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Heather E. Prince & Olivia Diggory

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Recognition and reporting of outdoor learning in primary schools in England

Heather E. Prince  and Olivia Diggory

Institute of Science & Environment, University of Cumbria, Cumbria, UK

ABSTRACT

The Office for Standards in Education, Children's Services and Skills (Ofsted) inspects and reports on the quality and effectiveness of educational provision in England. This research explores the extent to which non-mandatory curricular outdoor learning was recognised and reported by Ofsted in their inspections of state-maintained English primary schools (3–11 years) between September 2019 and February 2020. The data obtained from published reports ($n = 629$) using key word searches indicate mainly positive outcomes for pupils who have opportunities for outdoor learning (42% of reports). Seventy-two percent of comments related to the Early Years Foundation Stage (3–5 years) where access to an outdoor environment or planned daily outdoor activities is a statutory requirement. Inspectors reported on learning and enjoyment outcomes although some identified the need to develop quality outdoor space and learning. The data provide a proxy measure for the extent, nature and status of outdoor learning at a national level.

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School-based outdoor learning involves 'play, teaching, and learning that take place in natural environments for children in formal education and care settings' (Waite, 2020, p. 1). It provides memorable, authentic and contextualised experiences to extend classroom-based learning usually in local areas, school grounds and playgrounds (Chancellor, 2013; James & Williams, 2017; Karppinen, 2012); supports a range of curriculum objectives across many subjects and topic areas (MacQuarrie, 2018); and often involves physical activity. Regular and long-term opportunities for outdoor learning such as those in school can achieve a range of outcomes in cognitive learning, health and wellbeing, relationships with nature, self-constructs and meta-skills (Fiennes et al. 2015; Institute for Outdoor Learning (IOL), 2022). Outdoor learning essentially is an experiential approach that includes learning about and connecting with nature (including in school grounds) through outdoor play, adventure and environmental education activities ideally with additional opportunities for educational visits and residential (overnight) experiences.

The importance of children and young people learning outdoors is widely acknowledged nationally and internationally, although the entitlement within formal education varies globally. In several countries, outdoor learning is supported by government policy as an integrated and regular part of the curriculum. For example, Udeskole in Denmark (Mygind et al., 2019) and experiential education in outdoor environments in the national curriculum of Finland (Sjöblom & Svens, 2019). However, in many nations, it is adjunct to the formal curriculum and/or integrated into the Physical and/or Health Education (see Chancellor, 2013; Gray & Martin, 2012 (Australia); Leather 2018 (UK); Prince & Cory-Wright, 2022 (New Zealand)), relying on levels of teachers' ability and motivation to overcome

CONTACT Heather E. Prince  heather.prince@cumbria.ac.uk  Institute of Science & Environment, University of Cumbria, Cumbria, UK

individual challenges and systemic barriers to support students' learning outdoors (Oberle et al. 2021; Waite, 2020). The exception to this is in the Early Years, where outdoor play is acknowledged as an important part of children's learning and development (Prince & Macgregor, 2022). In the UK, in the Early Years Foundation Stage (EYFS) (birth—5 years) it is a statutory requirement for schools to have access to an outdoor environment or to have planned outdoor activities every day (Department for Education DfE, 2021). Similarly, in Australia, schools in Victoria must address play-based learning in their curriculum design through the Victorian Early Years Learning and Development Framework (VEYDF) (Chancellor, 2013).

However, outdoor learning can be incorporated beyond the taught curriculum in the school day. Outdoor play and time outdoors are encouraged in school playgrounds and outdoor areas during break times (recesses), particularly in primary schools and this activity accounts for one-fifth of time in school for many pupils (Clevenger et al., 2020; Ridgers et al., 2011). Thus, the design of playgrounds to include natural as well as moveable features in that space contributes to this important non-curricular outdoor learning (Aminpour et al., 2020; Bates, 2020). Children value choice and variety in school playgrounds but have rarely been consulted in their design (Chancellor, 2013; Chancellor & Hyndman, 2017). However, when a participatory model is in place, changing an educational landscape can also precipitate a change in school culture and 'give children greater freedom outdoors to live, learn and grow together' (Bates, 2020, p. 364). However, the reduction in school break times together with a lower level of prioritisation of funding for outdoor areas compared with indoor provision and different weather thresholds across the globe, has resulted in inconsistencies in pupil engagement with outdoor play and learning (Cevher-Kalburan, 2022; Montiel et al., 2021).

Regular and long-term opportunities for outdoor learning such as those in school can support improvements to students' physical, mental, social and emotional health and wellbeing (Burdette & Whittaker, 2005; Marchant et al., 2019; Schneller et al., 2017). Outdoor learning increases levels of physical activity and has been shown to reduce sedentary behaviour, obesity and myopia (Aronsson et al., 2015). In the UK as in other countries, levels of physical activity amongst students show a decline after primary school (Hyndman et al., 2012; Verloigne et al., 2012) concomitant with more limited opportunities for, and a lower prioritisation of outdoor learning in secondary schools, which sometimes results in health problems in adolescents. However, school leaders may need to be persuaded to adopt outdoor learning practices even if they have positive health and wellbeing outcomes if these are not evidenced alongside cognitive benefits (Waite et al., 2022).

Outdoor learning is non-mandatory in the curricula of English schools. There is provision within the physical education (PE) programmes of study of the English National Curriculum for 'outdoor adventurous activities' focusing on teamwork and problem solving at Key Stages 2–4 (7–16 years) Department for Education (DfE, 2013) but most educators would see outdoor learning in a much broader context and with considerably wider scope (IOL, 2022).

Beyond the statutory curriculum, the UK government recognises the importance of children and young people spending time in nature and are auditing this through the Children's People and Nature Survey for England (Natural England, 2021). Furthermore, there are more national government initiatives supporting children's engagement and relationships with nature such as the Nature Friendly Schools project (Nature Friendly Schools NFS, 2022) that is encouraging schools particularly in areas of disadvantage, to engage with the outdoors for care and concern for the environment as well as resilience and wellbeing. The Department of the Environment, Food and Rural Affairs (DEFRA) recognises that time spent learning outdoors can benefit children's mental and physical health through their 25-year environment plan (DEFRA, 2018). The recent National Education Nature Park and Climate Leader's Award (Natural History Museum NHM, 2022)—a post COP-26 initiative—will include supporting schools to map the biodiversity of their school grounds and local green spaces, providing new skills in digitisation in the process.

At times, governments look to national-scale datasets to ascertain the nature and extent of provision to support their departments in directing resource where it is most needed and providing

baseline data to determine change (e.g. in the UK, an all-party parliamentary group (APPG) examining the demise of outdoor centres and provision for residential experiences due to the COVID-19 pandemic (All Party Parliamentary Group APPG, 2020); National Education Nature Park (Department for Education DfE, 2022). Data have been obtained in England on a limited scale (for example through teacher surveys, Prince, 2019, 2020b) but provision has not been audited on a national scale.

This research addresses this gap in data of the nature and extent of outdoor learning in primary schools in England using the proxy measure of information contained within reports published on school inspections that took place in a 6-month period, 2019–2020. It also gives an indication of the status of outdoor learning in primary schools at that time.

Background context/research

Education policy, governance and curricula are different in the four nations of the UK. In England, the reporting agency is The Office for Standards in Education, Children's Services and Skills (Ofsted). Ofsted is a non-ministerial department of the UK Government that reports to parliament regarding matters of children and students' care, training and education in England (Ofsted, 2022a). It regulates and inspects English primary schools by visiting their premises and completing a report that is published online. Inspectors include evidence from the pupils through discussion and surveys as well as from parents/carers and governors (Ofsted, 2018; 2021b).

The latest inspection framework (Ofsted, 2021a) requires every school to receive a judgement in four areas: the quality of education; the standard of pupils' behaviour and attitudes; the personal development of the learners; and, the leadership and management of the school. If a school has an early years setting (birth to 5 years) or a sixth form (16–18 years) attached then these areas will also receive a grading. Each of the areas is given a grading: 'outstanding,' 'good,' 'requires improvement' or 'inadequate.' The school is also graded on its overall effectiveness.

Ofsted is recognised as the gatekeeper for interpreting quality and measuring effectiveness in education in England because of its 'external and omnipotent forces of inspection' in which inspectors 'hold the sacred truth about effective schools' (Perryman, 2009, p. 614). It is 'a force for improvement through intelligent, responsible and focused inspection and regulation' (Ofsted, 2017, p. 5) setting accountability as a driver for improvement (Jones & Tymms, 2014), rather than development as identified, for example, in the German inspectorate (Bitan et al., 2015). School performance data are also examined and schools are ranked leading to a culture of educational performativity (Grigg, 2020).

In Scotland, outdoor learning has been mandatory in state schools through the Curriculum for Excellence since 2010 (Learning and Teaching Scotland, 2010). A measure of outdoor learning provision has been achieved through the monitoring of 'events' in a small sample of schools (Christie et al., 2014; Mannion et al., 2015). Beames and Polack (2019) examined the status of outdoor learning, residential experiences and adventurous activities using school inspection reports to inform stakeholders about the changes taking place in outdoor learning.

Inspection reports give a proxy measure of the nature and extent of outdoor learning in state schools. They are useful to reflect the degree to which outdoor learning is recognised and reported by the government agency responsible for inspecting the quality and effectiveness of educational provision in that nation, state or region. Publicly available reports may also capture shifts in provision and paradoxically the reporting mechanisms may not record all activity. For example, the absence of 'outdoor learning' within a particular report may not equate to 'outdoor learning not taking place' as cross-referencing with other data sets show that the number of residential experiences is greater than reported (Beames & Polack, 2019). Furthermore, in the Scottish study, a large number of reports were not available on the Education Scotland website.

There is evidence that inspections drive provision. In the Early Years Inspection Handbook (Ofsted, 2022b) there is the specification that for a setting to receive a 'good' grading, children should have the opportunity to go outside to take part in physically active play and they should experience risk

and challenge outdoors. However, in this neo-liberal climate, there are concerns about the abilities and motivation of primary schools to implement outdoor learning as a non-mandatory curricular area, out with the EYFS. Headteachers and Senior Leaders need to be assured and ensure that provision of outdoor learning will contribute positively to their Ofsted grading, which means that they need to recognise and believe in its value. This has often supported the development of high-quality outdoor learning as 'actively inclusive facilitated approaches that predominantly use activities and experiences in the outdoors, which lead to learning, increased health and wellbeing, and environmental awareness' (IOL, 2022) far beyond simply taking learning outdoors. There is evidence that teachers who place value on outdoor learning, often as part of their professional identity, enable sustained and successful provision in schools (Prince, 2020b).

School leaders in England will inevitably look to Ofsted's priorities in evaluating their own provision and policy direction. Outdoor learning is not included in documentation on educational quality (Ofsted, 2021a; Ofsted, 2021c) although there is stated recognition for individual school autonomy as a key characteristic of a high-quality education system (Gove, 2014) and many schools justify it in this way.

Thus, the ways and extent to which schools engage in outdoor learning is likely to be variable. This research is cognisant of the limitations of the school inspection system in England but utilised the rich data in reports available in the public domain to ascertain the nature and extent of outdoor learning in primary schools and its recognition and reporting by Ofsted.

Method

This research used secondary data as published by Ofsted and publicly available on their website (Ofsted, 2022a). The data were filtered to 'Education and Training' and 'Primary' (3–11 years) schools in England, giving access to over 19,000 English Primary school inspection reports. The sample was refined to those published after September 2019 as this was the date at which the revised inspection framework was implemented (Ofsted, 2021a) until the beginning of March 2020, prior to the disruption caused by the COVID-19 pandemic when routine inspections were suspended.

The resulting sample of 2120 primary schools was subsequently reduced to omit those schools that were inspected before 1 September 2019 or were classified as 'independent' schools as these were outside the focus of 'state-funded' primary schools. The sample included the most common types of state funded primary schools but omitted special schools, residential special schools, pupil referral units or other schools (often primary and secondary aged students in a single institution). Furthermore, 'short' inspection 'Section 8' reports were omitted from the sample as these only occur in schools that are previously deemed to be 'good' or 'outstanding' and confirm that the school has remained at their grading and that they have effective safeguarding in place (Ofsted, 2021b). Thus, this research considers 629 'Section 5' (long) inspection reports resulting in gradings on state-funded mainstream primary schools in England published in a 6-month period 1 September 2019–29 February 2020. The sample included community, foundation, voluntary, academies and free schools (UK government, 2022).

Restricting the publication dates to between September 2019 and February 2020 means that this research does not present any understanding of outdoor learning's place in inspection reports since the COVID-19 pandemic. Gupta and Jawanda (2020) found that the pandemic was having negative effects on children including a lack of physical and outdoor activity. Research such as this has the potential to promote outdoor learning in schools and encourage Ofsted to recognise it to a greater extent than before.

Numerical identifiers 1–629 were used to collate research data. School names and Unique Reference Numbers (URNs) were cross-referenced by the researcher but are not disclosed in the analysis. A search was conducted on each report for the words 'outdoor,' 'outside' and 'residential' and the number of occurrences of each word was recorded with contextual qualitative report quotations to illustrate the ways in which words had been used by the inspection team. The analysis

Table 1. Search words and corresponding phrases within Ofsted reports for English Primary schools.

Search word	Phrases identified from search word
Outdoor	Outdoor(s), outdoor learning, learning outdoors, outdoor provision, outdoor space
Outside	Outside, learning outside, outside space, learning outside the classroom
Residential	Residential(s), residential experience(s), adventure residential(s), residential programme(s)

of qualitative and quantitative data followed the ‘convergent’ design for mixed methods (Creswell & Creswell, 2018). A basic descriptive analysis of the quantitative data was undertaken from the data collated on Microsoft Excel to report measures of proportion and variation and is presented in percentages and as absolute numbers for within percentage differentiation. The qualitative data were coded whereby the quotations were categorised manually and collapsed into broad themes within the same datasets (Braun et al., 2012). Themes can reflect similarities in meanings, frequency of appearance within the data, correspondence and causation (Saldaña, 2009). A further categorisation took place to classify comments as positive, negative or neutral. Neutral comments usually referred to the presence of an aspect of outdoor learning (e.g. an outdoor play area) without providing an opinion about its benefits or any issues with the provision. The availability of negative comments within the reports provides much more of a balanced picture than perhaps would be available in other datasets generated by proponents of outdoor learning, or respondents using other sampling strategies.

Search words

A pilot study was conducted to identify search words that would reflect the reporting of most in-school and out-of-school outdoor learning activities by the inspectorate both in respect of their presence and representation within the reports. These words and associated phrases are shown in Table 1.

Recognising the limitations of using the three specific search words (‘outdoor,’ ‘outside’ and ‘residential’) is important. The focus of this research was on the generic level of curricular outdoor learning that occurs in schools and thus, more specific words associated with the outdoors such as ‘wood,’ ‘forest,’ ‘beach,’ ‘field’ and ‘adventure,’ for example, were not used. However, defining the scope in this way limited the research because comparisons could have been drawn between the recognition given to Forest/Beach School activities by Ofsted with the recognition given to other outdoor learning activities. Furthermore, Forest School in particular can be seen as an integral part of the outdoor learning movement in the UK (Knight, 2011) and therefore it is arguable that Forest School would have been an important aspect to this research (for example, reports that were found to make no mention of outdoor learning may have discussed Forest School). Moreover, the exclusion of the search word ‘forest’ means comments made about learning in forests that were not Forest School activities were not identified.

Detailed reading of the context of the selected search words was important at the next stage of the research to remove occurrences out of context or not relevant to outdoor learning. For example, a number of references to ‘outside’ were removed as they referred to, for example, *outside* agencies or experts, safeguarding information *outside* school or behaviour *outside* lesson time. One quote was removed from *residential* as it referred to a visit to a residential care home.

Results

Forty-two per cent (265) of the inspection reports mentioned at least one of the search words with relevance to outdoor learning. A total of 409 quotes were identified in the 265 reports. Of the comments using the words *outdoor* and *outside*, 69% and 76% respectively related to the Early Years Foundation Stage (EYFS). In the EYFS, the themes identified from comments made by inspectors in

Table 2. Residential: positive comments in Ofsted reports for English Primary schools ($n=93$, some reports contained more than one theme).

Number of reports stating theme	Themes
39	Residential are enjoyable experiences for pupils
33	Pupils learn skills and develop personal qualities on residential.
11	Residential benefitted pupils with memorable, broad experiences
3	Residential supported learning

the reports are as follows: outdoor learning supports learning and enjoyment in the EYFS (52%); Development is needed (37%); Recent development has taken place (10%); Other (1%). The recognition of learning and enjoyment as outcomes was reported as good practice, for example, 'they [the children] particularly enjoy learning in the recently extended outdoor area. During the inspection they built dens and went on a number hunt' (School 565) and 'Staff make skilled use of highly stimulating indoor and outdoor learning areas, exciting resources and a purposeful early years curriculum to develop children's knowledge in subjects including early mathematics and reading' (School 451).

'Development needed' comments were usually in respect of improving the learning environments of outdoor spaces or replacing used worn or inappropriate equipment to further support learning, often in comparison to more suitable learning spaces indoors. 'Leaders and staff should ensure that the curriculum provision in the outdoor area reflects the high standard of the learning environment indoors' (School 508). Inspectors could be quite direct in their comments:

The outdoor early years area is not stimulating for young children. A lot of the equipment is old and weathered. Some areas are not well planned or set up to aid learning. For example, the utensils for the 'mud kitchen' were too high for children to reach and the kitchen itself lacked mud, sand and water. (School 388)

Forty-four per cent (36 out of the 81 comments) suggested development that would require obvious expenditure by a school. However, other comments related to the planning and integration of learning, 'Planning the outside activities needs to be an integral part of the learning environment' (School 564), ensuring suitable levels of challenge, 'The activities on offer to children to choose indoors and outside are not demanding enough' (School 260) or encouraging leaders to ensure that outdoor areas are used to their potential, 'Leaders should build on [the enhanced opportunities for children to learn] indoors to create more stimulating experiences in the outdoor area' (School 612).

'Recent development' drew attention in reports to newly refurbished or enhanced outdoor spaces and recently purchased resources for the outdoor learning environment, 'The outdoor area has been completely revamped since the last inspection. It is now full of exciting and meaningful activities' (School 416). 'Other' comments refer to the weather, moving in and out of doors and that the inspectors had visited an outdoor area.

Of the 309 occurrences of the words *outside* and *outdoor* in relation to outdoor learning (OL), 89 of the uses (29%) were general comments pertaining to the whole primary age range rather than specifically about the EYFS. There were three themes identified in these general comments: OL supports pupils' learning and enjoyment (46%); OL occurs at the school (39%); Residential visits to an outdoor centre (15%). The prevalent theme of learning and enjoyment included how outdoor learning (with physical education and/or sport) teaches about health and wellbeing, 'Personal, social and health education, including PE, sport and outdoor learning, helps pupils to learn about their health and well-being' (School 58) and how it promotes a healthy lifestyle, 'Pupils develop their understanding of healthy lifestyles through sport and outdoor learning' (School 597).

Of the 629 English primary school inspection reports considered in this research, 93 (15%) of the reports used the word 'residential' to refer to an outdoor learning overnight experience. Residential were reported as positive experiences in the reports as evidenced by the themes identified in Table 2.

A further 15 neutral comments were made stating that residential opportunities had been available at the school. 'Visits' (not linked to 'residential') were also mentioned in 11 of the quotations from the reports, although this was not in itself a search word. All the references to 'residential' and 'visits' were in general primary. All the comments about EYFS seemed to imply that they used the school grounds, playground or local spaces for outdoor learning,

Further to the above considerations about how residential as part of outdoor learning are represented in Ofsted reports, it is of note that 19% of the uses of the word 'residential' represented the pupil voice. They are comments paraphrased by inspectors or are direct quotes. For example, one comment stated that pupils 'told us [the inspectors] that they like to participate in residential learning and adventure activities' (School 451) and another comment included a quote from a child: 'These [regular residential trips] help you push your limits, so you're not scared' (School 135).

Thirty-three of the reports stated that pupils learn skills and develop personal qualities on residential. Nine of the reports specifically mention that residential boost character or personal development: 'Trips and visits, including the Year 6 residential to the Brecon Beacons, help to develop pupils' character' (School 147); 'Pupils' personal development is also supported well by a range of extra-curricular opportunities, including clubs, educational visits, and residential trips' (School 530). A further 14 reports mention how pupils' confidence, happiness, resilience, independence, self-esteem, determination, ability to overcome fears and ability to push limits and try new things are developed. For example, 'Residential trips develop pupils' confidence, resilience and independence' (School 60) and 'They [pupils] speak enthusiastically about school trips, such as the residential which "build our self-esteem"' (School 252).

Discussion EYFS (3–5 years)

The data in this research give evidence about how attention to outdoor learning is reported to a greater extent on the EYFS during Ofsted inspections than in other phases of primary education. This is unsurprising as the Early Years Framework (DfE, 2021) not only actively promotes the use of the outdoors during this phase of a child's development but it also makes it a statutory requirement. Early years settings attached to schools, like the ones considered as part of the primary school inspection reports in this study, are also obligated to adhere to the Early Years Framework. Interestingly, although 72% of the schools identify outdoor learning in their EYFS provision, this means that 28% do not, or that this employment of this research methodology has not identified such practice.

In the Framework, three characteristics that promote teaching and learning are identified: opportunities to play and explore; Learning actively with concentration; and, learning to think and create critically. If outdoor learning provides children with freedom and opportunities to learn and problem solve (Joyce, 2012), it becomes apparent that outdoor learning has the potential to promote the teaching and learning characteristics listed in the Framework. The Ofsted reports sampled in this research show recognition that outdoor learning contributes to enjoyment and learning development for EYFS children supporting the notion that the outdoors is an effective learning environment for children in this phase of development (Bilton, 2010; Knight, 2011, 2013; Ouvry & Furtado, 2020; Watts, 2013). Due to their focus on the quality of education, inspectors also identify areas for development such as the need for learning activities outside to be integral to the whole learning experience for children and that the activities and opportunities inside and outside should be equally demanding and stimulating.

Thirty-seven per cent of comments relating to the EYFS were about the need for improvement of outdoor spaces for children's learning although a further 10% drew attention in reports to recent and effective developments of these areas. These encouragements by Ofsted for schools to invest in new equipment and resources for the purpose of outdoor learning may be as a result of safety concerns or damage-beyond-repair situations. However, they may lead to less than sustainable use of existing resources or the over-development of school's outdoor spaces where they become built-up and

standardised. This commodification of outdoor learning can be seen when companies encourage schools to purchase expensive outdoor equipment and even declare that installing their equipment can help the school to achieve a 'good' Ofsted grading (Soft Surfaces, 2022).

A further issue of encouraging primary schools to purchase new equipment is that expense is already a barrier to outdoor learning provision (Waite, 2011). If the inspectorate sets the expectation that outdoor learning requires schools to have new equipment or risk having older (or cheaper) equipment criticised in their inspection report, then schools may feel that outdoor learning is not a viable investment, although for English EYFS educational settings, the statutory requirement means that it is probably not an option.

Primary Schools (5–11 years)

As only 28% of the uses of 'outside' and 'outdoor' related to year groups outside of the EYFS, it is important to consider why outdoor learning in Key Stages 1 and 2 (5–11 years, Years 1–6) do not seem to attract the same level of attention from the inspectors as the EYFS. The reason for this may be simple: access to the outdoors for specific learning activities in Years 1–6 is not a statutory requirement. The statutory requirement is for time outdoors to be provided for the purposes of play and for the necessary elements of the PE curriculum. The Primary National Curriculum (DfE, 2013) does not recognise outdoor learning as a subject. This statutory requirement of the PE curriculum can be fulfilled by schools taking pupils on residential visits to outdoor education centres. Therefore, it is possible to expect a higher percentage of the use of the word 'residential' in relation to older children (in KS1 and KS2).

Residentials were reported entirely as positive or neutral (in that they took place) experiences for primary-aged children. Residentials are one of the five core themes of high-quality outdoor learning (Outdoor Education Advisers' Panel, 2015) in which enjoyment, learning skills and developing personal qualities, broadened horizons and an increased appetite and motivation for learning are outcomes, in synergy with the themes that Ofsted reported as identified through this research. Ofsted essentially report on cross-sectional evidence (one point in time) and gather feedback from school stakeholders to inform their judgement and reporting. It could be that 'enjoyment' and 'memorable, broad experiences' are first-level outcomes from evidence elicited in this way. It is unsurprising that longer term impacts of residentials as identified in theory of change models where complex interactions derived from research evidence work in combination to determine outcomes and impacts (Prince, 2020a; Williams, 2013) are not so strongly represented. CUREE (2010) in a systematic review of the impact of residential experiences in schools showed that the most commonly reported forms of impact were non-cognitive. Since then, more research has focused on the effect of residential experiences on pupil progress and attainment providing evidence that these increase as a result of non-cognitive outcomes (including the development of personal qualities and the quality of learning and social relationships within a class) that then enables an increase in engagement with learning (Kendall & Rodger, 2015; Loynes et al., 2021).

Ofsted assesses pupils' personal development as an area of inspection (Ofsted, 2021b) so it is unsurprising that residentials are valued by inspectors for the personal development they provide. The list of outcomes from this research fits within Ofsted's description of 'character' because they are positive personal traits that encourage motivation, help learners to succeed in society and guide pupils' behaviour and attitude to learning (Ofsted, 2021b). This evidence suggests that residential trips are credited with developing character by Ofsted, even if the term is not specifically stated. Developing character in schools is a statutory requirement (Department for Education DfE, 2019), and outdoor learning's association with character development in Ofsted reports may be seen as one endorsement of it.

The Inspection Handbook (Ofsted, 2021b) specifies that schools should be giving pupils opportunities to be active at school and to learn about keeping healthy. The emphasis of the learning and enjoyment outcomes through a focus on health and wellbeing in these data not only reflects the

inspectorate's requirement to report in this area but also substantiates other government strategies. The Children's Plan (Department for Children, 2007) indicates the importance of promoting an active lifestyle at school by declaring outdoor activities as being important for children's development and in reducing obesity. Government strategy (UK Government, 2020) promotes the use of at least thirty minutes of physical activity at primary school every day to tackle the obesity issue.

Outdoor learning promotes physical activity and mental wellbeing by building confidence, self-esteem, and independence (Constable, 2017). Therefore, it would be easy for schools to utilise outdoor learning to achieve the inspectorate's requirements regarding healthy lifestyles. The government has also previously stated that they are committed to increasing the time children spend in PE and sport to two hours a week. As schools can find timetable time to be pressured and state it as a barrier to teaching outdoors (Waite, 2020), the government's ambition to increase the time given to a single National Curriculum subject (PE) to two hours may be unrealistic. A possible solution to this would be to encourage these two hours to focus on learning outdoors using active tasks which cover curriculum objectives from any of the National Curriculum subjects. If schools were utilising outdoor activities as much as the government suggests, outdoor learning would become an established part of a school's routine and it would therefore be reasonable to assume that one would expect to see outdoor learning mentioned in most Ofsted reports. There were only 89 general comments (outside of the EYFS) from 71 of the 629 reports, and this suggests most schools are not using outdoor learning regularly to achieve learning objectives as an established part of their weekly timetable. However, it is possible that schools do have outdoor learning as a standard feature of their curriculum, and it is not being mentioned by Ofsted when reporting.

Despite the School (general rather than Early Years focussed) Inspection Handbook (Ofsted, 2021b) not specifically mentioning outdoor learning, there is clear potential for inspectors to choose to provide space for outdoor learning in their report if they feel that it is considered to contribute to Ofsted's criteria of effective schooling. The handbook states that inspectors will spend time observing and in conversation with pupils during activities outside normal lessons to consider their personal development including enrichment activities. This could include time spent in outdoor learning provision at the school.

The dataset in this research of 629 reports is of a similar magnitude to that in the research in Scotland (644 reports, Beames & Polack, 2019). The research for Scotland indicated that 72% of primary schools had some outdoor learning provision in comparison to 42% of English Primary schools, albeit that some Scottish reports were missing and that study included a wider range of search words over a longer time period of audit. Given that there is strong policy support for outdoor learning in Scotland, the proportion of schools in which it is reported is the same as the EYFS statutory provision (72%). Twenty-four per cent of primary schools undertook a residential experience compared to 15% in England. The search word for these data was the same ('residential(s)') but it is likely that a longer auditing period (7.4 years versus 0.5 years in the English study) captured more of these experiences. Outcomes of residential experiences in Scotland were reported on as developing personal skills and confidence, self-esteem, resilience and a 'can do' attitude, which were recognised in this research and the literature.

The data from this research reflect a position where outdoor learning/activities/experiences are usually reported in the same sentence as PE, physical activity and/or sport, reflecting statutory provision. Outdoor learning was rarely reported linked to other curricular subjects other than generically as 'cross-curricular' and there were no reports linked to its place in supporting learners in knowledge, skills and understanding about global and local environmental issues through the search terms used here. It is possible that had the search terms included 'geography' or 'science,' the emphasis would have shifted. As more initiatives develop and implement a 'nature-based curriculum' (e.g. the Morecambe Bay Curriculum linked to Eden Project North (Lancaster University, 2022)) using a place-based, outdoor learning approach, the reporting of outdoor learning by Ofsted should become more widespread. Furthermore, as the Department for Education embeds the Climate

Leader's Award and National Education Nature Park, schools are likely to incorporate relevant activities, which will be reported on subsequently by Ofsted.

Conclusion

This research provides an indicative overview of the extent and the nature of outdoor learning in English primary schools and the way in which it is reported. The data indicate that statutory requirements drive provision. The extent of outdoor learning is highest in the EYFS (birth—5 years) where it is mandatory for children to have access to an outdoor environment or to have planned outdoor activities every day. Much of the reporting of outdoor learning provision in KS1 and KS2 in general Primary schools (5–11 years) was noted alongside physical education, physical activity and/or sport reflecting the place of 'outdoor and adventurous activities' as a statutory part of the PE curriculum. This recognition in the context of a mandatory curriculum points to the need for a threshold entitlement to outdoor learning, a call echoed globally, so that students of all ages can benefit from outdoor opportunities and experiences. In a number of reports, the main theme of learning and enjoyment was linked to being active in school and the importance of a healthy lifestyle, which is also a specified reporting element. Whilst it is unsurprising that inspectors focus on statutory provision, they are also able to comment on other aspects of school provision that contribute to effective schooling. 'Residential' were noted in 15% of primary schools at KS1 and KS2 with positive or neutral outcomes in all reports with the majority of comments focusing on enjoyment or the contribution these experiences make to personal development.

The data obtained through the lens of school inspectors indicate positive outcomes for the majority of pupils in primary schools through outdoor learning with comments focusing on learning and enjoyment in all phases. However, the methodology in this research provides a balanced summary of provision as the inspectorate can and do make judgements and comments about provision that needs development to optimise effective learning. The data show that indoor and outdoor provision in the EYFS in particular sometimes is not equitable, perhaps reflecting limited teacher knowledge or confidence of learning opportunities in the outdoors, or under-prioritisation of that environment as a learning space.

Outdoor learning was mentioned in 42% of school inspection reports and the assumption must be that in the majority of schools it may take a different form, is not reported or does not take place. As it seemed to be aligned with PE in the eyes of the inspectorate, it could be that parts of the curricula that include knowledge, skills and increased awareness about the environment, nature, climate change, biodiversity and sustainability have not been picked up in this research due to the limited selection of key words, or that these curriculum areas are not yet sufficiently embedded to be recognised or learning in these areas does not take place. More recent initiatives that are driven by the Department for Education (e.g. the Climate Leaders Award and National Education Nature Park) may drive this change in future. A focus on 'Forest School(s)', 'visits/trips/activities' and/or 'adventure' as key search words in primary school inspection reports would extend the scope of this research to ascertain the extent to which outdoor learning is included in other curricula provision.

Where outdoor learning is good or excellent, it is lauded by school inspectors who recognise the range of outcomes that rich provision provides and its quality and effectiveness in enhancing learning for children. Schools should ensure that they exhibit and evidence good practice to inspectors focussing on the *learning* that may derive from enjoyment, increased motivation and engagement through the provision of outdoor learning opportunities.

Disclosure statement

The authors report there are no competing interests to declare.

Notes on contributors

Heather Prince is Professor of Outdoor and Environmental Education at the University of Cumbria, UK. She designs, develops and teaches on undergraduate and postgraduate programmes in outdoor studies and is interested in pedagogic practice and curriculum development in schools and higher education. She is co-editor of the *International Handbook of Outdoor Studies, Research Methods in Outdoor Studies* and *Outdoor Environmental Education in Higher Education: International Perspectives*. She is a Principal Fellow of AdvanceHE.

Olivia Diggory is an experienced primary school teacher working in North Yorkshire. She is a graduate of the MA in Outdoor and Experiential Learning at the University of Cumbria. This research formed part of her MA dissertation.

ORCID

Heather E. Prince  <http://orcid.org/0000-0002-6199-4892>

References

- All Party Parliamentary Group (APPG). (2020). *Outdoor learning*. Available at: <https://publications.parliament.uk/pa/cm/cmallparty/201216/outdoor-learning.htm>
- Aminpour, A., Bishop, K., & Corkery, L. (2020). The hidden value of in-between spaces for children's self-directed play within outdoor school environments. *Landscape and Urban Planning*, 194, 103683. Advance online publication <https://doi.org/10.1016/j.landurbplan.2019.103683>
- Aronsson, J., Waite, S., & Clark, M. (2015). Measuring the impact of outdoor learning on the physical activity of school age children. *Education and Health*, 33(3), 57–62.
- Bates, C. (2020). Rewilding education? Exploring an imagined and experienced outdoor learning space. *Children's Geographies*, 18(3), 364–374. <https://doi.org/10.1080/14733285.2019.1673880>
- Beames, S., & Polack, N. (2019). *School inspection reports and the status of outdoor learning, residential experiences and adventurous activities in Scottish schools*. The University of Edinburgh, Moray House School of Education and Sport.
- Bilton, H. (2010). *Outdoor learning in the early years: Management and innovation* (3rd ed.). Routledge.
- Bitan, K., Haep, A., & Steins, G. (2015). School inspections still in dispute – an exploratory study of school principals' perceptions of school inspections. *International Journal of Leadership in Education*, 18(4), 418–439. <https://doi.org/10.1080/13603124.2014.958199>
- Braun, V., & Clarke, V. (2012). Thematic analysis. In Cooper, H., P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbook of research methods in psychology, Vol. 2: Research designs: Quantitative, qualitative, neurophysical and biological* (pp. 57–71). American Psychological Association.
- Burdette, H. L., & Whitaker, R. C. (2005). Resurrecting free play in young children: Looking beyond fitness and fatness to attention, affiliation, and affect. *Archives of Pediatrics & Adolescent Medicine*, 159(1), 46–50. <https://doi.org/10.1001/archpedi.159.1.46>
- Cevher-Kalburan, N. (2022). Experiences of teachers after training on outdoor education in early childhood. *Journal of Adventure Education & Outdoor Learning*, 1–15. Advance online publication <https://doi.org/10.1080/14729679.2022.2147970>
- Chancellor, B. (2013). Primary school playgrounds: Features and management in Victoria, Australia. *International Journal of Play*, 2(2), 63–75. <https://doi.org/10.1080/21594937.2013.807568>
- Chancellor, B., & Hyndman, B. (2017). The rush to judgement: Mapping moral geographies of the primary school playground. *Global Studies of Childhood*, 7(1), 38–50. <https://doi.org/10.1177/2043610617694731>
- Christie, B., Nicol, R., Beames, S., Ross, H., & Higgins, P. (2014). Outdoor Education Provision in Scottish Schools. *Scottish Educational Review*, 46(1), 48–64. <https://doi.org/10.1163/27730840-04601005>
- Clevenger, K., Wierenga, M. J., Howe, C. A., & Pfeiffer, K. A. (2020). A systematic review of child and adolescent physical activity by schoolyard location. *Kinesiology Review*, 9(2), 147–158. <https://doi.org/10.1123/kr.2019-0009>
- Constable, K. (2017). *The outdoor classroom ages 3-7: Using ideas from forest schools to enrich learning*. Routledge.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative and mixed-methods approaches*. SAGE.
- CUREE. (2010). *Learning Away: A small-scale literature review*. CUREE.
- Department for Children, Schools and Families. (2007). *The children's plan: Building brighter futures*. Available at: <https://www.gov.uk/government/publications/the-childrens-plan>
- Department for Education (DfE). (2013). *The national curriculum in England: primary curriculum*. Available at: <https://www.gov.uk/government/publications/national-curriculum-in-england-primary-curriculum>
- Department for Education (DfE). (2019). Character education framework. Available at: <https://www.gov.uk/government/publications/character-education-framework>
- Department for Education (DfE). (2021). *Early years foundation stage (EYFS) statutory framework*. Available at: <https://www.gov.uk/government/publications/early-years-foundation-stage-framework-2>

- Department for Education (DfE). (2022). *COP26. Everything you need to know about the Department's quest to put climate change at the heart of education*. Available at: <https://educationhub.blog.gov.uk/2021/11/09/cop-26-everything-you-need-to-know-about-the-departments-quest-to-put-climate-change-at-the-heart-of-education/>
- Department for Environment, Food and Rural Affairs (DEFRA). (2018). *A green future: Our 25 year plan to improve the environment*. Available at: <https://www.gov.uk/government/publications/25-year-environment-plan>
- Fiennes, C., Oliver, E., Dickson, K., Escobar, D., Romans, A., & Oliver, S. (2015). *The existing evidence-base about the effectiveness of outdoor learning*. UCL Institute of Education. Evidence for Policy and Practice: Information and Coordinating Centre (EPPI-Centre) and Giving Evidence. The Blagrove Report
- Gove, M. (2014, June 07). *The purpose of our school reforms*. Policy Exchange. Speech
- Gray, T., & Martin, P. (2012). The role and place of outdoor education in the Australian national curriculum. *Journal of Outdoor and Environmental Education*, 16(1), 39–50. <https://doi.org/10.1007/BF03400937>
- Grigg, R. (2020). 'Ofsted says we are outstanding': HMI conceptions of teaching excellence in the nineteenth- and twentieth-century primary school. *British Journal of Educational Studies*, 69(6), 1–19. <https://doi.org/10.1080/00071005.2020.1850636>
- Gupta, S., & Jawanda, M. K. (2020). The impacts of Covid-19 on children. *Acta paediatrica*, 109(11), 1–3. <https://doi.org/10.1111/apa.15484>
- Hyndman, B., Telford, A., Finch, C. F., & Benson, A. C. (2012). Moving physical activity beyond the school classroom: A socio-ecological insight for teachers of the facilitators and barriers to students' non-curricular physical activity. *Australian Journal of Teacher Education*, 37(2), 1. <https://doi.org/10.14221/ajte.2012v37n2.2>
- Institute for Outdoor Learning (IOL). (2022). *What is outdoor learning?* Available at: <https://www.outdoor-learning.org/Good-Practice/Research-Resources/About-Outdoor-Learning>
- James, J. K., & Williams, T. (2017). School-based experiential outdoor education: A neglected necessity. *The Journal of Experiential Education*, 40(1), 58–71. <https://doi.org/10.1177/1053825916676190>
- Jones, K., & Tymms, P. (2014). Ofsted's role in promoting school improvement: The mechanisms of the school inspection system in England. *Oxford Review of Education*, 40(3), 315–330. <https://doi.org/10.1080/03054985.2014.911726>
- Joyce, R. (2012). *Outdoor learning: Past and present*. Open University Press.
- Karppinen, S. J. A. (2012). Outdoor adventure education in a formal education curriculum in Finland: Action research application. *Journal of Adventure Education & Outdoor Learning*, 12(1), 41–62. <https://doi.org/10.1080/14729679.2011.569186>
- Kendall, S., & Rodger, G. (2015). *Evaluation of Learning Away: final report* (Paul Hamlyn Foundation). Retrieved from <http://learningaway.org.uk/wp-content/uploads/LA-Final-Report-May-2015-1.pdf>
- Knight, S. (2011). *Risk and adventure in early years outdoor play: Learning from forest schools*. SAGE.
- Knight, S. (2013). *Forest school and outdoor learning in the early years*. SAGE.
- Lancaster University. (2022). *Morecambe Bay Curriculum*. Available at: <https://www.lancaster.ac.uk/arts-and-social-sciences/engagement/morecambe-bay-curriculum/>
- Learning and Teaching Scotland. (2010). *Curriculum for excellence through outdoor learning*. Available at: <https://education.gov.scot/documents/cfe-through-outdoor-learning.pdf>
- Leather, M. (2018). Outdoor education in the National Curriculum: The shifting sands in formal education. In Becker, P., B. Humberstone, C. Loynes, & J. Schirp (Eds.), *The changing world of outdoor learning in Europe* (pp. 179–193). Routledge.
- Loynes, C., Dudman, J., & Hedges, C. (2021). The impact of residential experiences on pupils' cognitive and non-cognitive development in year six (10 – 11 year olds) in England. *Education 3-13*, 49(4), 398–411. <https://doi.org/10.1080/03004279.2020.1722199>
- MacQuarrie, S. (2018). Everyday teaching and outdoor learning: Developing an integrated approach to support school-based provision. *Education 3-13*, 46(3), 345–361. <https://doi.org/10.1080/03004279.2016.1263968>
- Mannion, G., Mattu, L., & Wilson, M. (2015). *Teaching, learning, and play in the outdoors: A survey of school and pre-school provision in Scotland*. Scottish Natural Heritage Commissioned Report, 779. Scottish Natural Heritage. Available at: http://www.snh.org.uk/pdfs/publications/commissioned_reports/779.pdf
- Marchant, E., Todd, C., Cooksey, R., Dredge, S., Jones, H., Reynolds, D., Stratton, G., Dwyer, R., Lyons, R., & Brophy, S. (2019). Curriculum-based outdoor learning for children aged 9-11: A qualitative analysis of pupils' and teachers' views. *PLoS One*, 14(5), e0212242. <https://doi.org/10.1371/journal.pone.0212242>
- Montiel, I., Mayoral, A. M., Navarro-Pedreño, J., & Maiques, J. (2021). Transforming learning spaces on a budget: Action research and service-learning for co-creating sustainable spaces. *Education Sciences*, 11(8), 418. <https://doi.org/10.3390/educsci11080418>
- Mygind, E., Bølling, M., & Barfod, K. S. (2019). Primary teachers' experiences with weekly education outside the classroom during a year. *Education 3-13*, 47(5), 599–611. <https://doi.org/10.1080/03004279.2018.1513544>
- Natural England. (2021). *The children's people and nature survey for England, 2021 update*. Available at: <https://www.gov.uk/government/statistics/the-childrens-people-and-nature-survey-for-england-2021-update>
- Natural History Museum (NHM). (2022). *Rapid evidence review. National Education Nature Park and Climate Leaders Award*. DfE.
- Nature Friendly Schools (NFS). (2022). *How it works*. Available at: <https://www.naturefriendlyschools.co.uk/how-it-works>

- Oberle, E., Zeni, M., Munday, F., & Brussoni, M. (2021). Support factors and barriers for outdoor learning in Elementary schools: A systemic perspective. *American Journal of Health Education*, 52(5), 251–265. <https://doi.org/10.1080/19325037.2021.1955232>
- Ofsted. (2017). *Ofsted strategy 2017-22*. Available at: <https://www.gov.uk/government/publications/ofsted-strategy-2017-to-2022>
- Ofsted. (2018). *School inspections: staff and pupil questionnaire text*. Available at <https://www.gov.uk/government/publications/school-inspections-staff-and-pupil-questionnaire-text>
- Ofsted. (2021a). *Education inspection framework*. Available at: <https://www.gov.uk/government/publications/education-inspection-framework>
- Ofsted. (2021b). *School inspection handbook*. Available at: <https://www.gov.uk/government/publications/school-inspection-handbook-eif>
- Ofsted. (2021c). *Principles behind Ofsted's research reviews and subject reports*. Available at: <https://www.gov.uk/government/publications/principles-behind-ofsted-research-reviews-and-subject-reports>
- Ofsted. (2022a). *About us*. Available at: <https://www.gov.uk/government/organisations/ofsted/about>
- Ofsted. (2022b). *Early years inspection handbook*. Available at: <https://www.gov.uk/government/publications/early-years-inspection-handbook-eif>
- Outdoor Education Advisers' Panel. (2015). *High quality outdoor learning*. English Outdoor Council.
- Ouvry, M., & Furtado, A. (2020). *Exercising muscles and minds: Outdoor play and the early years curriculum* (2nd ed.). Jessica Kingsley.
- Perryman, J. (2009). Inspection and the fabrication of professional and performative processes. *Journal of Education Policy*, 24(5), 611–631. <https://doi.org/10.1080/02680930903125129>
- Prince, H. E. (2019). Changes in outdoor learning in primary schools in England, 1995 and 2017: Lessons for good practice. *Journal of Adventure Education & Outdoor Learning*, 19(4), 329–342. <https://doi.org/10.1080/14729679.2018.1548363>
- Prince, H. E. (2020a). The lasting impacts of outdoor adventure residential experiences on young people. *Journal of Adventure Education & Outdoor Learning*, 21(3), 261–276. <https://doi.org/10.1080/14729679.2020.1784764>
- Prince, H. E. (2020b). The sustained value teachers place on outdoor learning. *Education 3-13*. *Education 3-13*, 48(5), 597–615. <https://doi.org/10.1080/03004279.2019.1633376>
- Prince, H., & Cory-Wright, J. (2022). Outdoor education as a deep education for global sustainability and social justice. In Petry, K. & de Jong, J. (Eds.), *Education in sport & physical activity: Global perspectives & future directions* (pp. 49–59). Routledge.
- Prince, H., & MacGregor, L. (2022). Outdoor Learning. In Cooper, H., S. Elton-Chalcraft (Eds.), *Professional Studies in Primary Education* (4th ed.). pp. 348–367. SAGE.
- Ridgers, N. D., Carter, L. M., Stratton, G., & McKenzie, T. L. (2011). Examining children's physical activity and play behaviors during school playtime over time. *Health Education Research*, 26(4), 586–595. <https://doi.org/10.1093/her/cyr014>
- Saldaña, J. (2009). *The coding manual for qualitative researchers*. SAGE.
- Schneller, M. B., Schipperijn, J., Nielsen, G., & Bentsen, P. (2017). Children's physical activity during a segmented school week: Results from a quasi-experimental education outside the classroom intervention. *The International Journal of Behavioral Nutrition and Physical Activity*, 14(1), 80. <https://doi.org/10.1186/s12966-017-0534-7>
- Sjöblom, P., & Svens, M. (2019). Learning in the Finnish outdoor classroom: Pupils' views. *Journal of Adventure Education & Outdoor Learning*, 19(4), 301–314. <https://doi.org/10.1080/14729679.2018.1531042>
- Soft Surfaces. (2022). *Ofsted requirements for outdoor play*. Available at: <https://www.softsurfaces.co.uk/ofsted-requirements-for-outdoor-play/>
- UK Government. (2020). *Tackling obesity: government strategy*. Available at: <https://www.gov.uk/government/publications/tackling-obesity-government-strategy>
- UK Government. (2022). *Types of school*. Available at: <https://www.gov.uk/types-of-school>
- Verloigne, M., Van Lippevelde, W., Maes, L., Yildirim, M., Chinapaw, M., Manios, Y., Androutsos, O., Kovács, E., Bringolf-Isler, B., Brug, J., & De Bourdeaudhuij, I. (2012). Levels of physical activity and sedentary time among 10- to 12-year-old boys and girls across 5 European countries using accelerometers: An observational study within the energy-project. *The International Journal of Behavioral Nutrition and Physical Activity*, 9(1), 1–8. <https://doi.org/10.1186/1479-5868-9-34>
- Waite, S. (2011). Teaching and learning outside the classroom: Personal values, alternative pedagogies and standards. *Education 3-13*, 39(1), 65–82. <https://doi.org/10.1080/03004270903206141>
- Waite, S. (2020). Where are we going? International views on purposes, practices and barriers in school-based outdoor learning. *Education Sciences*, 10(11), 311. <https://doi.org/10.3390/educsci10110311>
- Waite, S., & Aronsson, J. (2022). Some impacts on health and wellbeing from school-based outdoor learning. In Jucker, R., J. von Au (Eds.), *High-quality outdoor learning* (pp. 171–190). Springer.
- Watts, A. (2013). *Outdoor learning through the seasons: An essential guide for the early years*. Routledge.
- Williams, R. (2013). Woven into the fabric of experience: Residential adventure education and complexity. *Journal of Adventure Education & Outdoor Learning*, 13(2), 107–124. <https://doi.org/10.1080/14729679.2012.731725>