

Prince, Heather (2019) Changes in outdoor learning in primary schools in England, 1995 and 2017: lessons for good practice. *Journal of Adventure Education and Outdoor Learning*, 19 (4). pp. 329-342.

Downloaded from: <http://insight.cumbria.ac.uk/id/eprint/4181/>

Usage of any items from the University of Cumbria's institutional repository 'Insight' must conform to the following fair usage guidelines.

Any item and its associated metadata held in the University of Cumbria's institutional repository Insight (unless stated otherwise on the metadata record) may be copied, displayed or performed, and stored in line with the JISC fair dealing guidelines (available [here](#)) for educational and not-for-profit activities

provided that

- the authors, title and full bibliographic details of the item are cited clearly when any part of the work is referred to verbally or in the written form
- a hyperlink/URL to the original Insight record of that item is included in any citations of the work
- the content is not changed in any way
- all files required for usage of the item are kept together with the main item file.

You may not

- sell any part of an item
- refer to any part of an item without citation
- amend any item or contextualise it in a way that will impugn the creator's reputation
- remove or alter the copyright statement on an item.

The full policy can be found [here](#).

Alternatively contact the University of Cumbria Repository Editor by emailing insight@cumbria.ac.uk.

1
2
3 **Changes in outdoor learning in primary schools in England, 1995 and**
4 **2017: Lessons for good practice**
5

6
7 Heather E Prince

8
9 University of Cumbria, Ambleside Campus, Rydal Road, Ambleside, LA22 9BB. UK.
10

11
12 heather.prince@cumbria.ac.uk
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

For Peer Review Only

Abstract

Outdoor learning provides memorably relevant learning and authentic, contextualised opportunities to extend classroom-based education. This research draws on empirical data from surveys involving teachers in primary schools in England in 1995 and 2017 (n=61 and n=40 respectively). It adds to the evidence base of outdoor learning in the statutory curriculum, illustrating that schools are continuing to use their playgrounds and day visits as locations for practice with a proportionate increase in residential visits in 2017. The expertise in schools had decreased by 2017 but the major challenges and barriers to implementation of time and expense remain similar in both years. Teachers no longer see outdoor 'education' as a subject in its own right but as part of the physical education curriculum ('outdoor and adventurous activities') although in the Early Years Foundation Stage, practitioners report an enabling curriculum for outdoor learning. The research identifies the strength of teachers' values and beliefs, an open approach to curriculum interpretation, the importance of suitable locations, a culture of risk benefit and positive initiatives as key ingredients for successful outdoor learning in primary schools. These outcomes should support practitioners and policy makers in promoting more opportunities for learning outdoors within formal curricula.

Key words: Outdoor learning; outdoor education; change; primary schools; curriculum

Introduction

‘Outdoor learning’ is defined by the Institute for Outdoor Learning (IOL, 2018) as, ‘purposeful and planned experience in the outdoors. It’s a broad term that includes discovery, experimentation, learning about and connecting to the natural world, and engaging in outdoor sports and adventure activities.’ School-based provision is where outdoor learning is used to support curriculum delivery and integrated into it (Fägerstam, 2014; Macquarrie, 2016;) and not as supplementary (Nicol, 2014) or seen as a privilege (Power et al, 2009). It can be integrated in all teaching and learning (Dolan, 2015) as regular rather than short term provision (Stern, Powell & Hill, 2014).

The gap in knowledge about how teachers see the outdoor classroom and why and how they are using it was identified by Rickinson et al. (2004). It was evident from the Blagrove Report, which reviewed the effectiveness of outdoor learning in the UK (Fiennes et al., 2015) that more research data and evidence of practice and interventions needs to be captured on the types and volume of activity. Thus, there has been a renewed emphasis on research initiatives that result in a better understanding of the breadth and depth of outdoor learning practice, encourage the development and use of good practice and raise the value placed on outdoor learning (IOL, 2018).

This research project gathered data in the form of surveys from teachers in state primary schools in England at two points in time, 1995 and 2017. Its purpose was to identify any changes to outdoor learning practice over 22 years in respect of: the locations used by teachers; the curriculum areas in which outdoor learning was embedded; the level of expertise of teachers; the factors influencing provision; and, teacher perspectives on the place of outdoor learning in the curriculum. From the data, key ingredients for successful implementation of outdoor learning in schools are identified.

1
2
3 This research adds to the evidence base, as it also identifies the breadth of practice,
4 and positive initiatives and good practice that support its development and enable it to
5 flourish for the benefit of all children in school. It also examines the challenges and barriers
6 to implementation and ways in which schools value outdoor learning and have sought to
7 enable experiences for their students. It is hoped that the sharing of these data will support
8 primary schools, practitioners and policy makers in promoting more opportunities within
9 formal curricula.
10
11
12
13
14
15
16
17
18
19
20
21
22

23 **School-based outdoor learning**

24
25
26 Outdoor learning provides memorably relevant learning and authentic and contextualised
27 opportunities to extend classroom-based learning (James & Williams, 2017; Karpinnen,
28 2012). There is evidence that where outdoor experiences are regarded as having inherent
29 educational value and equivalence with classroom learning, outdoor learning can support
30 curriculum delivery very effectively (Macquarrie, 2016; Maynard & Waters, 2007;
31 Merewether, 2017). A regular programme as an intervention for 8-11 year olds has also been
32 shown to improve achievement, particularly in reading (Quibbell, Charlton & Law, 2017) and
33 mathematics (Harvey, Rankine & Jensen, 2017) adding to the evidence of the impact of
34 residential on attainment (Paul Hamlyn Foundation, 2015).
35
36
37
38
39
40
41
42
43
44
45
46

47 There has been considerable emphasis on the benefits of children's relationships with
48 the natural environment in the context of formal education for a number of educational
49 outcomes (Malone & Waite, 2016) including health and wellbeing (Dyment, Bell & Green,
50 2017; Humberstone & Stan, 2009; Norðhal & Jóhannesson, 2013) and the development of
51 self constructs and teamwork (Hattie et al, 1997; Neill, 2008). The importance of outdoor
52 play cannot be underestimated (for example, Carrington, 2016).
53
54
55
56
57
58
59
60

Context

Each country in the UK has different governance and curricula; this study examined the provision across a sample of English primary schools. A range of factors appear to have influenced the provision of outdoor learning in schools in England, which have contributed to the perceived ‘downward path’ in recent years (Waite, 2010). Schools in England have been increasingly pressured by government policy and directives to drive pupil performance with metrics derived from testing and reporting particularly in the core areas of English, mathematics and science (James, 2014; Prince & Exeter, 2016). Curriculum reform has resulted in the inclusion or exclusion of outdoor and adventurous activities in the formal physical education curriculum over the years (Leather, 2018), and outdoor ‘learning’ or outdoor ‘education’ has been taught through a range of curriculum subjects, topics or initiatives, and in some schools, as a subject in its own right (Allison, Carr & Meldrum, 2012). The safeguarding and risk management agenda has been more prominent in recent years with substantial permissions and approvals needed to take children outdoors and the varied perception of risk by parents/carers and teachers (Little, 2015; Savery et al., 2017). Furthermore, budgets and the prioritisation of how and what to spend money on are ever more challenging for Headteachers and can limit the resourcing for outdoor learning with requests for parental contributions permissible out with formal curriculum time.

The definitions employed in this paper, other than in quotations, follow those in common usage in the national curriculum of England (DfE, 2018) and use the terms ‘outdoor learning’ in 2017 and ‘outdoor education’ in 1995.

Method

1
2
3 A survey utilising questionnaires was undertaken in both years to focus on macro-data from a
4 number of teachers representing a range of primary schools. Surveys are known to have
5 internal and external validity, are efficient, can cover a wide geographical area, have ethical
6 advantages and are flexible (Mathers, Fox & Hunn, 2007). The questionnaire involved a
7 number of open, closed and ranking questions, with space for more extensive qualitative
8 comments and included cross-referenced questions to test reliability (Adèr and Mellenbergh,
9 1999; Kelley et al., 2003). The sampling framework was stratified and purposive across
10 primary schools in England, which were first destination employers for graduate teachers
11 from Charlotte Mason College¹ in 1995. Some of these graduates were specialists in outdoor
12 and environmental education and a question within the survey elicited the expertise of
13 teachers in the discipline through a clear descriptor. After piloting to teachers out with the
14 stratified sample, the questionnaire was deployed to a sample of 101 schools using a postal
15 survey with a response rate of 60% [n=61].

16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34 This survey was repeated in 2017 using the same sample, where possible. Some
35 schools had merged (for example, from an infant and junior school to a primary school),
36 some had become multi-school academies on more than one site, some had changed names
37 and some had closed. Where a multi-site academy was found, the questionnaire was sent to
38 the main school in the consortium; where a school had closed, it was sent to the next nearest
39 geographically located primary school. Although this created an unmatched sample, the
40 research aimed to examine the perspectives and opinions of teachers reflecting on their
41 educational establishments' policies and practice, rather than the schools themselves and
42 therefore, this was felt to be acceptable. This survey was deployed using an online platform
43 and elicited a very poor response, so a postal survey followed, accepting that this is, '... the
44 best form of survey in an educational enquiry' (Cohen, Mannion & Morrison, 2018, p.405).
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000

1
2
3 the same schools of 11% [n=11]. Acknowledging that this is a low response rate, the sample
4 was doubled using the same criteria (graduate first destinations from the University of
5 Cumbria² in 2017, no specialist trainees) giving an overall response rate for 2017 of 20%
6
7 with returns from 40 schools. The research project was approved by the Ethics Committee of
8 the University of Cumbria.
9
10
11
12
13
14

15 The research was an exploratory analysis ‘...investigating data without the ambition
16 to make inference about the population the data came from’ (Adèr and Mellenbergh, 1999, p.
17 135). The research was a longitudinal by definition as there were two (or more) discrete
18 surveys (Kelley et al, 2003) in an attempt to analyse change and to ascertain if there were
19 trends within (termed ‘residual heterogeneity’ by Galton et al, 1999) and between each
20 dataset. Essentially, it was cross-sectional at two points in time designed to provide an
21 articulation of the influence of curricula and the practices of teachers within schools
22 (Holland, Thomson & Henderson, 2006).
23
24
25
26
27
28
29
30
31
32
33

34 There was some concern about unbalanced samples for comparative studies. Both
35 surveys were addressed by name to Headteachers (or equivalent) at schools. It was not
36 possible to ascertain what role all respondents had in their schools but they were asked to
37 indicate which phases their answers referred to (Early Years Foundation Stage (EYFS)³, Key
38 Stage 1 (KS1)⁴ and/or Key Stage 2 (KS2)⁵.) Thus, the surveys generally are representative of
39 practices of a number of teachers within each school. The surveys did not include any
40 incentives for completion (other than a report on the research) and one reminder was sent by
41 email in 2017 following a shift from online (Bristol Online Survey, 2018) to postal survey.
42 Barlich & Holtom (2008) reporting on the survey response rates in organisational research
43 from 1607 studies published between 2000 and 2005 in 17 refereed academic journals,
44 conclude that the use of incentives was not found to be related to response rates and the use
45 of reminders was associated with lower response rates. Interestingly the mean response rate
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3 from their research was 35.7%; in this research it is 40%. It was not felt that non-response
4 bias was influential to this exploratory analysis and rather a manifestation of the multitude of
5 time demands and pressures on teachers in schools in England, particularly in 2017. Non-
6 response could mean that those schools were not active in providing outdoor learning in the
7 curriculum, or that teachers did not understand the meaning of the term and although
8 anecdotal evidence would suggest that this was not the case, it has to be included as a critique
9 of the research.
10
11
12
13
14
15
16
17
18
19

20 Surveys produce summary reported data that are overarching and cannot portray the
21 micro-level of rich practice as a case study would do, or include narratives and creative data
22 sources representing the voices of teachers, carers or children as, for example, Waite (2010).
23 They do not provide a more objective observation of practice that might be elicited through
24 inspection reports, for example. The questions were designed however, to ascertain the depth
25 of curriculum integration and learning embedded as outdoor learning, and to differentiate this
26 practice from those who are just taking their 'indoor' teaching outdoors (Ager, 2018). They
27 enable key headline messages supplemented by qualitative comments to illustrate practice
28 and change.
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46

47 **Analysis**

48 A descriptive analysis of the data was undertaken from collation of the quantitative data on
49 Microsoft Excel to report measures of central tendency, order and variation (Cresswell &
50 Cresswell, 2018). Rankings are shown by percentages of responses and total number of
51 respondents (n) for questions where multiple answers were possible (e.g. locations used by
52 schools for outdoor learning). In questions where only rank was requested such as factors
53 influencing the provision of outdoor learning, mean rankings were calculated from all data
54
55
56
57
58
59
60

1
2
3 and the factors then ordered (1-4 are shown in the tables). The differences in the mean ranks
4
5 (rank differentials) from 1-2, 2-3 and 3-4 are shown to illustrate ranking distribution. For
6
7 example, a rank differential of 0.08 between factor 1 (most important) and factor 2 (next most
8
9 important) shows that these were ranked closer together by respondents than a rank
10
11 differential of 0.28. The first four ranks are given to include curriculum areas beyond core
12
13 (e.g. science) and foundation (e.g. geography) subjects such as outdoor and environmental
14
15 education and PSHE (personal, social, health and economic education) in curriculum based
16
17 questions. For parity, this approach is followed for data presentation for all relevant
18
19 questions. A detailed content analysis was undertaken of each set of data and codes and
20
21 themes were elicited in the qualitative answers. Open qualitative comments were recorded
22
23 and are embedded in the analysis and discussion.
24
25
26
27
28

29 An overview of the two datasets is provided in Table 1. The datasets are examined
30
31 here holistically, with differentiations and cross referencing (such as for EYFS respondents,
32
33 'urban', 'suburban' and 'rural' schools, and SEN/D⁶ schools) but two-way analyses of
34
35 variables, for example, to teacher expertise or professional development needs, are not
36
37 reported in this paper.
38
39
40

41 <Table 1 here>
42
43

44 **Results and discussion**

45
46
47 <Table 2 here>
48
49

50 Table 2 shows the most used locations for outdoor learning in 1995 and 2017; the first two
51
52 ranks are the same in both years. Schools in 1995 seemed to be using their local
53
54 environments to a greater extent than in 2017, including the built environment. The use by
55
56 schools of residential increased by 9% in 2017 (69% of schools used residential in 1995).
57
58 Interestingly in both years, day visits are more popular locations for outdoor learning than
59
60

1
2
3 school grounds beyond the ‘playground’ (usually a hard surface area). There were associated
4 comments about both the lack of school grounds but also school expansion and new buildings
5 reducing the area of school grounds, ‘The school has expanded to a four form entry. New
6 buildings take up playground space’. However, school grounds were used by a higher
7 proportion of EYFS respondents (83%, n=5) with mention of EYFS/KS1 specialist areas
8 including for outdoor play and by both of the SEN/D schools. In 2017, the variety of
9 locations for outdoor learning had expanded to include school gardens, vegetable plots, forest
10 school gardens, allotments, beach schools and museums/galleries. This could be a reflection
11 of the influence of the Manifesto for Learning outside the Classroom (DfES, 2006; LotC,
12 2018) that defines learning outside the classroom more widely than previously to include
13 visits to cultural facilities, for example.
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

29 The apparent increased use of residential over the 22 years is interesting, given the
30 decline in local authority funded outdoor centres in the UK. It could be that some schools
31 interested in outdoor learning opportunities have benefitted from national initiatives such as
32 ‘Learning Away’ in which consortia of schools used funding to provide residential
33 opportunities (Kendall & Rodger, 2015) Students in mainstream schooling are shown to
34 benefit from residential experiences (Christie, Higgins & MacLaughlin, 2014) but the
35 increased engagement illustrated by these data is not reflected in published research (Prince
36 et al, 2018).
37
38
39
40
41
42
43
44
45
46
47

48 <Table 3 here>
49
50

51 There appears to have been a change in the subject areas in which outdoor learning is
52 integrated at the two time points in this study. Environmental education and outdoor
53 education were seen much more as curriculum areas in 1995, perhaps reflecting the former as
54 a defined ‘cross-curricular theme’ (Manchester City Council, 1991) and although outdoor &
55
56
57
58
59
60

1
2
3 adventurous activities were only compulsory at KS2 in 1995 within the physical education
4 curriculum, outdoor education was recognised as a curriculum area in its own right. This
5 could be reflective of teachers within the schools who had trained in outdoor and
6 environmental education whereas in 2017, this was not a specialist area although 9% [n=3] of
7 schools reported that they could access specialist support and expertise through governors,
8 local outdoor centre staff or that the staff themselves had a strong personal interest in outdoor
9 activities (see Table 4).
10
11
12
13
14
15
16
17
18
19

20 Teachers in 2017 used the mandatory physical education curriculum as a vehicle for
21 outdoor learning, fewer schools used geography but science is ranked the same in both years.
22 PSHE features in 2017. All the respondents representing only the EYFS stated that they used
23 the outdoors in all curriculum areas. A range of curriculum areas was mentioned in both
24 years including art, music, technology, and drama. 16% (1995, n=10) and 13% (2017, n=5)
25 mentioned that they used the outdoors for literacy/numeracy (or 'language'/'mathematics').
26 Forest School entered the lexicon in the 2017 survey.
27
28
29
30
31
32
33
34
35

36 <Table 4 here>
37
38
39

40 Teachers were asked if there is any activity or experience for which they consider the
41 outdoors to provide the optimum learning environment. In 1995, the main area was
42 'environmental education/nature' (31%, n=19); in 2017 it was 'PSHE' (30%, n=12) with
43 several schools mentioning teamwork as important part of this provision. In 1995, teachers
44 tended to respond to this question by naming subjects within the curriculum; in 2017, there
45 seemed to be a much more open approach and less compartmentalisation, 'whichever less
46 lends itself to that environment', 'experiencing nature', 'reflection' and 'real life situations'
47 were some responses. In EYFS/KS1, there are a 'variety of opportunities' with mention of
48 'role play, large construction, gross motor and coordination skills' and in SEN/D schools,
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3 ‘contextual spatial awareness and freedom’. Interestingly, three schools in 1995 mentioned
4 that residential provided the optimum learning environment but only one mentioned these in
5
6
7
8 2017 even though the percentage of schools undertaking residential had increased. In 2017,
9
10 Forest School was cited by 23% [n=9] of schools as an experience using the outdoors as an
11
12 optimum learning environment.
13
14

15
16 Forest School has become a popular initiative in English primary schools and its
17
18 efficacy in the curriculum is well researched (Cumming & Nash, 2015; Elliott, 2015; Knight,
19
20 2013). It is not easy to ascertain if its implementation is as a result of the recognition of its
21
22 value in regular participation for pupils outdoors, or because many local authorities and
23
24 schools are supporting the professional development of teachers to obtain Forest School
25
26 Leader awards, or both. Forest School training has engendered confidence in teachers who
27
28 have had little experience of outdoor learning and has provided a framework for opportunities
29
30 in curriculum integration.
31
32

33
34 <Table 5 here>
35
36

37
38 Teachers were provided with a number of factors to rank from 1 – 5 (1= most
39
40 important, 2= next most important etc.) that they felt influenced the provision of outdoor
41
42 learning in the curriculum of their school. Table 5 illustrates the overall average rank of
43
44 factors and the difference in ranks. Time and expense were ranked top in both years, although
45
46 expense was more dominant in 1995 and time in 2017, with time a slightly more
47
48 differentiated influence in 2017 (another factor termed ‘more important priorities’ ranked
49
50 equally but not so highly in either year). Interestingly, weather achieved the lowest rank in
51
52 2017 with expertise being much more of an influencing factor and not far behind expense. In
53
54 1995, teachers were asked about the single most enhancing factor for the provision of outdoor
55
56 education and staffing (expertise, skilled adults and number of staff) was equally ranked as
57
58
59
60

1
2
3 top with a well-resourced, close, safe and accessible environment, followed by staff effort
4
5 and enthusiasm.
6
7

8 There are similar findings in studies across different cultural contexts. Zink and Boyes
9
10 (2006) found expense to be the highest ranking barrier to teaching outdoor education in New
11
12 Zealand but Remington and Legge (2017) question whether cost is increased by the choice to
13
14 travel to facilities or expertise at a distance from schools. Füz in a recent extensive online
15
16 survey on ‘out-of-school learning’ in Hungary, reports a desire amongst teachers for this
17
18 practice but that ‘financial arrangements’ and ‘fitting the activities into the syllabus’ to be
19
20 barriers to implementation, which only occasionally takes place (Füz, 2018). The frequency
21
22 of implementation is reflected in Cyprus, where Nemitsa (2017) in research involving 362
23
24 primary teachers, also reports a positive attitude but where the main barriers are bureaucracy,
25
26 lack of time, a rigid curriculum, safety and risk, assessment issues, lack of support and cost.
27
28 In Canada, Dymont (2005) found that three of the barriers recognised by Rickinson et al
29
30 (2004) – teacher confidence and expertise, requirements of school curricula and wider
31
32 curriculum reform (perhaps symptomatic of ‘time’ or ‘more important priorities’) were
33
34 influencing practice but at that time, shortage of time, concerns over health and safety and
35
36 access to resources and support were not influential. Interestingly, she also identified
37
38 additional barriers such as competition from other curriculum areas for example, sports,
39
40 music or drama, which although reported anecdotally from schools in 2017, was not stated
41
42 overtly in survey responses.
43
44
45
46
47
48
49

50 Many of the schools in this study were utilising environments close to the school and
51
52 time as the most influential factor in provision was almost always linked to performativity
53
54 and testing in 2017 as illustrated by comments such as, ‘Outdoor learning is lost while the
55
56 government/senior school leaders/teachers struggle to meet unrealistic targets in core subject
57
58 areas’. (55, suburban⁸)
59
60

1
2
3
4
5
6 The appetite for continuing professional development in areas related to outdoor
7
8 learning was keen in both years with teachers requesting focus on scientific investigation
9
10 outdoors, outdoor and adventurous activities in the school grounds and cross-curricular use of
11
12 the school grounds. However, there has been a shift from requesting support for teaching
13
14 mapwork skills and outdoor adventurous activities in outdoor centres in 1995, to creative
15
16 approaches in the outdoors, teaching numeracy and literacy and Forest School training in
17
18
19
20 2017.

21
22
23 Teachers were asked to state what they considered the place of outdoor
24
25 education/outdoor learning in the curriculum from a list of options and an open answer in
26
27 rank order. The results are shown in Table 6.

28
29
30 <Table 6 here>

31
32
33 The place of outdoor education as a 'subject/approach to learning' stems from the
34
35 Dartington Conference (DES, 1976) at a time when outdoor education was being established
36
37 more formally in the curriculum of schools (Ogilvie, 2013). It seems that, by 2017, the
38
39 notion of outdoor education/learning as a subject in its own right had somewhat diminished
40
41 and has been superseded by its place in the formal curriculum, particularly in physical
42
43 education (outdoor and adventurous activities). This supports the data in table 3. It seems
44
45 that some teachers in both years see outdoor education in the curriculum as a
46
47 subject/approach to learning in its own right and 'indispensable' as argued for in Australia
48
49 (Quay, 2016) - this could reflect the influence of responses from EYFS practitioners.
50
51
52
53
54
55
56
57

58 **Identifying trends in practice**

59
60

1
2
3 After various iterations of the national curriculum, outdoor and adventurous activities are
4 again part of the formal physical education in England and EYFS curricula, and teachers see
5 the place of outdoor learning there in 2017. In 1995, all teachers were involving outdoor
6 education in the geography curriculum, although this and environmental education were seen
7 more as curriculum areas in their own right perhaps due to supporting framework documents
8 and the more widespread initial training of teachers in those areas. This was also reflected in
9 the expertise in schools. However, in 2017, teachers saw the place of outdoor learning most
10 importantly for PSHE, with team building and communication skills often mentioned by
11 respondents.
12
13
14
15
16
17
18
19
20
21
22

23
24 Time and expense were the major factors inhibiting provision in schools, although
25 time (linked to performativity) was more clearly the major factor in 2017, particularly if
26 linked to expertise, 'The curriculum is too formal and pressure for SATS⁹ results mean that
27 teachers are reluctant to take on new ideas ...' (27, rural). This aligns with identified needs
28 for continuing professional development concentrated on the locality and in areas where
29 teachers' expertise can readily be developed in outdoor learning, including supporting
30 curriculum delivery through science, creativity, literacy and numeracy and Forest School.
31
32
33
34
35
36
37
38
39
40
41
42
43

44 ***Good practice: Making it happen***

45
46
47 The research evidence and supporting literature identifies the following key ingredients to
48 enable high quality outdoor learning to be an integral part of the formal curriculum in
49 primary schools (quotations are from the 2017 survey):
50
51

52 *Values and beliefs of teachers*

53
54
55 The importance of teachers' beliefs, drive, effort and enthusiasm was paramount to enabling
56 outdoor learning in both years. Sometimes, the manifestation of this in the curriculum was
57
58
59
60

1
2
3 linked to expertise and personal experience (Remington & Legge, 2017) but also through
4 mechanisms that empower teachers to experiment through distributed forms of leadership and
5 in-school cooperation (Brundrett & Duncan, 2014) and pedagogical transgression to
6 challenge dominant discourses (Merewether, 2017).
7
8
9
10
11
12

13 Life is not computer generated or all about social media, it's about connecting with
14 people, face to face, connecting with environments, getting dirty, experiencing real
15 things and making memories. (68, rural)
16
17
18
19

20 We believe that children often learn better outside the classroom. The factors do not
21 hinder us. We aim to be outside as much as possible. (231, rural)
22
23
24
25

26 There are no factors that would prevent us from learning outside - we would find
27 somewhere. (271, rural)
28
29
30
31

32 We take the learning outdoors at every opportunity. (238, urban - no expertise
33 declared in this school.)
34
35
36
37

38 We believe that outdoor learning is very important for children. It is often what they
39 remember most about school. (242, urban)
40
41
42
43
44

45 Outdoor learning can have a major role in most of the 'formal curriculum' but usually
46 needs a 'champion' or 'specialist' to drive it. (276, urban)
47
48
49
50
51

52 53 *An open approach to curriculum interpretation*

54 Many teachers were embedding outdoor learning across the curriculum through different
55 subjects, topics and experiences:
56
57
58
59
60

1
2
3 I think outdoor education is an approach to delivering a range of curriculum
4 objectives across all subjects. (289, rural)
5
6
7
8
9

10 Our aim is to provide interesting, exciting and experiential learning in every subject -
11 a visit, trip or visitor every topic/subject. (276, urban)
12
13
14
15
16

17 In EYFS in particular, the current curriculum comprising prime areas of learning in
18 communication and language, physical development and personal, social and emotional
19 development (DfE, 2018) provides much scope for learning outdoors:
20
21
22
23
24
25

26 We have identified as many learning outside the classroom opportunities across as
27 many areas of the curriculum as possible. (68, rural).
28
29
30
31
32

33 *Suitable location*

34
35
36 A well-resourced, safe, accessible environment or resource is important, and the breadth of
37 resources accessed by teachers has grown by 2017 to include woodlands, gardens and
38 allotments, and beaches, partly as a result of initiatives and available training. This might be a
39 reflection of the wider agenda for natural schooling, enhancing children's relationship with
40 nature and the use of green spaces.
41
42
43
44
45
46
47

48 In EYFS we use the outdoors every day and encourage the children to take the
49 learning from inside to the outdoor areas. E.g. baking - mud kitchen. PE - bouldering
50 wall. (243, rural)
51
52
53
54
55
56
57

58 *Culture of risk benefit*

1
2
3 Although aspects of safeguarding (more in 2017) and risk management were mentioned in
4
5 1995 and 2017, risk and concerns about safety was ranked low by teachers in both years.
6
7 There seems to be a culture of risk benefit amongst teachers who regularly take children
8
9 outdoors.
10
11

12
13 Risk assessments and paperwork have previously restricted use of the outdoor area
14
15 around school. EYFS team effort has made it possible over the last few years. (316,
16
17 suburban, SEN/D school)
18
19

20 21 *Initiatives*

22
23 It is obvious that some initiatives and funding has supported the development of outdoor
24
25 learning in schools. Some are in clusters of schools or a region, for example, a school in SW
26
27 England that took part in the Natural Connections demonstration project (Waite et al, 2016)
28
29 the 'Step Outside' quality mark for EYFS/KS1 schools in NW England; school gardening
30
31 support and 'Grandparents Gardening Week' (see Grow to School, 2018); some are more
32
33 national or international (e.g. Forest School, see Knight, 2013, and access to forests by the
34
35 Forestry Commission - a government agency, Beach School); some are initiated by schools
36
37 themselves such as 'Forest Fridays' (following ideas such as CIDIO 'Can I do it outside?'
38
39 (Ager, 2018), 'No child left inside' initiative in Oregon, US (Oregon Community Foundation,
40
41 2012), 'Every Child Outdoors' (Hunt, 2018)).
42
43
44
45
46

47 Our Early Years team are currently working towards the 'Step Outside' quality award.
48
49 This has given us more experiences and a mentor to lead us in the right direction.
50
51 (261, urban)
52
53
54

55
56 We are fortunate as a school as we provide Forest School sessions (we got lottery
57
58 funding to secure an area) - that doesn't follow a curriculum and it is good at how
59
60

1
2
3 free/natural it is. We are trying to develop more outdoor learning opportunities over
4
5 the next year that link with curriculum topics. (250, urban)
6
7
8
9

10 **Changes reflecting an upward path for outdoor learning?**

11
12
13 The main locations schools use for outdoor learning are playgrounds and day visits and these
14
15 have not changed between the survey periods but the proportion of schools undertaking
16
17 residential has increased. There continues to be limited use of school environments beyond
18
19 the playground with some evidence of reducing 'green space' rather than a lack of realising
20
21 potential of these spaces. Interestingly, the UK government through its 25 year Environment
22
23 Plan (DEFRA, 2018) has released funding of £6.3 million to support primary schools in areas
24
25 of disadvantage to create and use 'nature friendly' grounds and enable visits that will provide
26
27 children with access to 'green' spaces primarily to promote health and wellbeing and
28
29 engagement with school.
30
31
32
33
34

35 Schools focused their integration of outdoor learning in the formal curriculum in 2017
36
37 in areas that specify relevant knowledge and skills in the curricula Programmes of Study
38
39 (physical education, science and geography – by 83%, 80% and 78% of schools respectively)
40
41 although teachers recognise its value in PSHE and through environmental education. An
42
43 exception to this is in the EYFS, where outdoor play and a broad curriculum framework
44
45 facilitate the inclusion of outdoor learning by committed practitioners. In 1995, outdoor
46
47 education was integrated in geography by all schools and recognised as a subject in its own
48
49 right by 75% of respondents, perhaps because it was previously a more common specialist
50
51 subject in initial teacher training. The level of expertise of teachers in primary schools
52
53 reflects this as the data showed that it has decreased by 12% between the two surveys.
54
55
56
57
58
59
60

1
2
3 Although there are barriers and challenges to the implementation of outdoor learning
4 in primary schools in England, these have not changed significantly over the last 22 years and
5 there is much cause for optimism. Expense and time were the two major factors influencing
6 provision with expense more predominant in 1995 and time in 2017. Teachers now believe
7 that the place of outdoor learning within the curriculum is foremost within physical education
8 (where 'outdoor and adventurous activities' are specified). However, second to its
9 implementation in this subject in the formal curriculum, in 2017 they also saw it as an
10 approach to teach PSHE.
11
12
13
14
15
16
17
18
19
20
21
22
23
24

25 **Conclusion**

26
27
28 This paper seeks to ascertain meaning from albeit limited and self-reported data from
29 teachers for enabling practice in schools. It has identified five key 'ingredients' to enable
30 outdoor learning to take place in primary schools, namely: The values and beliefs of teachers;
31 an open approach to curriculum interpretation; a suitable location; a culture of risk benefit;
32 and, initiatives.
33
34
35
36
37
38
39

40 Responses from teachers in 2017 show a more diverse range of environments being
41 used for learning outdoors (some supported by training and funding initiatives), integration
42 across a range of curriculum areas and a determination to seek out opportunities and expertise
43 is evident from the data. It could be argued that the term 'outdoor learning' (used in 2017) is
44 broader than 'outdoor education' (used in 1995) and that frameworks such as the Learning
45 outside the Classroom Manifesto have widened this further. However, it was evident that
46 many teachers in both years hold strong value sets and belief in the importance of learning
47 outdoors and that this is key to making it happen.
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3 Risk management is seen by some teachers as adding to the burden of administration
4 that detracts from the time available to plan and implement high quality outdoor learning
5 experiences. Others see the notion of managed risk as part of the value of outdoor
6 experiences and an important part of the learning that children can take away with them.
7
8
9
10
11
12

13 Examination across the data sets provides an indicator broadly termed 'initiatives' as
14 levers to implementation at a macro-level. These comprise international approaches and
15 associated training such as Forest School and projects in which schools have been supported
16 to develop practice. Some schools have also achieved, or are in the process of achieving,
17 quality marks and catch phrases also appear successful to either drive the curriculum
18 integration of outdoor learning or raise awareness of stakeholders, particularly where a whole
19 school approach is envisioned.
20
21
22
23
24
25
26
27
28
29

30 This research is part of a wider project on the influences of curriculum reform on
31 school-based provision in outdoor learning in England. It alludes to comparisons in the
32 barriers and enablers to practice in a selection of other countries for children 3-11 years, and
33 this could be extended further. Objectivity and depth could be also be examined through
34 using government inspection data and layered analyses in selected schools. This research
35 seeks to extend the evidence base by moving beyond summarising change to influence
36 practice by identifying the key 'ingredients' for successful implementation of outdoor
37 learning in English primary schools.
38
39
40
41
42
43
44
45
46
47
48
49
50

51 **Disclosure statement**

52 No potential conflict of interest was reported by the author.
53
54

55 **Notes**

56
57 ¹Charlotte Mason College, Ambleside, Cumbria, UK – a legacy higher education institution of the
58 University of Cumbria

59 ²University of Cumbria, UK
60

³EYFS: birth to 5 years

⁴KS1: 5-7 years

⁵KS2: 7-11 years

⁶SEN/D: Special Educational Needs/Disability

⁷PSHE: Personal, Social, Health and Economic Education (PSE: Personal and Social Education in 1995)

⁸Attributed quotations: (anonymous identification number, urban/suburban/rural)

⁹SATs: Standard Assessment Tasks (testing at the end of KS2)

References

Adèr, H.J. & Mellenbergh, G.J. (1999) *Research methodology in the social and behavioural sciences*. London: SAGE.

Ager, J. (2018) *Transcending CIDIO ('Can I Do It Outside?') An (auto)ethnographic case study of designing a progressive primary school curriculum that embraces outdoor learning as a pedagogical approach*. (Unpublished master's thesis). University of Cumbria, UK.

Allison, P., Carr, D. and Meldrum, G. (2012) 'Potential for excellence: interdisciplinary learning outdoors as a moral enterprise', *Curriculum Journal*, 23(1), pp.43-58.

Barlich, Y. & Holtom, B.C. (2008) Survey response rate levels and trends in organisational research. *Human Relations*, 61(8), 1139-1160.

Bristol Online Survey (2018) <https://www.onlinesurveys.ac.uk/about/>

Carrington, D. (2016) *Three-quarters of UK children spend less time outdoors than prison inmates – survey*. The Guardian, 25 March 2016. Retrieved from:

<https://www.theguardian.com/environment/2016/mar/25/three-quarters-of-uk-children-spend-less-time-outdoors-than-prison-inmates-survey>

Christie, B., Higgins, P. & McLaughlin, P. (2014) 'Did you enjoy your holiday?' Can residential outdoor learning benefit mainstream schooling? *Journal of Adventure Education and Outdoor Learning*, 14(1), 1–23.

1
2
3
4
5
6 Cohen, L., Manion, L. & Morrison, K. (2018) *Research methods in education*. 8th ed.

7
8 London, New York: Routledge.

9
10
11 Cresswell, J. W. & Cresswell, J.D. (2018) *Research design: Qualitative, quantitative and*
12
13 *mixed-methods approaches*. London: SAGE.

14
15
16 Cumming, F. & Nash, M. (2015) An Australian perspective of a forest school: Shaping a
17
18 sense of place to support learning. *Journal of Adventure Education and Outdoor Learning*,
19
20
21
22
23 15(4), 296-309.

24 Department for Education (DfE) (2018) National curriculum. Retrieved from

25
26
27 <https://www.gov.uk/government/collections/national-curriculum>

28
29 Department for Education and Science (DfES). (2006). *Learning outside the classroom*.

30
31 Nottingham: DfES.

32
33
34 Department of Education and Science (DES). (1976) *Outdoor education study conference:*
35
36
37 *Dartington Hall, 1975*. London: HMSO.

38
39
40 Department of Environment, Food and Rural Affairs (DEFRA). (2018) *A green future: Our*
41
42
43 *25 year plan to improve the environment*. Retrieved from

44
45
46 <https://www.gov.uk/government/publications/25-year-environment-plan>

47
48 Dolan, M. (2015) Place-based curriculum making: Devising a synthesis between primary
49
50
51
52
53
54 geography and outdoor learning. *Journal of Adventure Education and Outdoor Learning*,
55
56
57 16(1), 1–14.

58
59
60 Dymont, J. (2005) Green school grounds as sites for outdoor learning: Barriers and
opportunities. *International Research in Geographical and Environmental Education*, 14(1),
28-45.

1
2
3 Dymont, J.E., Bell, A. and Green, M. (2017) Green outdoor environments: Settings for
4 promoting children's health and wellbeing, In H. Little, S. Elliott and S. Wyver (Eds.),
5
6 *Outdoor Learning environments: Spaces for exploration, discovery and risk-taking in the*
7
8 *early years* (pp. 38-58). Australia: Allen and Unwin Academic.

9
10
11
12 Elliott, H. (2015) Forest school in an inner city: Making the impossible possible.
13
14 *Education 3-13*, 43(6), 722-730.

15
16
17 Fägerstam, E. (2014) High school teachers' experience of the educational potential of outdoor
18
19 teaching and learning. *Journal of Adventure Education and Outdoor Learning*, 14(1), 56-81.

20
21
22
23 Fiennes, C., Oliver, E., Dickson, K., Escobar, D., Romans, A. & Oliver, S. (2015) *The*
24
25 *existing evidence base about the effectiveness of outdoor learning*. London: Giving
26
27 Evidence; University College London.

28
29
30 Füz, N. (2018) Out-of-school learning in Hungarian primary education: Practice and barriers.
31
32 *Journal of Experiential Education*. Doi:10.1177/1053825918758342.

33
34
35 Galton, M., Hargreaves, L., Combes, C. & Wall, D with Pell, A. (1999) *Inside the primary*
36
37 *classroom: 20 years on*. London: Routledge.

38
39
40
41 Grow to School (2018) www.growtoschool.co.uk/

42
43
44 Harvey, M., Rankine, K. & Jensen, R. (2017) Outdoor learning hubs. A Scottish attainment
45
46 challenge innovation fund project report. Retrieved from [www.sapoe.org.uk/wp-](http://www.sapoe.org.uk/wp-content/uploads/2018/01/Outdoor-Hub-Learning-Report-Dec-2017-V1.pdf)
47
48 [content/uploads/2018/01/Outdoor-Hub-Learning-Report-Dec-2017-V1.pdf](http://www.sapoe.org.uk/wp-content/uploads/2018/01/Outdoor-Hub-Learning-Report-Dec-2017-V1.pdf)

49
50
51 Hattie, J., Marsh, H.W., Neill, J.T. & Richards, G.E. (1997) Adventure education and
52
53 Outward Bound: Out-of-class experiences that make a lasting difference, *Review of*
54
55 *Educational Research*, 67(1), 43-87.

1
2
3 Holland, J., Thomson, R. & Henderson, S. (2006) *Qualitative longitudinal research: A*
4 *discussion paper*. London: London South Bank University.

5
6
7
8 Humberstone, B. & Stan, I. (2009) Well-being and outdoor pedagogies in primary schooling:
9 The nexus of well-being and safety. *Australian Journal of Outdoor Education*, 13(2), 24-32.

10
11
12
13 Hunt, A. (2018) *Every Child Outdoors -enabling regular outdoor experiences throughout*
14 *childhood*. Unpublished report, Natural England.

15
16
17
18
19 Institute for Outdoor Learning (2018) *Outdoor learning research. Evolving research and*
20 *practice development in outdoor learning*. Retrieved from [https://www.outdoor-learning-](https://www.outdoor-learning-research.org/Research/Research-Reports)
21 [research.org/Research/Research-Reports](https://www.outdoor-learning-research.org/Research/Research-Reports)

22
23
24
25
26 James, C. (2014) Trends in governance and governing of schools in England. *Local*
27 *Government Studies*, 40(6), 893-909.

28
29
30
31 James, J.K. & Williams, T. (2017) School-based experiential outdoor education: A neglected
32 necessity. *Journal of Experiential Education*, 40(1), 58-71.

33
34
35
36
37 Karpinnen, S.J.A. (2012) Outdoor adventure education in a formal education curriculum in
38 Finland: Action research application. *Journal of Adventure Education and Outdoor Learning*,
39 12(1), 41–62.

40
41
42
43
44 Kelley, K., Clark, B., Brown, V. & Sitzia, J. (2003) Good practice in the conduct and
45 reporting of survey research. *International Journal for Quality in Health Care*, 15(3), 261-
46 266.

47
48
49
50
51 Kendall, S., & Rodger, J. (2015). *Paul Hamlyn Foundation evaluation of Learning Away:*
52 *Final report*. London: Paul Hamlyn Foundation.

- 1
2
3 Knight, S. (2013) *Forest Schools and outdoor learning in the Early Years*. London: SAGE.
4
5
6 Leather, M. (2018). Outdoor education in the national curriculum: The shifting sands in
7
8 formal education. In P. Becker, C. Loynes, B. Humberstone & J. Schirp (Eds.) *The changing*
9
10 *world of the outdoors* (pp.179-193). Oxford: Routledge.
11
12
13 Little, H. (2015) Mothers' beliefs about risk and risk taking in children's outdoor play.
14
15 *Journal of Adventure Education and Outdoor Learning*, 15(1), 24-39.
16
17
18 LotC (2018) *Learning outside the classroom. Manifesto*. Retrieved from
19
20 <http://www.lotc.org.uk/about/manifesto/>
21
22
23
24 Macquarrie, S. (2016) Everyday teaching and outdoor learning: Developing an integrated
25
26 approach to support school-based provision. *Education 3-13*, 1-17.
27
28
29 Manchester City Council (1991) *Cross-curricular themes: Environmental Education*.
30
31 Manchester: Manchester CC.
32
33
34 Mathers, N., Fox, N. & Hunn, A. (2007) *Surveys and questionnaires*. Sheffield: NIHR
35
36 Research Design Service.
37
38
39 Maynard, T. & Waters, J. (2007) Learning in the outdoor environment: A missed
40
41 opportunity? *Early Years*, 27(3), 255-265.
42
43
44 Merewether, J. (2017) Making the outdoors visible in pedagogical documentation. In A.
45
46 Fleet, C. Patterson & J. Robertson (Eds.), *Pedagogical documentation in Early Years*
47
48 *practice: Seeing through multiple perspectives* (pp.131-145). London: SAGE.
49
50
51
52 Neill, J. (2008). Meta-analytic research on the outcomes of outdoor education. 6th Biennial
53
54 Coalition for Education In. The Outdoors Research Symposium, Bradford Woods, IN, 11-13
55
56 January, 2002.
57
58
59
60

- 1
2
3 Nemitsa, K. (2017) *Primary education teachers' attitudes and practice towards outdoor*
4 *learning activities as a means to maximise learning outcomes for primary school children in*
5 *Cyprus*. (Unpublished master's thesis), University of Cumbria, UK.
6
7
8
9
10
11 Nicol, R. (2014) Entering the fray: The role of outdoor education in providing nature-based
12 opportunities that matter. *Educational Philosophy and Theory*, 46(5), 449-461.
13
14
15
16 Norðdahl, K. & Jóhannesson, I.A. (2013) Children's outdoor environment in Icelandic
17 educational policy. *Scandinavian Journal of Educational Research*. doi:10.1080/00313831.
18 2013.821091.
19
20
21
22
23 Quay, J. (2016) Outdoor education and school curriculum distinctiveness: More than content,
24 more than process. *Journal of Outdoor and Environmental Education*, 19(2), 42-50.
25
26
27
28 Oregon Community Foundation (2012) *Launching, managing and sustaining an outdoor*
29 *school program*. Portland: OFC.
30
31
32
33
34 Ogilvie, K. (2013) *Roots and wings: A history of outdoor education and outdoor learning in*
35 *the UK*. Lyme Regis: Russell House Publishing.
36
37
38
39 Power, S.C., Taylor, C., Rees, G. & Jones, K. (2009) Out of school learning: variations in
40 provision and participation in secondary schools. *Research Papers in Education*, 24(4), 439-
41 460.
42
43
44
45
46
47 Prince, H, Christie, B., Humberstone, B. & Pedersen Gurholt, K. (2018) Adventure
48 education and outdoor learning: Examining journal trends since 2000. In P. Becker, C.
49
50
51 Loynes, B. Humberstone & J. Schirp (Eds.) *The changing world of the outdoors* (pp. 144-
52 159). Oxford: Routledge.
53
54
55
56
57
58
59
60

1
2
3 Prince, H. and Exeter, D. (2016) Formal curricular initiatives and evaluation in the UK. In B.
4 Humberstone, H. Prince & K.A. Henderson (Eds.) *International Handbook of Outdoor*
5
6 *Studies* (pp. 141-150). Oxford: Routledge.
7
8

9
10
11 Quibell, T., Charlton, J. & Law, J. (2017) *Wilderness schooling: A controlled trial of the*
12
13 *impact of an outdoor education programme on attainment outcomes. British Educational*
14
15 *Research Journal*, 43(3), 572-587.
16

17
18 Remington, T. & Legge, M. (2017) Outdoor education in rural primary schools in New
19
20 Zealand: a narrative inquiry. *Journal of Adventure Education and Outdoor Learning*, 17(1),
21
22 55-66.
23

24
25
26 Rickinson, M., Dillon, J., Teamey, K., Morris, M., Choi, M.Y., Sanders, D. & Benefield, P.
27
28 (2004) *A review of research on outdoor learning*. London: National Foundation for
29
30 Educational Research & King's College, London.
31

32
33 Savery, A., Cain, T., Garner, J., Jones, T., Kynaston, E., Mould, K., Nicolson, L., Proctor, S.,
34
35 Pugh, R., Richard, E. & Wilson, D. (2017) Does engagement with Forest School influence
36
37 perceptions of risk held by children, their parents, and their schools staff. *Education 3-13*,
38
39 45(5), 519-531.
40
41

42
43 Stern, M.J., Powell, R.B & Hill, D. (2014) Environmental education program evaluation in
44
45 the new millennium: What do we measure and what have we learned? *Environmental*
46
47 *Education Research*, 20(5), 581-611.
48

49
50
51 Waite, S. (2010) Losing our way? The downward path for outdoor learning for children
52
53 aged 2-11 years. *Journal of Adventure Education and Outdoor Learning*, 10(2), 111-126.
54

55
56 Waite, S., Passy, R., Gilchrist, M., Hunt, A., & Blackwell, I. (2016). *Natural Connections*
57
58 *Demonstration Project 2012-2016: Final report*. Natural England Commissioned report
59
60

1
2
3 NECR215. Available at:
4

5 <http://publications.naturalengland.org.uk/publication/6636651036540928>
6
7

8 Zink, R. & Boyes, M. (2006) The nature and scope of outdoor education in New Zealand
9 schools. *The Australian Journal of Outdoor Education*, 10(1), 11-21.
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

For Peer Review Only

1
2
3 **Changes in outdoor learning in primary schools in England, 1995 and**
4 **2017: Lessons for good practice**
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

For Peer Review Only

Table 1: Survey datasets, Outdoor learning in primary schools in England, 1995 and 2017

Phase	Location descriptor			1995 survey	Total responses by phase (1995)	2017 survey	Total responses by phase (2017)	Duplicates	Totals both surveys	Rural schools both surveys	Suburban schools both surveys	Urban schools both surveys
(EYFS) KS1 & KS2	rural			11	48% [n=29]	7	67% [n=27]	3	18	26% [n=26]	30% [n=30]	44% [n=45]
		suburban		9		5		3				
			urban	9		15		2				
KS2	rural			2	34% [n=21]	2	12% [n=5]		4			
		suburban		8		3		2				
			urban	11								
KS1	rural			3	15% [n=9]		3% [n=1]		3			
		suburban				1 (+EYFS)		1				
			urban	6								
SEND		suburban		2	3% [n=2]	1	3% [n=1]		3			
EYFS	rural					1	15% [n=6]		1			
		suburban				1						
			urban			4		1^				
Number of responses [n]				61		40			11	101		

EYFS (Early Years Foundation Stage): birth to 5 years [nursery & reception in 1995]
 KS1 (Key stage 1): 5-7 years
 KS2: (Key stage 2) 7-11 years
 SEN/D: Special Educational Needs/Disability

^ KS2 urban in 1995

Table 2: Locations for outdoor learning, primary schools in England

Rank	1995		2017	
1	Playgrounds (95%)	[n=58]	Playgrounds (88%)	[n=35]
2	Day visits (87%)	[n=53]	Day visits (83%)	[n=33]
3	Local area – built (79%)	[n=48]	Residential (78%)	[n=31]
4	Other school grounds (74%)	[n=45]	Other school grounds (75%)	[n=30]

For Peer Review Only

Table 3: Curriculum areas for outdoor learning, primary schools in England

Rank	1995	2017
1	Geography (100%) [n= 61]	Physical education (83%) [n=33]
2	Science (95%) [n=58]	Science (80%) [n=32]
3	Environmental education (93%) [n=57]	Geography (78%) [n=31]
4	Outdoor education (75%) [n=46]	PSHE ⁷ (70%); Environmental education (70%) [n=28;28]

For Peer Review Only

Table 4: Stated expertise* of teachers, primary schools in England

	1995	2017
Yes	53% [n=32]	41% [n=16]
No	47% [n=29]	59% [n=24]

*defined as 'any member of staff with expertise in outdoor education (e.g. as major part of teacher training, holding national governing body awards in outdoor activities, substantial involvement and Continuing Professional Development (CPD) attendance over time.)'

For Peer Review Only

Table 5: Factors influencing the provision of outdoor learning experiences as part of the school curriculum, primary schools in England

Rank	1995	Difference in mean rank	2017	Difference in mean rank
1	Expense		Time	
2	Time	0.08	Expense	0.28
3	Weather	0.44	Expertise	0.28
4	More important priorities	0.57	More important priorities	0.46

For Peer Review Only

Table 6: The place of 'outdoor education' (1995, n=61)/'outdoor learning' (2017, n=40) in the curriculum, primary schools in England

Rank	1995	2017
1	A subject/approach to learning in its own right	Included in PE as outdoor and adventurous activities
2	Included in PE as outdoor and adventurous activities	For personal, social (and health) education
3	For personal, social (and health) education	A subject/approach to learning in its own right
4	Taught through geography	Taught through geography

For Peer Review Only