A National Framework for Learning for Sustainability in Initial Teacher Education































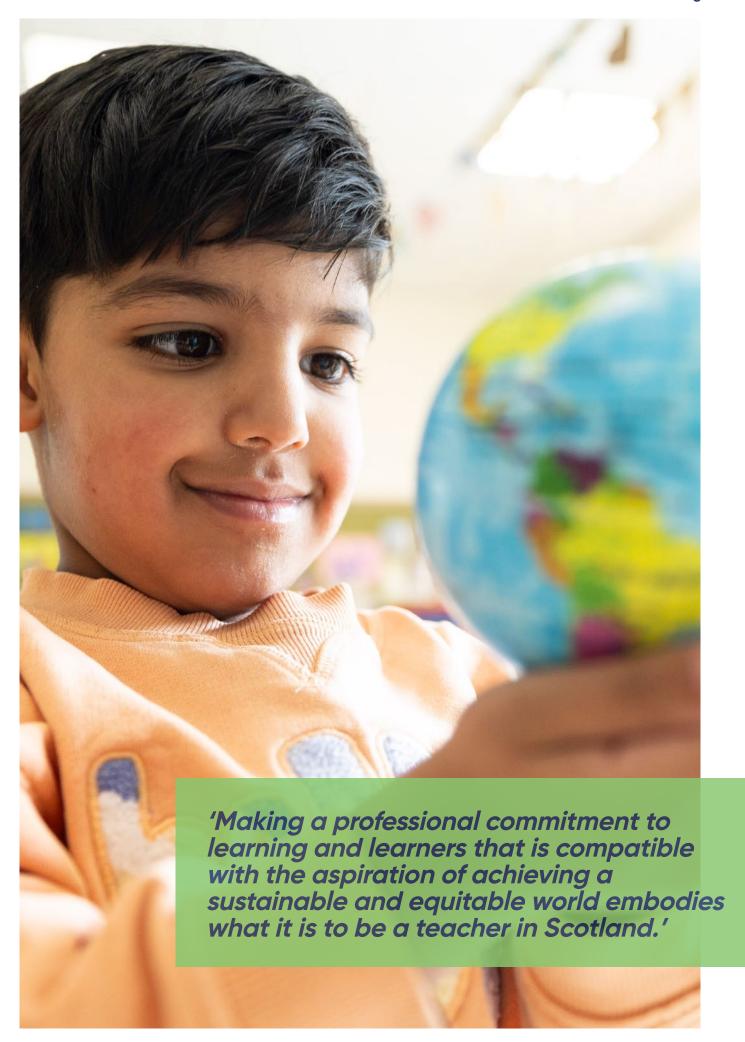
Published: April 2025

To cite this:

Rushton, E.A.C., Aldous, S., Christie, B. King, B., Leask, K. & Ramjan, C. (2025). *A National Framework for Learning for Sustainability in Initial Teacher Education*. Scottish Council of Deans of Education.

Available at: https://www.scde.ac.uk/learning-for-sustainability-in-ite

All images provided by Education Scotland.



Introduction

Since the 1980s there has been an international movement towards an ethos of learning that weaves opportunities for children and young people to enhance and develop the values, skills, knowledge, and attributes needed to thrive in a socially, economically, and ecologically uncertain world and as-yet-unknown futures.1 Such education has emerged as pivotal to the universal vision to end poverty, protect the planet and ensure that all people enjoy peace and prosperity that came out of the **United Nations 2030 Agenda for** Sustainable Development in 2015.2 Of the 17 Sustainable Development Goals (SDGs) created to bring this vision to life, SDG 4.7 in particular aims for all children and young people to acquire the knowledge and skills needed to promote sustainable development.3

Whilst discussion and contestation concerning the terminologies used to define and position this field – Environmental Education, Sustainable Development Education, Education for Sustainable Development, Global Learning, Learning for Sustainability and more - continues, there is a central thread concerning a 'deep attention to education itself – its paradigms, policies, purposes, and practices, and its adequacy for the age we find ourselves in'.4 Internationally, UNESCO uses the term 'Education for Sustainable Development', defined as: 'a holistic approach to education that empowers learners of all ages with the knowledge, skills, values and agency to make informed decisions and act responsibly to protect the environment, promote just and equal economic development and societies.'5 Increasingly, there are calls from students in schools, and in further and higher education, including those in Scotland and throughout the UK, for their education to be both relevant and meaningful, responding to current and future realities of the world.⁶ It is also acknowledged globally that changes in education systems are required, with professional learning for educators throughout their careers being one of the most significant catalysts for bringing about the changes that are needed.⁷

Researchers also report many educators feeling unprepared to help children and young people develop the competencies needed to contribute effectively to making a better world and such education is not widely taken up in Initial Teacher Education globally.⁸

Understandably, whilst engaged in educational processes and immersed within educational spaces, it can be difficult to collectively step back as a profession and ask deeper questions. For example, what are the limits of the current systems we exist within? What kind of futurities do we want from educational systems, and for ourselves within them? However, asking such questions stokes the possibilities of truly transformational learning and the 'as-yet-unthought possibilities' of what a future could look like, especially one that may be indifferent to our [teachers' and learners'] 'fears and desires'. 10

Scotland has its own long history of commitment to embracing this important ethos of learning across all aspects of education. Scottish 19th-century visionary Sir Patrick Geddes spoke about the merit of engaging 'heart, hand and head' to achieve truly transformational learning, and this holistic approach encapsulates an ethos underpinning learning that is compatible with achieving a sustainable and equitable world. This type of learning concerns not only knowing, but also feeling, being and doing.¹¹

Following the UN's Decade of Education for Sustainable Development (2005-2014) the term 'Learning for Sustainability' (LfS) has been introduced across 3-18 years education in Scotland. It is viewed as an integrated holistic concept, and an approach to life and learning. 12 Learning for Sustainability is an entitlement of all pupils as part of a whole learning community approach and deeply embedded in the Professional Standards for teachers in Scotland, as set out by the General Teaching Council for Scotland: 'Making a professional commitment to learning and learners that is compatible with the aspiration of achieving a sustainable and equitable world embodies what it is to be a teacher in Scotland.' 13

Ongoing Scottish Government commitment recognises that this transformative agenda requires 'the commitment of all Scotland's people, supported throughout their

education'. The 'Target 2030' Learning for Sustainability Action Plan states that it is 'is not just for a few, it is for everyone'; inviting government, agencies, NGOs, schools, educators, children and young people to be part of the 'inspiring movement for change so every 3-18 place of education becomes a Sustainable Learning Setting by 2030'.14

Already, all ITE institutions in Scotland have recognised their important role in questioning and collaborating with student teachers to imagine and develop approaches to weaving LfS throughout their practice – and this document has been co-created by, with and for members of the ITE community in Scotland. While it is celebrated that each institution will develop its own place-based response to meeting the needs of Scotland's diverse learning communities, this presents an important opportunity to embrace a shared vision for the future of LfS across Scottish ITE.





Learning for Sustainability (LfS) is understood as, 'a cross-curricular approach which enables children and young people, educators, learning settings and their wider community to build a socially-just, sustainable and equitable society; and as an effective whole-setting approach which weaves together global citizenship, sustainable development and outdoor learning to create coherent, rewarding and transformative learning experiences'. ¹⁵

Given this complex, interconnected and ongoing challenge, it is important to view this framework as a contribution which builds upon strong foundations and is oriented to the future. We encourage you to engage with the framework as a dynamic conversation, a 'living contribution', which seeks to clarify key concepts and ideas, prompt and encourage critical questioning of individual and collective practices and support iterative reflection and action.

As such, the framework is structured around the LfS 'Target 2030' concept of *Sustainable Learning Settings*, which integrates LfS across all aspects of the context for learning through a focus on the four 'Cs' of Curriculum, Culture, Community and Campus.¹⁶

Student teachers are already expected to demonstrate LfS in their practice to achieve the GTCS Standard for full Provisional Registration¹⁷ and more broadly, ITE has an important role in realising the vision that every place of education becomes a Sustainable Learning Setting by 2030. Therefore, we have included 'touchstone questions' as part of each of the four 'Cs' which support reflection and enable change. We have drawn inspiration from the incorporation of 'touchstones' in Wild Pedagogies, which are understood as 'points of departure and places to return'. 18 Our touchstone questions are intended as flexible, enquiry-focused questions which can be used within and across institutions to frame and respond to LfS in a critical, caring, collective and iterative ways.

This framework has been developed through collaborative partnership, led by Prof Lizzie Rushton (University of Stirling; Scottish Council of Deans of Education), Betsy King and Kirsten Leask (Learning for Sustainability Scotland), Dr Claire Ramjan (University of Glasgow), Suzy Aldous (General Teaching Council Scotland) and Dr Beth Christie (University of Edinburgh; Learning for Sustainability Scotland). During 2023-2024, this has involved phases of discussion, reflection and consultation, drawing on the expertise and perspectives of teacher educators, teachers, school mentors, young people. This work has been supported by the Scottish Council of Deans of Education, Education Scotland, The General Teaching Council Scotland, Learning for Sustainability Scotland and all eleven Scottish Higher Education Institutions which provide ITE.



Curriculum

Introduction

As part of Sustainable Learning Settings, 'Curriculum' includes learning, teaching, assessment and pedagogy, ensuring that teachers create LfS learning experiences which are inspirational, relevant and impactful.¹⁹ We understand curriculum and curriculum making as multi-layered social practices, which are made by teachers and

other groups, including young people, across multiple sites or spaces of activity.²⁰ Therefore, LfS curriculum making occurs across all the four Cs and should be woven across the curriculum, rather than an additional or optional dimension. At the core of LfS is enabling people to develop a heartfelt appreciation of the world,²¹ which leads to flourishing for all.

The context of ITE

Teachers are central to LfS curriculum making and we recognise the vital role ITE has in enabling beginning teachers to become curriculum makers who are able to identify, move between and create spaces of agency.²² From the outset of their professional lives, beginning teachers should be supported to develop curriculum expertise, exploring the curriculum as it currently exists and being able to collaboratively envisage its future. Beginning teachers should have opportunities to develop the knowledge, understanding

and skills necessary to enact LfS which is rooted in ideas of justice. An essential facet is to enable beginning teachers to connect their complex experiences of LfS across university-based learning and school placements. We acknowledge the importance of providing beginning teachers with opportunities to engage with care in interdisciplinary curriculum making, and to support them to develop professional criticality and creativity in relation to LfS.



- In what ways is LfS integral to the ITE curriculum?
 - What practices are visible and invisible?
 - How could these practices be strengthened and further oriented towards justice in the future?
 - How can we integrate opportunities across curriculum, pedagogy and assessment for students to demonstrate their progress towards LfS in the standards for professional registration?
- What opportunities are there in ITE programmes for curriculum making in the context of LfS?
 - How are beginning teachers supported to critically engage with LfS, embracing complexity and creativity?
 - What connections to LfS can beginning teachers make across their experiences of the ITE curriculum?
 - What support is there for beginning teachers to attend to the varied emotions in LfS including approaches which engage the 'Head, Heart and Hands' approach²³ and emotionally-responsive pedagogies?²⁴

- How do beginning teachers and teacher educators describe and understand LfS?
 - What language do they use?
 - How might this change over time?
- What does it mean to be a beginning teacher of LfS?
 - How might this evolve throughout school placements, the probationary period and beyond?
 - What opportunities do beginning teachers have to connect LfS with realising an ethics of care and the values for teachers in the Professional Standards for Scotland?
- What opportunities do beginning teachers have to identify, move between and create spaces of agency in the context of LfS and curriculum making?
- How equipped are beginning teachers, teacher educators and the wider ITE community to engage with, consume and be producers of LfS research?

...teachers should be supported to develop curriculum expertise, exploring the curriculum as it currently exists and being able to collaboratively envisage its future.

Cultures

Introduction

As part of Sustainable Learner Settings, 'Culture' includes; learner voice, The United Nations Convention on the Rights of the Child (UNCRC), ethos, and relationships. It is about how staff and children and young people relate to each other. Valuing the diversity and complexity of culture that is vital in the context of LfS, we acknowledge this by using the plural cultures in the title of this theme. Cultures are complex and challenging to define, however, at the heart of culture are relationships and leadership. The relationships

between and among children and young people and staff are vital in creating and sustaining the culture of an institution. The values and ethos of an organisation are instrumental to the cultures that are demonstrated therein. Leadership is essential to ensure the culture, professional norms and expectations around LfS are established and nurtured. By embracing a social justice approach and embodying the UNCRC, institutions demonstrate their commitment to LfS.

The context of ITE

In preparing student teachers to embrace and enact LfS in their own teaching and learning practices, ITE institutions can support teachers in noticing and contributing to the cultural dimensions of their teaching life. ITE Institutions have their own unique cultures, including linguistic and place-based cultures, which are important to recognise and celebrate, but also to challenge. These are

embedded within the connections to their wider institutions and to the communities within which they are situated. These wider ecosystems contribute to the cultures present and visible within institutions, supporting student teachers to navigate these will support the embedding of the diverse cultures of LfS in their emerging teacher identities.



Word cloud generated during LfS in ITE workshops held as part of the co-creation of the framework.

- To what extent does LfS underpin the culture of our institutions?
 - What cultures are visible/invisible?
 - What opportunities are there to explore the cultures of our institutions? Do these currently include ideas of rights-based approaches?
- What is valued within our institutions?
 - How is this recognised, including through participation in international frameworks?²⁵
 - How do we represent the values of LfS within our institutions?
 - How is the leadership of LfS understood, enacted and valued within our institutions?

- How do our institutional policies and cultures influence each other?
 - What policies support LfS and which inhibit LfS within our institutions?
 - How is policy development enacted within the culture of our institutions?
- How might teacher educators partner with school-based mentors to enhance LfS through school placements?
- Who are our children and young people?
 - What do we know about/how do we celebrate their diverse cultural influences?
 - How do we support them to embrace and learn about the cultures present in our institutions and in their teaching placement communities?



Communities

Introduction

As part of Sustainable Learning Settings, 'Community' includes place, partnerships, families, local action.²⁶ The value and richness of LfS is founded on diverse educational communities and we acknowledge this by foregrounding this pluralist approach in the title of this theme, Communities. We recognise the following dimensions of Communities:

Rights-based, adopted into Scots Law in 2024, The UN Convention on the Rights of the Child states that children should have the right to be heard and have their opinion considered (Article 12).²⁷

- Intersectional, bringing together varied individual, group and community identities, with distinct dimensions of discrimination and privilege.²⁸
- Intergenerational and relational, where knowledge, competencies and attitudes are shared between generations and across communities.²⁹
- Place-based, collective and reciprocal, where human and more-than-human communities are entangled through kinship, which challenges ideas of human exceptionalism.³⁰

The context of ITE

Initial Teacher Education Communities have school-university partnerships at the centre which collectively and collaboratively prepare and support teachers to enact LfS at the outset of their professional lives. ITE Communities are place-responsive and are shaped over time by a range of actors and groups at different scales, including local and national governmental and nongovernmental organisations. Intergenerational communities (including beginning teachers, mentors, young people, parents) are a fundamental part of ITE. Given the spatial, temporal and moral complexities of LfS, ITE communities should embrace varied groups and spaces for learning and dialogue.³¹



- How do beginning teachers and teacher educators describe, understand and enact communities of LfS?
 - What language do they use?
 - Which communities are visible, invisible and valued?
 - How are ideas of difference, power and rights understood and experienced?
 - What opportunities are there to explore and enact ideas of reciprocity and kinship?
 - How might ideas of communities change over time and in different places?

- In what ways are communities reflected in ITE pedagogies?
 - How do local, national and international partnerships and initiatives shape LfS?
 - In what ways is LfS understood and enacted as responsive to place?
 - What opportunities do beginning teachers have to engage in LfS communities through school placements?
 - In what ways is intergenerational learning integral to ITE?
 - What opportunities are there to engage and learn with local, national and international communities?



Campus

Introduction

As part of Sustainable Learner Settings, 'Campus' includes buildings, grounds, transport, energy and water use. This is intentionally a wholesetting approach that builds on the physical environment and resources, as well as the buildings and grounds of our educational spaces. Noting that these are intrinsically linked to our learning communities and to the cultures of our institutions, 'Campus' represents much more than just the physical spaces available to children and young people. By using a range of pedagogical settings, educators can

evoke students' emotions, interests and curiosity, extending their ability to make-meaning in local places.³² Engaging in place-responsive pedagogies can enable children and young people to notice and become more connected to the more-than-human world around them.³³ Through hands-on activities, such as school gardens, children and young people can develop their understanding of biodiversity and ecological systems and exercise their rights in relation to environmental and sustainability concerns.³⁴

The context of ITE

Beginning teachers will experience both university and school campus settings during their time in Initial Teacher Education. The affordances of a wide range of different learning places and spaces can be drawn upon to develop a range of skills that beginning teachers can take into their future careers. Sustainability may be identifiable in the buildings and grounds, as well as in our programmes and staff attitudes and values. There is an opportunity to support beginning teachers to notice and respond to

these, integrating authentic and achievable sustainable practices into their teaching. Outdoor learning continues to be considered curriculum enhancing by teachers, however teacher confidence in taking learning outdoor varies considerably.³⁵ By using the places and spaces of our ITE campus and local community spaces, beginning teachers can be supported to develop skills, confidence and agency in outdoor learning which can extend throughout their careers.³⁶



- How does our campus make sustainability visible?
 - What sustainable choices are possible?
 - What sustainable practices are visible?
 - What opportunities for future change can be identified?
 - How can change be advocated for/ enacted on our campus?
- How does our campus provide opportunities for outdoor learning?
 - How does outdoor learning enable greater understanding of and improvement in human-environment relations?

- How can teacher educators prepare students to identify opportunities for LfS during school placements, including school campus-based outdoor learning?
- How do our campus settings evoke students' emotions, interests and curiosity?
 - How do our campus settings support students' noticing and connection with the more-than-human world?
 - How do our campus settings support rights-based approaches to LfS?



Orientations towards action

Introduction

The central aim of this framework is to support ongoing and reflective collaboration and action in the context of LfS in ITE. In moving through the framework of reflective questions we recognise that there are important concepts and ideas which weave these different dimensions of curriculum, cultures, communities and campus together, including: care, complexity, connectivity, creativity and criticality. These concepts might provide further sources of

reflection to frame action in your settings and context. Whilst we have used footnotes to indicate some of the theories and ideas which have informed the creation of this framework (for example, social justice, curriculum making, place-responsive pedagogies, teacher agency) we encourage you to continue to engage with diversity of ideas and thinking which underpin current and future action.

The context of ITE

Given that LfS is an entitlement for all children and young people and the responsibility of every teacher, and in the wider context of social and environmental crises which continue to shape our communities and our world, we urgently need to support continued action. Therefore, this final set of questions is intended to support the identification of individual and collective actions to enhance LfS in ITE.



- How do we ensure that our work guided by this framework is responsive and sustainable?
 - What actions can we identify as individuals and communities?
 - What support do we need to realise these actions?
- What are our next steps in this work as part of the ITE community and how might this evolve over time?
- What might our practice look like in one, three and five years?

- How will actions we take be reflected in our programmes, learning environments, professional learning opportunities and institutional processes?
- How will we continue to nurture and support the community of practice that is LfS in ITE? What role might beginning teachers have in the leadership of this work?
- How will we capture our ongoing learning and share good practice?



References

- 1 Evans, N., Inwood, H. J., Christie, B., & Newman, E. (2023). Exploring conceptions of sustainability education in initial teacher education: Perspectives from Australia, Canada and Scotland. *Journal of Environmental Education*, 54(6), 371–385. https://doi.org/10.1080/00958964.2023.2255548
- 2 https://sdas.un.org/2030agenda
- **3** UNESCO (2016) Education for people and planet: creating sustainable futures for all, Global education monitoring report https://www.unesco.org/gem-report/en/education-people-and-planet
- 4 Stephen Sterling (2024) Key Ideas https://sustainableeducation.co.uk/key-ideas/
- 5 https://www.unesco.org/en/sustainable-development/education/need-know
- 6 https://www.gov.scot/publications/learning-sustainability-young-people-practitioner-perspectives/pages/6/
 Dunlop, L., Rushton, E. A., Atkinson, L., Ayre, J., Bullivant, A., Essex, J., ... & Wood, L. (2022).
 Teacher and youth priorities for education for environmental sustainability: A co-created manifesto. British Educational Research Journal, 48(5), 952-973. https://doi.org/10.1002/berj.3803
- **7** UNESCO ESD for Sustainable Development: A Roadmap https://unesdoc.unesco.org/ark:/48223/pf0000374802; Rushton, E. (2025). Education for Environmental Sustainability. An Integrated Approach to Teacher Education. Bloomsbury Academic. Available online.
- **8** Evans, N., Inwood, H. J., Christie, B., & Newman, E. (2023). Exploring conceptions of sustainability education in initial teacher education: Perspectives from Australia, Canada and Scotland. *Journal of Environmental Education, 54*(6), 371–385. https://doi.org/10.1080/00958964.2023.2 255548; European Commission/EACA/ *Eurydice Learning for Sustainability in Europe: Building Competences and Supporting Teachers and Schools* (2024) Eurydice Report, Luxembourg, Publications Office of the European Union
- **9** Stein, S., & de Oliveira Andreotti, V. (2017). Higher Education and the Modern/Colonial Global Imaginary. *Cultural Studies* ↔ *Critical Methodologies*, 17(3), 173–181. https://doi.org/10.1177/1532708616672673
- **10** Facer, K. (2022). Imagination and the Future University: Between Critique and Desire. *Critical Times, 5*(1).202-216 https://doi.org/10.1215/26410478-9536559
- **11** Christie, B. & Higgins, P. (2021). *Educational outcomes of Learning for Sustainability: literature review*. https://www.gov.scot/publications/educational-outcomes-learning-sustainability-brief-review-literature/pages/3/
- **12** https://education.gov.scot/media/lshdsdg2/one-planet-schools-report-learning-for-sustainability.pdf; https://education.gov.scot/media/lshdsdg2/one-planet-schools-report-learning-for-sustainability.pdf; https://education.gov.scot/media/ulodcmfl/res1-vision-2030.pdf
- 13 https://www.gtcs.org.uk/knowledge-base/sections/the-standards;; https://www.gtcs.org.uk/registrant-resources/learning-for-sustainability
- 14 https://www.gov.scot/publications/target-2030-movement-people-planet-prosperity/
- **15** Scottish Government (2023). "Target 2030" A movement for people, planet and prosperity. Scotland's Learning for Sustainability Action Plan 2023-2030. Available <u>online</u>.
- **16** Ibid.
- 17 https://www.gtcs.org.uk/documents/the-standard-for-provisional-registration
- **18** Jickling, B., Blenkinsop, S., Morse, M., & Jensen, A. (2018). Wild pedagogies: Six initial touchstones for early childhood environmental educators. *Australian Journal of Environmental Education*, *34*(2), 159-171.
- **19** Scottish Government (2023). "Target 2030" A movement for people, planet and prosperity. Scotland's Learning for Sustainability Action Plan 2023–2030. Available online.
- **20** Priestley, M., Philippou, S., Alvunger, D. & Soini, T. (2021). Curriculum Making: A conceptual framing. In: M. Priestley, D. Alvunger, S. Philippou. & T. Soini. *Curriculum making in Europe: policy and practice within and across diverse contexts*. Bingley: Emerald.

- **21** Griffiths, M., & Murray, R. (2017). Love and social justice in learning for sustainability. *Ethics and Education*, *12*(1), 39–50.
- **22** Priestley, M., Biesta, G. & Robinson, S. (2015). *Teacher agency: An ecological approach.*Bloomsbury Academic; Rushton, E., Walshe, N., Kitson, A., & Sharp, S. (2025). Leading whole school spaces of agency for climate change and sustainability education. A case study of four schools from England. *Journal of Professional Capital and Community 10*(1): 79–92. Available online.
- 23 Sipos, Y., Battisti, B., & Grimm, K. (2008). Achieving transformative sustainability learning: engaging head, hands and heart. *International journal of sustainability in higher education, 9*(1), 68-86; Olsen, E. K., Lawson, D. F., McClain, L. R., & Plummer, J. D. (2024). Heads, hearts, and hands: a systematic review of empirical studies about eco/climate anxiety and environmental education. *Environmental Education Research*, 1-28. Available online.
- **24** Dunlop, L., & Rushton, E. A. (2022). Education for environmental sustainability and the emotions: Implications for educational practice. *Sustainability*, *14*(8), 4441.
- **25** Such frameworks could include the Advance HE Framework for Education for Sustainable Development, available <u>online</u> and the United Nations Sustainable Development Goals, available <u>online</u>.
- **26** Scottish Government (2023). "Target 2030" A movement for people, planet and prosperity. Scotland's Learning for Sustainability Action Plan 2023–2030. Available online.
- **27** UNICEF. (1989). The United Nations Convention on the Rights of the Child. Available <u>online</u>. UNCRC (Incorporation) (Scotland) Act 2024 part 2 statutory guidance. Available <u>online</u>.
- **28** Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum*, 1989, 8.
- **29** Mannion, G. (2007). Going spatial, going relational: Why "listening to children" and children's participation needs reframing. *Discourse: studies in the cultural politics of education, 28*(3), 405-420.
- **30** Haraway, D.J. (2016). *Staying with the trouble. Making kin in the Chthulucene.* Duke University Press; Kimmerer, R.W. (2017), Learning the Grammar of Animacy1. *Anthropological Conscious, 28*,128–134.
- **31** Rushton, E. A. C. (2024). Responding to the moral complexities of climate change education through intergenerational dialogue in teacher education. <u>Journal of Moral Education</u>, 1–13.
- **32** Häggström, M., & Schmidt, C. (2020). Enhancing children's literacy and ecological literacy through critical place-based pedagogy. *Environmental Education Research*, *26*(12), 1729–1745.
- **33** Mannion, G., Fenwick, A., & Lynch, J. (2012). Place-responsive pedagogy: learning from teachers' experiences of excursions in nature. *Environmental Education Research*, *19*(6), 792–809
- **34** School Gardens Briefing Paper (2023). Available <u>online</u>. Food Activism in the Schoolyard (2021). Available <u>online</u>.
- **35** Mannion, G., Ramjan, C., McNicol, S., Sowerby, M. & Lambert, P. (2023). *Teaching, Learning and Play in the Outdoors: a survey of provision in 2022*. NatureScot Research Report 133. Available online.
- **36** Barrable, A., & Lakin, L. (2020). Nature relatedness in student teachers, perceived competence and willingness to teach outdoors: An empirical study. *Journal of Adventure Education and Outdoor Learning, 20*(3), 189-201; Rushton, E. A. C., Dunlop, L., & Atkinson, L. (2024). Fostering teacher agency in school-based climate change education in England, UK. The Curriculum Journal. Available online.

