

Curriculum Vitae and List of Publications

GENERAL

1. **Name:** Shirley Gray
2. **School:** School of Education
3. **College:** College of Arts, Humanities and Social Science
4. **Date of first appointment:** August 2000: Appointed as Lecturer in Physical Education at the University of Edinburgh
5. **Date of promotion:** N/A

6. Career Since Graduation

1995-1996	Teacher of PE at Linlithgow Academy, West Lothian.
1996-1997	Teacher of PE at Liberton High School, Edinburgh.
1997-2000	Part-Time Teaching Instructor/Part-Time Hockey Development Officer, University of Edinburgh/Scottish Hockey Union.
2000-2001	Teacher of PE at Linlithgow Academy, West Lothian (0.4 FTE)/Lecturer in Physical Education, University of Edinburgh (0.6 FTE)
2001-to date	Lecturer of Physical Education, University of Edinburgh
2011-2012	Affiliate Member, University of McGill
2012-2013	Maternity leave.

7. University Education

2004-2008	Ph.D, Teaching Team Invasion Games in Scottish Secondary Schools: rhetoric, reality and implications for policy. The University of Edinburgh.
1998-2002	MSc. Coaching Studies, Understanding Decision-Making in Team Invasion Games. The University of Edinburgh.
1991-1995	BEd Hons Physical Education (1 st Class), Heriot-Watt University.

TEACHING

8. Current Teaching Responsibilities

MA Physical Education

Year 1

- Motor Skill Acquisition – An Introduction to Information Processing and Dynamical Systems Theories of Skill Acquisition.

Year 2

- Professional Practice and Enquiry (course organiser).

Year 3

- Physical Education 3B (component leader): Motor Skill Acquisition – Dynamical Systems, Direct Perception and Constraints. Year 4
- Physical Education 4B: Motor Skill Acquisition (component leader): Non-Linear Pedagogy.

Year 4

Physical Education 4C Research (course organiser).

Postgraduate Diploma in (Physical) Education Programme

- Physical Education Research

MSc Strength and Conditioning

- Coaching Children – Non-Linear Pedagogy
- Theories of Motor Learning

MSc Sport and Recreation Management

- Theories of Motor Learning

9. Postgraduate Supervision

- 2016 Vince Coleman: A male perspective and a Foucaultian analysis on health and the body in physical education.
- 2016 Laura Tirman: A systematic review of the effectiveness of universal school-based psychological, social, and emotional well-being interventions in economically deprived schools, Master of Public Health Dissertation, Centre for Population Health Sciences.
- 2011 Paul Wilkinson: Time motion analysis of different positions in an international rugby tournament, MSc Strength and Conditioning, Moray House School of Education, University of Edinburgh.
- 2011 Phil Greenwood: Time motion analysis in 2020 cricket, MSc Strength and Conditioning, Moray House School of Education University of Edinburgh.
- 2011 Rikki Bowls. Understanding girls' experiences in physical education, McGill University (co-supervisor), Montreal, Quebec, Canada.

RESEARCH

10. Major research interests, output and impact

Major research interests 2000-2008

- Teaching and learning in the context of team invasion games.

Output and impact

- Completion of MSc Coaching Studies
- Completion of PhD
- Publication of three articles in leading journals for Physical Education
- Co-author/Co-editor of one book
- One book chapter
- Award for the most downloaded article of 2010 by Sage Publisher
- Presentations at two international conferences
- Invited by the University of Otago in New Zealand and the National Institute of Education in Singapore in 2010 to present findings from PhD thesis

Major research interests 2008-2016

- Policy and curriculum. Including studies in:
 - The construction of policy text for PE within the Curriculum for Excellence
 - How teachers understand and enact new policy text
 - Teacher learning during the implementation of the new curriculum
 - Pupil experience in PE within the new Health and Wellbeing Curriculum

Output and impact

- Four articles in international peer reviewed journals, one of which was short-listed by Physical Education and Sport Pedagogy for best article 2015.
- Presentations at eight international conferences

- Publication of two conference proceedings
- Used by SERA to inform Education Scotland and Scottish Government of the nature and extent of current and past research in advance of the OECD review of CfE.
- Invitation by the editors of the book: Scottish Education: Post-devolution (Bryce and Humes) to write a chapter for the forthcoming edition.
- Pupil motivation and engagement in PE, Health and Wellbeing. Including studies in:
 - Pupil participation, wellbeing and self-determination in PE
 - Outdoor learning, problem-based learning and health and wellbeing
 - Healthism, pedagogy and curriculum in PE

Output and impact

- Five articles in international peer reviewed journals, one of which was a Taylor and Francis spotlight. <http://explore.tandfonline.com/content/ed/spotlight-journals-2016/may> and another was the
- Two book chapters
- Invitations by Education Scotland and the Scottish Association of Teachers of Physical Education to deliver research presentations
- Sponsorship by SERA to present at the Icelandic Educational Research Association Conference

In addition to the above projects, I have also been invited to work collaboratively with other academics from across the University of Edinburgh as well as UK and International academics. Most of these projects have resulted in peer reviewed publications in international journals. The projects include:

2008-2009	The development of an assessment tool for measuring decision-making in team games (Dr. Button, Otago University and Dr. Chow, National Institute of Education (NIE), Singapore).
2009-2011	Analysing cohesive behaviours in professional soccer performance (Dr. Shafizadeh, Sheffield Hallam University).
2011-2102	Analysing 'losing possession' behaviours in professional soccer performance (Dr. Shafizadeh, Sheffield Hallam University and Professor McMorris, Chichester University).
2013-2016	Game-centred teaching and professional learning (Dr. Drew Miller from the University of Newcastle , Australia).
2013-2016	Investigating the concept of healthism in PE, particularly in relation to the new PE curriculum in Scotland where PE is now situated within the domain of Health and Wellbeing. This research is also tied in with a project that examines the ways in which Scottish and Canadian PE students understand the term health and the implications for professional practice (Sarah MacIsaac, University of Edinburgh and Dr. William Harvey, McGill University, Canada).
On-going	Establishing a participatory research partnership focused on improving the promotion of mental, social and emotional wellbeing in Scottish secondary schools (Drs. McQuillan, Niven and Martin, University of Edinburgh).
On-going	Social and emotional learning in physical education: an international comparison (Dr. Paul Wright, Northern Illinois University, USA).
On-Going	The role of PE, Health and Wellbeing in schools located in areas of multiple deprivation in Scotland and Australia (Prof. Dawn Penney, Monash University, Australia and Dr. Mike Jess, University of Edinburgh).

11. Research Grants

2009-2010	£2200 Carnegie Trust Small Grant. Project title: Understanding decision-making in 2 versus 1 basketball games. Principal Investigator: lead researcher in terms of concept and design.
2010-2011	£1500 Moray House School of Education Seedcorn funds. Project title: Policy construction in physical education: a Scottish narrative. Principal Investigator: lead researcher in terms of concept, design and data collection.
2011-2012	\$100,000.00 (£55,000) over two-years from the Department of Education, Leisure and Sport of Quebec. Project title: Strengthening the role of the teacher in physical education and health education (PSE) - promoting Competency 3 (Adopts a Healthy, Active Lifestyle). Co-Investigator: major contribution to funding application and collaborations with key stakeholders. Significant contribution to research methodology.
2011-2012	£1566 Moray House School of Education Seedcorn funds. Project title: Meeting the challenges of implementing a new PE curriculum – understanding ‘on-the-job’ teacher learning. Principal Investigator: lead researcher in terms of concept, design and data collection.
2014-2015	£1500 College of Humanities & Social Science Knowledge Exchange and Impact Small Grant. Project title: To establish a participatory research partnership focused on improving the promotion of mental, social and emotional wellbeing in Scottish secondary schools. Principal Investigator: lead writer in the application for funding, organised the KE event, invitations and budget.
2014-2015	£1500 Moray House School of Education Seedcorn funds. Project title: A scoping review of the literature on students’ emotional, social and mental wellbeing in the school physical activity/PE contexts. Principal Investigator: lead researcher in terms of concept, design and data collection.
2015-2016	£1500 Moray House School of Education Seedcorn funds. Project title: Enhancing student motivation in physical education: understanding current practice in the Scottish compulsory physical education context. Principal Investigator: lead researcher in terms of concept, design and data collection.
2016-2017	£5810 ESRC Knowledge Exchange Placement. Working with the City of Edinburgh Council to develop teachers engagement with research and the research process. Principal Investigator: lead researcher in terms of concept, design and data collection.
On-going	An application to the Nuffield Foundation for funds to investigate primary school physical education in socially deprived areas. Principal Investigator: co-writing the application for funding with Professor Dawn Penney from Monash University and Dr. Mike Jess, University of Edinburgh.

12. Research Supervision Experience

Current PhD Supervision: Co-Supervisor

2012 to date Sarah MacIsaac (Bicentennial Fellowship): ‘Healthism discourse in the physical education context’.

Completed PhD Students: Principal Supervisor

- 2015 Edward Hall (internal funding): 'Understanding the context and practice of an elite women's rugby coach over the duration of one season'.
Completed PhD Students: Second Supervisor
- 2011 Shaun Phillips (Funded by a College Postgraduate Research Studentship): 'The influence of carbohydrate supplementation on endurance capacity, sprint performance, and physiological responses to adolescent team games players to prolonged, high-intensity intermittent exercise.'
- 2011 Danielle Bryant (ESRC funded): 'Teacher stress, learned optimism and coping strategies'.

ACADEMIC LEADERSHIP AND MANAGEMENT

13. Academic leadership and management experience

- 2004-2006 Physical Education Curriculum 1 and 2 Course Organiser (BEd PE).
2006-2010 BEd Physical Education Year 1 and year 2 coordinator.
2006 – 2010 Physical Education Perspectives 1 and 2 Course Organiser (BEd PE).
2007-2011 BEd PE entrance interviews coordinator. This involved: recruiting and managing students, academic staff and in-service teachers from local secondary schools.
- 2013 to date Physical Education Research 2 Course Organiser (BEd PE).
2013 to date Physical Education 4c Investigation Course Organiser (BEd PE).
2013 to date Years 3 and 4 Motor Skill Acquisition course leader (BEd PE).
2014 to 2015 Co-convenor of the Gender Equality Charter Mark (GEM) self-assessment team for the Institute for Sport, Physical Education and Health Sciences. In this role I had the shared responsibility to deliver a number of planned outcomes including: family friendly meeting times, a regular agenda item at Institute meetings and the development of network for women in academia and sport. At School level, we now have an Equality and Diversity 'tab' on the Intranet page, a promotions advisory group and a School Equity and Diversity group.
- 2013 to date Leader of the Physical Education Research Forum. We are a group of 10 researchers from the University of Edinburgh who meet monthly to discuss ways in which we can support each other to ensure that we engage in high quality research and knowledge exchange activities.
- 2014 to date Co-leader of the School Pedagogy, Curriculum and Learning Cluster. In this position, I have the shared responsibility to create a space for academics across all Institutes to nurture and develop their research.
- 2016 Staff recruitment (teaching fellows): writing PRAF's, short-listing and interviews.
2016 Lead role in organising staff professional development workshops for teaching and learning on the MAPE Programme.

14. Membership of committees

- 2013-2015 The Institute for Sport, Physical Education and Health Sciences Athena Swan Self-Assessment Team
- 2009 to date The School of Education Ethics Committee.
2013 to date The Physical Education Research Forum
2013 to date The Institute for Sport, Physical Education and Health Sciences Research Committee
2016 to date The School of Education Equity and Diversity Group
2016 to date The School Athena Swan Self-Assessment Team

2016 to date The School of Education Research and Knowledge Exchange committee.

15. Appointment as external examiner

2015 to date External examiner for the University of the West of Scotland. PGDE Primary Physical Education.

16. Editorship

2010 Co-editor (and author) of a book entitled: Thorburn, M and Gray S. (2010). Physical Education - Picking up the baton. Policy and Practice in Education. No 27, Edinburgh: Dunedin Academic Press.

2015 to date Editor of the Physical Education Research Digest:
<http://www.blogs.hss.ed.ac.uk/peresearch/>

17. Consultancies

2014-2015 Consultant and 'Key Expert' for the Maltese Government creating an outcomes-based primary and secondary school curriculum. The consortium partners for this project were: Outlook (a Maltese project management, marketing and social policy development company), the Institute of Education, University of London and East Coast Education Ltd. The programme that I developed now forms the foundation for PE in Secondary schools throughout Malta.
<http://www.schoolslearningoutcomes.edu.mt/en/subjects/pe--sports>

2013 Consultant in the development of the International Baccalaureate for Physical Education. <http://www.ibo.org/en/programmes/middle-years-programme/curriculum/physical-and-health-education/>

LIST OF PUBLICATIONS

1. Book chapters

Jess. M., & Gray. S., (2016). Curriculum reform and policy cohesion in Physical Education. In Ennis. C. (ed) Routledge Handbook of Physical Education Pedagogy, Routledge. pp143-156 .

Hall, E. T., Gray, S., Kelly, J., Martindale, A, & Sproule, J. (2015) A new model of the sport coaching process: comprehending the challenge of effectiveness in practice. In Davis, P. (ed.) The Psychology of Effective Coaching and Management, Nova Science Publishers, New York, pp13-34.

Gray, S. and Hall, E. T. (2014) Tactics: practice and competition. In Nash, C. (ed.) Practical Sports Coaching. Hodder Education, pp. 148-174. **Main originator.**

Gray, S. and McMorris, T. (2012). Skill in Sport. *IB Course Companion*, pp. 107-137. **Main originator.**

Gray, S., (2010). *Teaching physical education in the 21st century: pedagogical challenges*. In Thorburn, M. & Gray, S. (eds), Physical Education - Picking up the baton. Policy and Practice in Education. No 27, Edinburgh: Dunedin Academic Press, pp. 30-47. **Main originator.**

Thorburn, M. and Gray, S. (2010). *Professionalism and professional development*. In Thorburn, M. and Gray, S (eds), Physical Education - Picking up the baton. Policy and Practice in Education No. 27. Edinburgh: Dunedin Academic Press, pp. 48-67.

2. Books edited

Thorburn, M and Gray S. (2010). Physical Education - Picking up the baton. Policy and Practice in Education. No 27, Edinburgh: Dunedin Academic Press.

3. Articles published as sole author N/A

4. Joint Articles Published in International Peer-Reviewed Journals

*Campbell, D., Gray, S., Kelly, J. & MacIsaac, S. (2016). Inclusive and Exclusive Masculinities in Physical Education: a Scottish case study. Sport Education and Society. <http://dx.doi.org/10.1080/13573322.2016.1167680>

Miller, A., Eather, N., Gray, S., Sproule, J., Williams, C., Gore, J. & Lubans, D. (2016). Can continuing professional development utilizing a game-centered approach improve the quality of physical education teaching delivered by generalist primary school teachers? European Physical Education Review. <http://dx.doi.org/10.1177/1356336X16642716>

Hall, E. & Gray, S. (2016). Reflecting on reflective practice: a coach's action research narratives. Qualitative Research in Sport, Exercise and Health. doi: 10.1080/2159676X.2016.1160950

Allison, P., Gray, S., Sproule, J., Nash, C., Martindale, R. & Wang, J. (2015). Exploring contributions of project-based learning to health and wellbeing in secondary education. Improving Schools. DOI: 10.1177/1365480215599298

Miller, A., Christensen, E., Eather, N., Gray, S., Sproule, J., Keay, J. & Lubans, D. (2015). Can physical education and physical activity outcomes be developed simultaneously using a game-centered approach? European Physical Education Review, DOI: 10.1177/1356336X15594548

*Gray, S., MacIsaac, S., & Jess, M., 2015. 'Teaching 'health' in physical education in a 'healthy' way,' RETOS: Nuevas tendencias en Educacion Fisica Deportes y Recreacion, 28, 165-172. **Main originator.**

Hall, E.T., Gray, S & Sproule, J. (2015). The microstructure of coaching practice: behaviours and activities of an elite rugby union head coach during preparation and competition. Journal of Sports Sciences.

*MacLean, J., Mulholland, R., Gray, S. & Horrell, A. (2015) Enabling Curriculum Change in Scotland - PE Teacher and Policy Constructors' Perceptions compared. Physical Education and Sport Pedagogy. <http://dx.doi.org/10.1080/17408989.2013.798406>. **Main originator.**

*Mitchell, F., Gray, S. & Inchely, J. (2015). This choice thing really works. Changes in experiences and engagement of adolescent girls in Physical Education classes, during a school-based physical activity programme. Physical Education and Sport Pedagogy. 20(6), p. 593-611. (Taylor and Francis Spotlight Article).

Sproule, J., Martindale, R., Wang, J., Allison, Nash, C. & Gray, S. (2013). Investigating the Experience of Outdoor and Adventurous Project Work in an Educational Setting Using a Self-Determination Framework. European Physical Education Review. 19, 3, p. 315-328.

Shafideh, M., Gray, S., & Sproule, J., (2013) The emergence of coordinative structures during offensive movement for goal-scoring in soccer. *International Journal of Performance Analysis in Sport*, 13: 612-623.

*Johnson, S., Gray, S. & Horrell, A (2013). I want to look like that: healthism, the ideal body and physical education in a Scottish secondary school. *Discourse: Studies in the Cultural Politics of Education*. 34 (3), 457-473

*Gray, S., MacLean, J. & Mulholland, R. (2012). Physical education within the Scottish context: A matter of policy. *European Physical Education Review*. 18, 258-272. **Main originator.**

Shafizadeh, M., Gray, S., Sproule, J. & McMorris, T. (2012). An exploratory analysis of losing possession in professional soccer. *International Journal of Performance Analysis in Sport*, Volume 12, Number 1, April 2012 , p. 14-23.

*Gray, S., Mulholland, R. & MacLean, J. (2012) The ebb and flow of curriculum construction in physical education: a Scottish narrative. *The Curriculum Journal*. 23(1), 59-78. **Main originator.**

Horrell, A., Sproule, J. & Gray, S., (2011). Health and wellbeing: a policy context for physical education in Scotland. *Sport, Education and Society*. 17(2) 163-180

*Gray, S. & Sproule, J. (2011). Developing Pupils' Performance in Team Invasion Games: a comparative study within a Scottish context. *Physical Education and Sport Pedagogy*, 16 (1), 15-32. **Main originator.**

Sproule, J., Ollis, S., Gray, S., Thorburn, M., Allison, P. & Horton, P. (2011). Promoting perseverance and challenge in physical education: the missing ingredient for improved games teaching. *Sport, Education and Society*. 16(5):665-684.

*Gray, S., Sproule, J. & Morgan, K. (2009). Teaching Team Invasion Games and Motivational Climate. *European Physical Education Review*, Vol. 15(1), 1-23. **Main originator.** (Sage most downloaded article)

*Gray, S., Sproule, J. & Wang, J. (2008). Pupils' perceptions of and experiences, in team invasion games: A case study of a Scottish secondary school and its three feeder primary schools. *European Physical Education Review*, Vol. 14(2), 179-201. **Main originator.**

5. Book Reviews

Gray, S. (2013) *Foundations of Sport Coaching*. *Sports Coaching Review*.

6. Articles and books in press

Gray, S., Mitchell, F., & Wang, C.K.J (in press). *Transformative Teaching and Learning in Physical Education*. Routledge. **Main originator.**

Gray, S., Morgan, K, & Sproule, J. (in press). *Transformative Teaching and Learning in Physical Education*. Routledge. **Main originator.**

Hall, E. T., Gray, S., Martindale, A., Kelly, J., & Sproule, J. (in press). The Personal, Social and Contextual Model of the Coaching Process. *Sports Coaching Review*.

7. Articles and books under consideration for publication

Gray, S., MacIsaac, S., & Harvey, W. (under review). Health, the body and the physical education curriculum – perspectives of Canadian and Scottish students of physical education. *Comparative Education*. **Main originator**.

Gray, S., Mitchell, F., Wang, C.K.J., & Robertson, A. F. (under review). Understanding students' experiences in a PE, health and wellbeing context: a self-determination theory perspective. *Educational Psychology*. **Main originator**.

8. Other outputs

Conference presentations

Gray, S. & Treacy, J. (2016). Understanding disengaged pupils' experiences in physical education (PE): an appreciative inquiry approach. Paper presented at the Icelandic Educational Research Association (FUM) conference, Reykjavik 12th - 13th May 2016.

Gray, S. & Mitchell, F. (2015) Understanding student experience within a Scottish physical education (Health and Wellbeing) curriculum: a self-determination theory perspective. Paper presented at the AISEP International Conference, Madrid 8th-11th July 2015.

Gray, S & Mitchell (2014) Promoting health and wellbeing in the Scottish physical education context. The French Society for Scottish Studies, Bordeaux, 9-11th October.

MacLean, J., Mulholland, R., Gray, S. & Horrell, A (2013) The WEI Conference USA –Physical Education Teachers Perceptions of the factors that influence Curriculum Change, Orlando, March 20-22

Mulholland, R., MacLean, J., Horrell, A., & Gray, S., (2013) 'Healthy Expectations! - Physical Education Teachers' Perceptions of Curriculum Change within Scotland', ECER, Istanbul, 10-13 September.

MacLean, J., Mulholland, R., Gray, S., Horrell, A (2012). Physical Education Teachers Perceptions of Curriculum Change: Part 1. ICERI Conference (2011)Madrid.

Mulholland, R., MacLean, J., Gray, S., and Horrell, A., (2012). Physical Education Teachers' Perceptions of Curriculum Change: Part II. ICERI Conference (2011) Madrid.

MacLean, J., Mulholland, R., Gray, S., Horrell, A (2012). A Fine Balancing Act Part (I): Physical Education in Contemporary Times. Paper presented at the conference of the Scottish Education Research Association.

Horrell, A., Gray, S. and Lennox, T. (2012) Leading curriculum development in the Scottish physical education context. Scottish Educational Research Association at the University of the West of Scotland's from 21st - 23rd November 2012.

Gray, S., Horrell, A. and Lennox, T. (2012) Professional learning and curriculum development in health and wellbeing. Scottish Educational Research Association at the University of the West of Scotland's from 21st - 23rd November 2012.

Gray, S. and Sproule, J (24th-28th May, 2010). Teaching basketball: Investigating off the ball movements. Paper presented at the ICPESS Conference, Singapore.

Horrell, A., Sproule, J. and Gray, S. (2010). 'Health and wellbeing: a policy context for physical education in Scotland' The Scottish Educational Research Association Conference 25th November – 26th November 2010.

Gray, S. (14-17 May, 2008). The effects of a TGfU approach to teaching games on motivational climate. Paper presented at the 4th Teaching Games for Understanding Conference, Vancouver, Canada.

Sproule, J., Ollis, S. and Gray, S. (14-17 May, 2008). TGfU and challenge in curricular physical education. Paper presented at the 4th Teaching Games for Understanding Conference, Vancouver, Canada.