S7]

- **1,101,000 young people became more active**
...of whom 557,000 achieved CMO activity guidelines [R4,S5,S6]
...equivalent to 17% of all school-age children achieving CMO guidelines [S7]

(III) SYSTEMS CHANGE TO THE DELIVERY OF SCHOOL SPORT FOR THE LEAST ACTIVE

The collective impact of the research and the efficient and impactful investment in the resulting programme portfolio was to embed an evidence-based systems change in the delivery of school sport for the least active based on *spear's* research that will benefit young people for years to come. Specifically, practice has changed according to *spear's* findings and recommendations in the following areas:

- **Empowerment - Choice, Voice and Peer Leadership** – the Head of Health and Wellbeing at the YST emphasises that *'the key area of empowering children to establish and run their own activity club for their peers'* was established as a *'driver for success'* for subsequent programmes by *spear's* research [S3], with the YST Research and Evaluation Lead confirming *'your evaluation confirmed peer-led activity was the right way to go and gave us the evidence to back that up and make it the right approach'* [S8]. The research provided the primary evidence for Choice and Voice as two of the eight principles in Public Health England (PHE)'s guidance, *What works in schools and colleges to increase physical activity* [S9]. *spear's* recommendations for inclusive practice, including the importance of **developing the school workforce to promote inclusion**, and of finding a role for every young person, were adopted by the DfE, the Department for Digital, Culture, Media & Sport (DCMS), Sport England and the YST for all school sport programmes in 2018 [S10], and have been disseminated to 24,323 schools across England [S4]. Finally, the emphasis in *spear's* C4L research on empowering young people also *'informed the first iteration of the government's Childhood Obesity Plan'* [S3,S11,S12].
- **Intervention length** – the Research and Evaluation Lead at the YST stated: *'In Change 4 Life you highlighted that we need 12 weeks of intervention – we are holding on to that statistic and reel that statistic out on a regular basis to help develop our programmes'* [S8].
- **Effective targeting** – in August 2013, the DfE published *Evidence on Physical Education and Sport in Schools*, which emphasised the importance of targeting, citing *spear's* research showing that *'greater targeting has the potential to more than double the reach and impact of programmes'* [S14]. Effective targeting has now become a primary implementation requirement in subsequent DfE, DH and DCMS funded programmes across their delivery agencies, even featuring in the title of the £1.8million Targeted Populations Leadership Interventions programme (see impact (I) above).
- **Evaluation design** - A review by PHE of over 300 physical activity evaluations and interventions showed that *spear's* C4L evaluation was the only genuinely nationally distributed evaluation of a national programme, with a sample size three-times that of any other reviewed. It was the first to use a repeated measures panel design, a nationally distributed control group and post-programme follow-up, and the first rated Nesta Level 5 for quality [S12]. The YST Head of Health and Wellbeing commended *'the drive for continual improvement with the introduction of control elements, recommendations for programme managers...and for policy makers in DH and PHE'*, and confirmed that consequently *'These reports were the catalyst for demonstrating the role of schools in addressing inactivity in the national policy framework "Everybody Active Everyday", and the refining of the CMOs guidelines for physical activity for 5-18 year olds in 2016'* [S3]. Expectations for controlled designs were subsequently included in both the Youth Sport Trust [S14] and Sport England [S15] Evaluation Frameworks, and in Sport England's flagship Get Healthy Get Active Interventions [S16].

5. Sources to corroborate the impact (indicative maximum of 10 references)

S1) Speech by Jane Ellison MP, Minister for Public Health, ukactive Summit (7/11/13)

- http://www.ukactive.com/downloads/managed/Jane_Ellison_MP_Parliamentary_Under-Secretary_of_State_for_Public_Health_ukactive_Summit.pdf
- S2) YST press release (19/10/15) <https://www.youthsporttrust.org/news/change4life-primary-school-sport-clubs-reach-over-quarter-million-young-people>
- S3) Testimonial from Head of Health and Wellbeing, YST (16/12/2020)
- S4) Testimonial from Development Manager, YST (14/12/2018)
- S5) *spear* (Foad, A. et al) – evaluations of: C4L SSC [2014-16] (2015, 2016); Active Kids Paralympic Challenge (2016); Young Ambassadors Peer Leaders (2016); Targeted Populations Leadership Interventions (2017); Project Ability (2018); Hub Schools (2018); Healthy Active Lifestyle Champions (2019). Reports to: DoH, DfE, DCMS, Sport England & YST. <https://www.canterbury.ac.uk/science-engineering-and-social-sciences/spear/research-projects/research-projects.aspx>
- S6) Leeds Beckett University (2019) Active in Mind Impact Summary. https://www.youthsporttrust.org/system/files/YST-AIM-A4-Infographic_Poster%20V004.pdf
- S7) Sport England Active Lives Young People Survey (2018/19) <https://sportengland-production-files.s3.eu-west-2.amazonaws.com/s3fs-public/2020-01/active-lives-children-survey-academic-year-18-19.pdf>
- S8) Testimonial from Research and Evaluation Lead, YST (6/12/2018)
- S9) PHE (2015) What Works in Schools and Colleges to Increase Physical Activity? https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/469703/What_works_in_schools_and_colleges_to_increas_physical_activity.pdf
- S10) DfE / DCMS / Sport England / YST (2018) Inclusion Schools: Making a real difference for young people (available on request)
- S11) Your School Games – Change 4 Life (2017) Childhood Obesity Plan. <https://www.yourschoolgames.com/how-it-works/change4life/#childhoodobesityplan>
- S12) PHE / ukactive / National Centre for Sport & Exercise Medicine (2017) Moving at scale – Promising practice and practical guidance on evaluation of physical activity programmes in the UK <http://research.ukactive.com/001-moving-scale/Moving-at-scale---Pr.pdf>
- S13) DfE (August 2013) Evidence on physical education and sport in schools. <https://www.gov.uk/government/publications/evidence-on-physical-education-and-sport-in-schools>
- S14) Youth Sport Trust (2014) Evaluations Guidance.
- S15) Sport England Evaluation Framework (2017) Levels of Measurement. <https://evaluationframework.sportengland.org/media/1246/project-measurement-examples.pdf>
- S16) Sport England (2015) Get Active Get Healthy Prospectus. <https://sportengland-production-files.s3.eu-west-2.amazonaws.com/s3fs-public/get-healthy-get-active-prospectusfinal3.pdf>