

1 **How trainee physical education teachers in England write, use and evaluate lesson plans**

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6
7 **Abstract**

8
9 Traditionally, all physical education initial teacher training (PEITT) courses in England, and in many
10 other countries, require trainee teachers to complete detailed lesson plans for each lesson they teach in
11 their school-based practicum and then to evaluate those lessons. However, there has been a limited
12 amount of research on lesson planning in PEITT generally or in England specifically. Hence, the purpose
13 of this study was to gain an initial insight into how trainee physical education teachers write, use and
14 evaluate lesson plans. Two-hundred-and-eighty-nine physical education trainees in England completed a
15 questionnaire about lesson planning after finishing a block school-based practicum. Frequencies and
16 percentages were calculated for the limited-choice questions on the questionnaires and open-ended
17 questions were analysed using content analysis. Results showed mixed responses, with no one method
18 followed by all trainees. Some trainees stated they planned and/or evaluated lessons as taught. Some
19 trainees stated they completed the plan and/or evaluation proforma to 'tick a box'. Further, the highest
20 percentage of trainees stated it took ½ to 1½ hours to plan each lesson. Although most trainees stated they
21 found the plan useful in the lesson, others stated they found it too detailed to use. Some trainees stated
22 they did not deviate from the plan in the lesson whereas others adapted the plan. The majority of trainees
23 stated that evaluation enabled them to see if objectives had been achieved. Results are discussed in
24 relation to teaching trainees how to plan lessons in PEITT in England.

25
26 **Key words:** accountability; England; initial teacher training; lesson planning; model of planning; time for
27 planning; uses of lesson plans

1 **Purposes and importance of lesson planning**

2
3 It is generally recognised that “good-quality teaching depends on effectively planned lessons” (Office for
4 Standards in Education, Children’s Services and Skills (Ofsted), 2011, p. 51) and this enhances pupil
5 learning. Drost and Levine (2015, p. 37) argued that “well-aligned lesson plans lead to better student
6 learning outcomes”, whilst the Department for Education (DfE) in England (2016, p. 5) suggested that
7 planning “is critical and underpins effective teaching, playing an important role in shaping students’
8 understanding and progression”. Thus, “the ability to plan or to make decisions that will shape and guide
9 the course of instruction is regarded as central to the role of the teacher” (Goc-Karp and Zekrajesk, 1987,
10 p. 377).

11 Siedentop (1983) identified several purposes of lesson planning, i.e. to remind a teacher of what
12 to achieve in each lesson and provide a script for attaining major objectives; help judge the results of
13 the lesson; and as a tool in reviewing and improving unit plans and instruction. However, lesson plans
14 also serve other purposes. In England, they provide evidence of attainment against the Teachers’
15 Standards (DfE, 2012) which are the minimum statutory requirements trainee teachers need to meet in
16 order to gain qualified teacher status (QTS), a requirement to teach in state schools. Likewise, other
17 countries have standards for teachers (e.g. Australia (AITSL, 2011); New Zealand (Education Council
18 (2015) and various European countries (European Commission (2013)). In England, lesson plans are
19 also used for external accountability through inspections of initial teacher training (ITT) by Ofsted,
20 the independent government agency which reports directly to Parliament, whose role is to inspect and
21 regulate services that care for children and young people and services providing education and skills
22 for learners of all ages. Inspections comprise a combination of data, observation and discussion. A
23 report is published following each inspection. Inspectors are qualified teachers (and for inspections of
24 ITT, many inspectors are working in teacher training) who have been trained by Ofsted to undertake
25 inspection within a specific framework. Thus, lesson plans are written by trainees to serve a number
26 of purposes. As stated by BJ (the participant in a study by Barrett et al. (1991, p. 97) “You do not
27 realize it ... but as a student teacher, your plans are written for others”.

1 Causton-Theoharis, Theoharis and Trezek (2008) reported that in almost every ITT course,
2 considerable time and effort is spent on teaching trainees how to create detailed lesson plans, while also
3 learning about: the relationship between theories of teaching, teaching strategies, pupils and learning; the
4 relationship between theory and practice; and how to place the pupil in the centre of the process of lesson
5 design. A study by Derri et al. (2014) on the ability of 27 trainees to plan physical education lessons for
6 elementary pupils concluded that a practicum course (lesson planning, teaching, observing, evaluating,
7 supervision) assisted learning in terms of creating more effective lesson plans as assessed in the study.
8 They suggested that presenting trainees with model lesson plans that exemplify the process could help
9 them to know what a lesson plan actually is and to understand the relationship between planning and
10 teaching. Further, the Carter Review of ITT in England (2015, p. 10) recommended “Planning should be
11 treated as a priority and given significant time and emphasis. Trainees should be encouraged to master
12 established and evidence-based approaches. Trainees should be taught how to find, adapt and evaluate
13 resources in their planning”.

14

15 **Models of lesson planning**

16

17 A number of models of lesson planning have been identified. For example, the “backwards design
18 model” (Wiggins and McTighe, 2005, p. 5) in which assessments are constructed before learning
19 experiences are planned to ensure that teachers do not focus solely on content coverage; rather, they
20 know how desired outcomes will be demonstrated. For Stenhouse (1975) and Egan (1992, 1997) a
21 naturally-emerging “naturalistic” or “organic” model involves starting with activities, then developing
22 objectives in order to support trainees to understand the mismatch between specific objectives and the
23 complexity of classrooms. John (2006) proposed a dialogical model of lesson planning in which
24 problem-level processes are a pre-cursor to the construction of the product (the plan). Brown and
25 Cheffers (1991) advocated Morrisey’s (1983) key results planning method. Lessons are planned in a
26 linear manner, but time and effort are focused on those aspects of a lesson essential for successful
27 performance of the activity/achievement of objectives. Hence, any unnecessary details are eliminated.

28 Despite there being a number of possible models for planning lessons, according to John (2006),

1 the dominant model of lesson planning adopted on the majority of ITT courses is a rationalistic and
2 technical, linear model. This is based on Tyler's (1949) linear, ends-means model, which is “intended
3 to provide teachers with a powerful model to follow in their planning” (Placek, 1984, p. 39). This
4 model comprises four sequential steps: formulating learning objectives, selecting appropriate learning
5 experiences, organising the learning environment and evaluation in order to inform planning of the
6 next lesson. This model has been promoted in many physical education texts over a considerable
7 period of time (e.g. Arthur and Capel, 2015; Breckon, 2014; Mosston, 1981; Siedentop, 1983;
8 Siedentop, Herkowitz and Rink, 1984).

10 **Challenges associated with lesson planning**

11
12 Despite the importance of lesson planning and the time and effort devoted to this on ITT courses,
13 research has suggested there are issues with lesson planning. For example, despite a linear/end-means
14 model of lesson planning being taught to trainees, as far back as 1981 Clark (1981) questioned whether
15 the rational-linear model accurately describes planning in the real world. Likewise, research by Stanescu
16 (2012) suggested there is a difference between planning and practice in physical education and that
17 participants considered year and semester plans to be more useful than lesson plans.

18 Further, John (1992) suggested that beginning teachers had difficulty constructing objectives before
19 they had even considered the central idea of the lesson, activities, methods or resources required and
20 available. John (1991) found that many trainees had difficulty matching goals, objectives and forms of
21 evaluation, particularly early in their learning to teach. Calderhead and Shorrock (1997) found many
22 beginning teachers were uncertain about how to achieve a number of different outcomes. In turn, this
23 resulted in them having difficulty juggling objectives, integrating topics, understanding concepts or tasks,
24 often causing a mismatch between goals and objectives on the one hand and the teaching and learning
25 process on the other. Likewise, according to John (2006), particularly early in ITT, trainees had difficulty
26 making predictions about pupils' responses and had problems adjusting their practice according to the
27 demands they encountered. Further, in physical education, research by Placek (1984) on how teachers
28 plan showed that, for many teachers, objectives are not the first consideration or starting point for

1 planning. Although there is no consensus about the appropriate starting point, for many teachers the main
2 focus of planning is the “activities and content, with less attention paid to pupils' needs, objectives, or
3 evaluation” (p. 40). Likewise, evaluation is not considered important by all teachers. Further, where the
4 means of recording planning is flexible, Placek suggested that Tyler’s (1949) four steps are not always
5 included, with evaluation being the least frequently used of the four aspects, followed by objectives.
6 Evans and Penney (1995) reported some teachers do not use a formal model for planning but instead
7 employ informal planning habits that typically focus on daily activities, not coherent efforts to match
8 objectives with content.

9 Previous research has also suggested that no one method can fit all situations as trainees make
10 decisions in a variety of ways, therefore do not plan, write and use lesson plans in the same way. John
11 (2000) suggested that, rather than a step-by-step or linear progression of decision-making, teachers
12 (including trainees) consider a range of elements in planning decisions, including time on task and
13 perceived pupil abilities and differentiation. Many teachers are guided in their planning and teaching
14 by broad intentions, intuition, tacit knowledge and lesson images. Many elaborate on material
15 presented in textbooks or other curriculum materials and re-structure knowledge for and with pupils
16 during the process of planning and teaching. John (2000) continued that, over time, lesson plans
17 become more detailed, to include factual information from text books which results in an information
18 giving model of instruction. Likewise, for Wertsch (1991), a model of planning and teaching which
19 leads from aim to input to task to feedback to evaluation, underpins a transmission model of teaching,
20 where the receiver is seen as passive. For him, it reflected an approach to teaching and learning in
21 which reflection is only marginal. A study by Jones and Vesiland (1996) found that, as trainees gain
22 more experience, they move from largely unalterable, scripted lesson plans with prepared materials to
23 focusing on a broader range of concerns, including classroom management, organisation of learning
24 and the need for greater flexibility and creativity in light of the unpredictable environment of
25 classrooms. Over time, the required course linear planning format was seen as unnecessary to their
26 needs as teachers; rather, planning became something that held the various pieces of teaching and
27 learning together.

28 Stroot and Morton (1989) found that over one year, the amount of detail teachers wrote on lesson

1 plans varied. In physical education, Placek (1984, p. 43) found that teachers wrote brief lesson plans,
2 in some cases "a bare list of activities". According to Barrett et al., (1991, p. 81) "As the mental image
3 is developed with experience, teachers begin to write only enough to remind them of their plan-in-
4 memory". Other research on using lesson plans to support teaching has suggested that the majority of
5 secondary trainees use lesson plans as memory aids while teaching (Kagan and Tippins, 1992).

6 According to John (2006), trainees described their planning as time-consuming as they struggled to
7 make sense of the numerous decisions they had to make regarding content, management, time, pacing and
8 resources. One of the recommendations of a report by the Independent Teacher Workload Review
9 Group (DfE, 2016, p. 12) on reducing the workload burden on teachers and eliminating unnecessary
10 workload around planning and teaching resources was that "ITT providers should review their demands
11 on trainee teachers and concentrate on the purpose of planning and how to plan across a sequence of
12 lessons". However, trainees are still held accountable for the quality of their planning and the impact it
13 has on pupil progress through the Teachers' Standards (DfE, 2012).

14 To summarise, whilst literature identifies key benefits of lesson planning, there are also challenges,
15 including the relevance of the process to current practice, the construction of objectives and
16 achievement of outcomes and the time spent on planning.

17

18 **Purpose of the study**

19

20 Despite the importance and wide-spread and long-standing use of detailed lesson planning proforma
21 designed to be completed in a linear manner, and the considerable time and effort spent on teaching
22 trainees to write lesson plans, research on lesson planning is limited. Much of the research on lesson
23 planning in physical education we have found is now dated. Results of research might not be relevant in
24 the accountability driven system in which trainees are learning to teach in England, with detailed lesson
25 planning being required to support pupils' learning, but also to provide evidence of meeting the Teachers'
26 Standards (DfE, 2012) and for external accountability purposes.

27 As a result, we know little about lesson planning by trainees. We do not know, for example, how
28 trainees write lesson plans within the framework given, how they use them in the classroom or how they

1 evaluate lessons once taught. Thus, the purpose of this study was to gain an initial insight into how
2 trainee physical education teachers in England write, use and evaluate their lesson plans in their school-
3 based practicum.

4 5 **Methodology and research design**

6
7 This study was an empirical, descriptive study, designed to gain an initial insight into lesson planning by
8 physical education trainees in England.

9 10 ***Participants***

11 The participants in this study were physical education trainees learning to teach in secondary schools in
12 three universities in England. Institutions, courses and hence trainees were selected by convenience
13 sampling. These trainees were studying on either a one-year postgraduate certificate of education (PGCE)
14 or on the third and/or fourth year of a three/four-year undergraduate course, all of which were university-
15 led in partnership with schools. Three-hundred-and-forty-three trainees were invited to participate in the
16 study before and after they completed a block of time in school. Three-hundred-and-fifteen voluntarily
17 agreed to participate, giving a response rate of 91.8 percent. Of these, the responses of 289 trainees who
18 completed the questionnaire after school-based practicum (91.7 percent of the participants in the study)
19 are included in this paper.

20 21 ***The context***

22 Trainees on a PGCE course had previously completed a three-year sports-related degree course. On
23 the PGCE course university-based work was interspersed with school-based practicums, with 24
24 weeks spent in school (divided between two schools) and 12 in the university. Those trainees who
25 were on an undergraduate course were studying their subject alongside learning to teach. At all three
26 universities trainees spent periods of time in the university and in school in each of the three/four
27 years of the course. Although the exact length of the practicums varied across courses, between 6 and
28 12 weeks were spent in school in each of the third and fourth years

1 On both PGCE and undergraduate courses, university-based work focused on developing subject
2 specific content and pedagogical knowledge and a critical understanding of issues and theories that
3 impact upon classroom practice in teaching, learning and assessment in secondary schools. This
4 included, for example, theories of teaching and learning, teaching strategies and knowledge about
5 learners, which trainees then applied in school. On undergraduate courses students also covered
6 relevant sport and exercise sciences content. On all of the courses there was a focus on developing
7 critical self-awareness and becoming a reflective practitioner.

8 All courses met the requirements for teacher training in England and were regularly inspected by
9 Ofsted. The trainees on all courses were required to provide evidence that they had met the Teachers'
10 Standards (DfE, 2012) by the end of their course to enable them to gain QTS.

11 On all PEITT courses in the UK there is a requirement for trainees to complete detailed lesson plans
12 for each lesson they teach in their school-based practicum and then to evaluate those lessons. On all
13 courses at all three universities, trainees were taught how to write lesson plans in the university-based part
14 of their course. They then had the opportunity to apply theory to practice within micro-teaching and serial
15 and block school-based practicums. In school, trainees were supported by a mentor (an experienced
16 physical education teacher with responsibility for supporting a trainee's development and in assessing
17 them against the Teachers' Standards (DfE, 2012) in order for them to gain QTS). Most trainees were
18 expected to submit lesson plans to their mentor for feedback prior to teaching a lesson; however, there
19 were no hard and fast rules for mentors and practice in each school could be different.

20 All universities and courses in this study used the linear means/ends model for lesson planning.
21 Although the specific detailed planning proforma at each university differed slightly, they were all
22 designed for trainees to work logically through the proforma from beginning to end. They all required
23 very similar information. This included basic information about the class and the lesson to inform and
24 underpin the detailed planning of the lesson itself, e.g. year, number in class, topic, length of lesson,
25 number of lesson within the unit of work, resources/equipment needed, as well as information about the
26 ability range and prior knowledge and experiences of pupils in the class. The plan then required specific
27 objectives (generally differentiated according to those which all, most or some pupils could achieve
28 and/or divided into psychomotor, cognitive and affective objectives) developed from evaluation of the

1 previous lesson. (In some plans objectives were called intended learning outcomes (ILOs). However, the
2 word objectives is used in this paper, except where participants have specifically used the term ILO.) The
3 plan continued with lesson content/material and specific activities, time for each activity, teaching
4 methods and learning experiences, organisation and teaching points to enable the identified objectives to
5 be achieved. The proforma concluded with an evaluation to be completed after the lesson had been taught
6 in order to provide information for planning the next lesson.

7

8 *Instruments and procedures*

9 Data were collected by questionnaire, divided into three sections: writing a lesson plan; using a lesson
10 plan; evaluating a lesson. The majority of questions were open-ended, although some required
11 respondents to tick the relevant box from a limited choice menu. Examples of questions included:

12 *Writing the lesson plan*

13 1. How do you work through the lesson planning model you are given? (work through from beginning to
14 end/deviate from the model given/it depends on the lesson)

15 Please explain why you work through the model in this way.

16 If you deviate from the plan what order do you plan the lesson in? Why?

17 2. What parts of the lesson plan do you believe are most important in planning a physical education lesson?
18 Why?

19 3. How long does it take you to plan your lessons?

20 *Using the lesson plan*

21 4. How useful do you find the lesson plan in delivering the lesson? (useful/not useful/it depends) Why?

22 5. How do you use the lesson plan in the lesson (work through from beginning to end/deviate from the
23 model given/it depends on the lesson) Why?

24 6. How do you cope with unpredictability in a lesson?

25 *Evaluating the lesson*

26 7. Please explain the process you use in evaluating your lessons.

27 8. How do you use the lesson evaluation in planning the subsequent lesson?

28

1 The questionnaire was pilot tested on a sample of trainees not involved in the study prior to final editing. After
2 the study was explained to trainees and informed consent given in writing, trainees voluntarily completed the
3 questionnaire during a regularly scheduled lecture to review the school-based practicum, held as soon as
4 possible after they had finished the practicum. Each respondent was identified by case number, university (A,
5 B or C), PGCE or undergraduate (P or U) and year on undergraduate course (3 or 4)). Also, trainees were
6 assured no names would be used in any paper. The lecturer who administered the questionnaire at each
7 university was integrally involved with the school-based practicum and was familiar to the trainees.

8

9 ***Ethics***

10 British Education Research Association (BERA, 2011) guidelines for research were followed in
11 conducting this study. The study received ethical approval from the relevant research ethics committee at
12 each of the participating universities.

13

14 ***Data analysis***

15 Frequencies and percentages were calculated manually for the limited-choice questions on the
16 questionnaires. The open-ended questions were analysed using thematic analysis. Data was read and
17 reread, first to gain a sense of the whole, and then to identify themes which emerged from the data
18 analysis. There were no preconceived themes; instead themes were allowed to flow from the data.
19 These emergent themes were then given labels.

20 Note: numbers do not add up to 289 in all the results, either because not all trainees responded to
21 every question, or because trainees gave more than one answer to a specific question. Where a percentage
22 is given it is in relation to the number of respondents to that question.

23

24 **Results**

25

26 ***How do trainees write lesson plans and how long do they take?***

27 The largest percentage of trainees (168; 58.8%) stated they worked through the lesson plan from
28 beginning to end, in the linear way intended, 69 (24.1%) stated they completed the lesson plan in a

1 different order and 49 (17.1%) stated it depends. When asked to explain why they worked through the
2 plan in the way stated, a variety of answers were given, including: how told to/expected; logical; easiest
3 for me; so I have an understanding of what I am doing/confident; allows organisation to be fluid and
4 helps to ensure the planning of an effective lesson; it flows.

5 Most trainees who completed the proforma in the order given did so because this is how they were
6 taught/told to do it, but also because they found it works, e.g.

7 *'because this is the expectation by the university. Also, through experience it has worked well'*
8 (231CP); *'the structure means everything is covered. It is logical, guidance received was comprehensive'*
9 (92AU3); and *'the plan allows me to be clear in my head; it helps me in planning relevant activities in a*
10 *structured way and helps me reflect'* (69AU4). Other reasons included: *'because it makes sure I tick a*
11 *box'* (272CP); and *'we were not told we can deviate'* (160BU4).

12 Various reasons were given by those trainees who completed the proforma in a different order, e.g.

13 *'it made me feel very constricted and did not help me as much as I hoped, the way I approached my*
14 *lessons...My thoughts are spread out so I did not like the linear format'* (11AP); *'found it difficult to plan*
15 *lesson to fit objectives and didn't really relate to these, they were just there. I was more engaged with the*
16 *learning objectives if I planned the lesson first'* (219CP); *'easiest to do and quicker to complete'*
17 (236CP); *'most effective'* (157BU3); *'everyone does it differently, this is just how I prefer to do it'*
18 (203CP); *'feel as though I already know what I am going to do, so can get it down first'* (214CU3). For
19 those trainees who stated it depends, *'I plan differently each time'* (27AU4); *'My thought process. I guess*
20 *each lesson is unique so I have no set structure'* (5AP).

21 Although 133 (49.4%) trainees stated they started planning with the objectives, 136 (50.6%)
22 identified a number of different starting points as well as differences in the order of planning lessons, e.g.
23 plan the content first, then either objectives and activities to achieve those or objectives last; fill in parts I
24 can do myself confidently then go onto learning activities. Examples of comments included:

25 *'complete the main body first then the front page'* (217CP); *'1) content need to cover, 2) activities, 3)*
26 *ILOs, 4) differentiate'* (19AP); *'I focus on the main area of the lesson and plan around it'* (233CP); *'I*
27 *write my ILO's last'* (196BU4); *'I complete the learning activities/content section first, followed by the*
28 *differentiation and organisation, then resources. I finish by writing the ILOs'* (28AU4).

1 For some trainees, the order in which they stated they planned their lessons reflected what they
 2 regarded as most important in the lesson plan. One-hundred-and-seven (38.9%) trainees stated all parts of
 3 the lesson plan were equally important, although different reasons were given for identifying them all as
 4 important, e.g.

5 *‘all parts because they are on the template’* (177BU4); *‘because one cannot be effective without the*
 6 *other’* (98AU3); *‘some parts of the lesson will not work as required without looking into all parts of the*
 7 *planning process’* (246CP); *‘they are all interlinked and come together to form your lesson’* (5AP).

8 However, 87 (31.6%) trainees stated some parts of a lesson were more important than others (see
 9 Table 1) and 81 (29.5%) stated they did not know.

10

11 Table 1 Part of a lesson plan identified as most important

12

| Most important part of a lesson | Number (and percent) of trainees |
|----------------------------------------------------------------------------------------|----------------------------------|
| Objectives (some with evaluation) | 37 (42.5%) |
| Content | 25 (28.7%) |
| Knowing your pupils/number of things to help pupils achieve | 17 (19.5%) |
| The Teachers’ Standards | 2 (2.3%) |
| Other | 3 (3.5%) |
| Some parts do not need to be planned and/or are less important to make the lesson work | 3 (3.5%) |

13

14 Examples of the range of comments about parts of the lesson plan identified as most important included:

15 *‘ILOs, content, evaluation’* (273CP); *‘previous pupil evaluations; ILOs to progress unit and lessons’*
 16 *(39AU4); ‘content...the objectives need to support the lesson being taught’* (132BU3); *‘the content as it*
 17 *determines whether or not ILO’s are met and unit aims are achieved’* (186BU4); *‘individual needs, what*
 18 *the class works well doing, evaluation from previous lesson—so I know what needs to be worked on’*

1 (242CP); *'some parts do not need planning for, e.g. teaching styles'* (79AU3/208CU3); *'equipment, ILOs*
 2 *and learning tasks are more important, as the rest can be improvised'* (141BU3).

3 A number of reasons were given for identifying specific aspects of the lesson plan as most important,
 4 including, for example: to get pupils engaged/active (13; 36.1%); pupils most important/every child
 5 learns differently (13; 36.1%); success of lesson (7; 19.4%); what is needed to deliver the lesson (3;
 6 8.4%).

7

8 Table 2 Length of time taken to plan a lesson

9

| Time taken to plan a lesson | Number (and percent) of trainees |
|------------------------------------|-----------------------------------------|
| Less than ½ hour | 18 (7.2%) |
| ½ - 1 hour | 142 (56.8%) |
| 1 – 1½ hours | 40 (16%) |
| 1½ - 2 hours | 18 (7.2%) |
| It depends on the lesson | 32 (12.8%) |

10

11 As Table 2 shows, 182 (72.8%) trainees stated they took ½ to 1½ hours to write each lesson plan. This
 12 number may be higher, at least for some lessons, as 32 (12.8%) trainees stated the length depends on the
 13 lesson. Examples of comments related to the length of time to plan a lesson included:

14 *'about double the length of the lesson'* (4AP); *'in the first year it took between 1 hour and 1½ hours*
 15 *but now it takes about 45 minutes to an hour'* (206CU3); *'depends on how detailed my plan is. Also*
 16 *depends what I am teaching. Between 30 minutes and ¾ hour'* (142BU3); *'depends on content.*
 17 *Sometimes 1 hour, others more or less'* (83AU3); *'to plan the activities, 20 minutes, to complete the*
 18 *entire plan, 1 hour'* (86AU3); *'around 1 hour depending on the activity and class'* (172BU4); *'2(ish)*
 19 *hours if my subject knowledge is high'* (205BU3).

20

21 ***How do trainees use lesson plans in their teaching?***

1 Two-hundred-and-two (67.8%) trainees stated they found the lesson plan useful in delivering the lesson;
2 while 23 (7.8%) stated it was not useful and 64 (21.4%) did not know. Reasons given for finding the plan
3 useful included: helps me remember/gives me something to refer to (185); feel confident (12); keeps me
4 on track (12), e.g.

5 *'it's a guide/map to what I will be doing'* (54AU4); *'I feel confident in teaching the lesson as I know*
6 *exactly what I am doing'* (29AU4); *'I know exactly what comes where in the lesson. Good plan = good*
7 *lesson (generally)'* (91AU3); *'I am clear about what I am doing but think it could be shorter'* (206CU3).

8 Despite finding it useful, 9 (3%) trainees stated they did not use the lesson plan itself in the lesson.
9 Examples of reasons given included:

10 *'it may look good on paper, but not when teaching. Many factors often lead to the lesson being*
11 *adapted'* (94AU3); *'I have to rewrite in 3 key points. A full lesson plan in [the university] format is*
12 *impossible to refer back to within the lesson'* (15AP); *'useful but too in-depth'* (13AP); *I have already*
13 *scribed my whole lesson so it is embedded in my head'* (266CP).

14 One-hundred-and-thirty-three (46.5%) trainees stated they deviated from the lesson plan during the
15 lesson; they were flexible over the plan/change or adapt the lesson in order to cope with unpredictability.

16 One-hundred-and-thirty (45.5%) stated it depended on the lesson (the majority of whom stated
17 specifically it depends on content knowledge of an activity/knowledge of a class), and 23 (8%) stated
18 they followed the lesson plan as written. The range of comments included:

19 *'unpredictability means lessons never go straight to plan'* (35AU4; 166BU4); *'I reflect in action and*
20 *assess how challenging/appropriate the content is'* (14AP); *'If I don't, pupil learning will not be as good'*
21 *(143BU3); 'to suit needs of pupils'* (243CP); *'I usually stick to the plan but if pupils struggle or excel I*
22 *will modify the plan accordingly'* (205CU3); *'for some activities, but you feel pressured to not change*
23 *ideas during the lesson because you know it is not what your mentor is following'* (186BU4); *'it frames*
24 *what I am going to teach but mentors should accept that it is a guide and can change, depending on*
25 *pupils needs'* (96AU3). For those trainees who stated they follow the lesson as planned, the reason given
26 by most trainees (12) was that it gives structure.

27 In terms of how they coped with unpredictability, previous experience was cited by 9 trainees, e.g.
28 *'easily, after 4 years of trainee teaching I have picked up little tips'* (162BU4). Other comments included:

1 ‘If I feel I need to adapt I will but it does makes me feel nervous’ (202CU3); ‘have back up activities
 2 in the back of my mind in case of unforeseen events’ (186BU4); ‘very well. I always have other ideas in
 3 my head’ (75AU3); ‘kind of panic but try to assess issues as soon as they arise’ (94AU3); ‘not very well
 4 if it is a lesson where I lack expertise’ (158BU3).

5

6 ***How do trainees evaluate their lessons?***

7 Table 3 How trainees evaluate lessons

8

| How trainees evaluate lessons | Number (and percent) of trainees |
|---------------------------------------------------|-----------------------------------------|
| See if objectives achieved (track certain pupils) | 182 (61.1%) |
| See if met the Teachers’ Standards | 58 (19.5%) |
| What went well, what can improve | 23 (7.7%) |
| Feedback from mentor | 18 (6%) |
| Use questions | 14 (4.7%) |
| Other | 3 (1%) |

9

10 As Table 3 shows, trainees used a range of ways to evaluate their lessons, although the highest percentage
 11 evaluated whether objectives had been met, e.g.

12 ‘I don’t follow the questions. I evaluate pupils based on ILOs and previous data’ (28AU4);
 13 ‘selection of pupils is evaluated against the ILOs and how they did during the lesson. Not much
 14 evaluation of the lesson itself’ (12AP). Other comments on how trainees evaluated their lessons included:

15 ‘use questions and keep track of certain pupils’ (135BU3); ‘no set process’ (82AU3); ‘lesson
 16 assessment sheets; internal evaluation (you know yourself whether it went well or not)’ (235CP); ‘I
 17 follow the university format to tick a box. However, I internalise the lesson in my own way which I find
 18 hard to write on a form’ (166BU4); ‘use of discussion with mentor and own opinion’ (169BU4); ‘I just
 19 tend to give a general account of my feelings regarding the lesson’ (151BU3).

20

1 Table 4 How lesson evaluation is used in planning the next lesson

2

| Use of lesson evaluation in planning the next lesson | Number (and percent) of trainees |
|------------------------------------------------------------------------------------------|----------------------------------|
| Evaluation sets up for the next lesson | 205 (65.5%) |
| Informs differentiation | 49 (15.7%) |
| Identify own aspects not improved; relevant Teachers' Standards are focus of next lesson | 38 (12%) |
| If objectives not achieved transfer to next lesson if applicable | 12 (3.9%) |
| Identify future goals and targets | 9 (2.9%) |

3

4 As Table 4 shows, for the highest percentage of trainees the lesson evaluation was used in planning the
 5 next lesson, for example:

6 *'Yes! Helps me to plan next ILOs and activities to follow from how pupils responded in the last*
 7 *lesson' (202CU3); 'by reflecting on the evaluation I can work on progressing what I feel needs to be*
 8 *improved' (56AU4); 'see what needs recapping and address it in next lesson. If a pupil needed specific*
 9 *adaptations this can be taken into account for future lessons' (12AP); 'it impacts on the level at which the*
 10 *lesson is planned' (109AU3). However, some trainees did not use the evaluation, e.g. 'I didn't really use*
 11 *this to replan as I use the unit of work' (274CP); 'I rarely do' (89AU3).*

12

13 **Discussion**

14

15 Results of this study showed mixed responses from this sample of trainees. There were differences in the
 16 perceptions of trainees about all aspects of lesson planning and there was no one method followed by all
 17 trainees. There was no difference in responses of trainees at the three universities, on different courses or
 18 in different years of an undergraduate course on writing or using lesson plans or evaluating lessons.

19 Hence, results suggested perceptions related to individual differences and personal preference and/or the

1 influence of individual mentors, as opposed to the course and/or university expectations of planning
2 lessons.

3

4 *The model used and the time taken to plan lessons*

5 Despite considerable time and effort being spent in universities teaching trainees how to write detailed
6 lesson plans in a linear manner, results suggested this is not necessarily how all trainees actually plan in
7 practice. Whether or not trainees planned lessons in a linear manner in the way they were taught, using
8 the planning proforma, was due to a number of reasons, including: because they were taught/expected to
9 do it this way; they found the linear format easiest; they found another method of planning easier; and/or
10 because they identified certain aspects of the lesson as most important (e.g. content or ‘what I am going
11 to teach’), so planned these first. Other research has also found that trainees plan in different ways and
12 suggested possible reasons. For example, John (1992) suggested that beginning teachers had difficulty
13 constructing objectives before they had even considered the central idea of the lesson, activities, methods
14 or resources required and available. Further, John (2006) questioned whether the current model of
15 planning encourages trainees to focus on: what they want pupils to learn; what knowledge and skills are
16 worthwhile and how they might best be learned; how their planning might best be informed by curricular
17 objectives and learning outcomes; what teaching and learning styles might best bring this learning about;
18 and what resources and tools might be used to engage pupils so that learning might take place. Thus, it is
19 important that teacher educators recognise that not all trainees plan in the same way and consider what
20 model(s) should be taught to trainees to enable them to understand, and prioritise, planning to enhance
21 pupils’ learning.

22 As with planning lessons, not all trainees completed the lesson evaluation in the way taught/intended.
23 However, the majority of trainees stated that evaluation enabled them to see if objectives had been
24 achieved (in all three universities in this study, trainees were asked to track a sample of pupils in each
25 lesson). Other foci of evaluation were on what went well and what they could improve. Many trainees
26 stated they used the evaluation to inform the planning of the next lesson and to inform differentiation for
27 pupils. This suggested they recognised the importance of evaluation. This is contrary to results of some
28 other research which has suggested that evaluation is not considered important by all teachers. For

1 example, of the four aspects of Tyler's (1949) linear planning model, evaluation has been identified as the
2 least frequently included of the four steps, followed by objectives (see, for example, Placek, 1984).

3 As trainees plan (and evaluate) in the way they find most useful, not necessarily how they were
4 taught to plan or evaluate, consideration could be given to whether it is appropriate to require trainees
5 to use one model of planning and evaluation which does not take account of individual trainees'
6 preferred ways of planning and evaluating. It might be appropriate to consider using a range of
7 models to enable trainees to select one they find useful and meets their needs. Bage et al. (1999)
8 discovered that efforts to impose a uniform system of lesson planning on teachers meant that often
9 they did not draw on the full range of their expertise when planning lessons in diverse contexts. They
10 concluded that the uniform model was less sophisticated than what teachers actually did in their
11 classrooms. Further, according to Furlong (2000), trainees see planning as a concrete process
12 involving the enactment of particular routines or recipes. He continued that in order to plan
13 effectively, trainees need an appreciation of how children learn, a flexible understanding of the
14 structure and deployment of content knowledge, and a repertoire of pedagogical skills and strategies.
15 The dominant lesson planning model may restrict such thinking. At the very least it must be viewed
16 alongside the relevant theory and the implications of that for practice.

17 John (2006) stated that the impression implicit in the professional standards for qualified teacher
18 status, is that teaching is a scripted performance as opposed to a complex engagement with children.
19 The detailed and technical nature of the lesson planning proforma being completed by trainees might
20 encourage that impression. Thus, if time is spent on completing the proforma, this may focus trainees
21 on the technical aspects of lesson planning rather than on developing criticality and reflection in the
22 process of planning, a stated aim on all courses at all three universities. In order to achieve this, it is
23 important that trainees understand the purpose of planning.

24 The amount of time it took to plan a lesson, ½ to 1½ hours for many trainees, was a significant
25 issue. While this length of time might be needed early on in learning to teach, and may be possible
26 when trainees are not carrying a full teaching load, it is unlikely to be needed as trainees gain
27 experience. Indeed, there was some indication that, as trainees gained experience, lesson planning
28 took less time. Likewise, this length of time is unlikely to be possible as trainees' teaching load

1 increases. Some trainees reported that lesson planning took longer in areas where content knowledge
2 was not as good. This should be explored further, but it highlights the importance of good content
3 knowledge for trainees in being able to plan, deliver and evaluate high quality lessons. Other studies
4 have highlighted the time taken to plan lessons. For example, according to John (2006), trainees
5 described their planning as time-consuming as they struggled to make sense of the numerous
6 decisions they had to make regarding content, management, time, pacing and resources. In this study
7 some trainees suggested the time taken was due to the requirements for completing the proforma.

8

9 *The uses of lesson plans*

10 Results suggested that most trainees understood the importance of lesson planning and why they do
11 it. They also suggested that the process of working through the lesson plan and evaluation was useful to
12 the majority of trainees to support their teaching and enhance pupils' learning, with reasons given similar
13 to those identified by Siedentop (1983). However, not all trainees referred to their lesson plans in lessons.
14 For some trainees this was because the process of thinking through the lesson while writing the lesson
15 plan enabled them to remember what they had planned and hence they they did not have to refer to the
16 plan while teaching the lesson, whilst for others the lesson plan was too detailed and hence hard to follow
17 in the lesson. Further, although some trainees stated they taught their lessons as planned because they felt
18 this was expected and they felt pressured not to deviate from the plan or change/restructure the lesson
19 while teaching it, the majority of trainees stated they deviated from/adapted the plan usually or sometimes
20 in order to cope with unpredictability, either because lessons never go to plan or to suit the needs of the
21 pupils. This suggested that at least some trainees understood the role of lesson plans in underpinning but
22 not dictating their teaching. This is encouraging in light of Jones and Vesiland's (1996) finding that early
23 in their learning to teach trainees' lesson plans were largely scripted with prepared materials and
24 unalterable. It supports John's (2000) suggestion that a lesson plan should not be viewed as a blueprint
25 for action, rather, should be a record of interaction. Hence, deviating from a lesson plan should be seen as
26 a positive act rather than evidence of failure.

27 Lesson plans written by trainees in England serve purposes in addition to supporting trainees'
28 teaching and pupils' learning; notably they provide evidence of attainment against the Teachers'

1 Standards (DfE, 2012) and are used for accountability purposes for Ofsted inspections. Results
2 suggested that at least some trainees completed the lesson plan (and/or evaluation) proforma ‘to tick a
3 box’ and provide evidence of meeting the Teachers’ Standards (DfE, 2012). This would need to be
4 explored further to see if the time taken to plan lessons and the detail required on the plans is related,
5 at least in part, to these other uses of lesson plans and if this is prioritised above writing lesson plans
6 to enhance their teaching and pupils’ learning. If ITT providers follow the recommendation of DfE
7 (2016) to reduce demands on trainees, the requirements of completing a detailed proforma need
8 consideration, particularly as trainees gain experience.

9 Consideration also needs to be given to ensuring that trainees focus their effort on the process of
10 planning high quality lessons to enhance pupils’ learning, as opposed to the product (i.e. completing a
11 proforma). This might be linked to consideration of whether a detailed lesson plan is the most
12 efficient and best mechanism for trainees to provide evidence of meeting the Teachers’ Standards
13 (DfE, 2012), as well as for accountability for Ofsted – or whether these requirements have rendered
14 lesson plans too detailed. After evidence of the ability to plan lessons has been gathered, it is likely
15 that only a small portion of any one lesson plan is needed to provide evidence of meeting other
16 Teachers’ Standards (DfE, 2012), which may not warrant the time spent on completing the detailed
17 proforma for each lesson.

18 Thus, results of this study suggest that it might be appropriate to examine whether lesson plans are
19 trying to achieve too many purposes and how the purpose(s) for planning are communicated to trainees to
20 focus trainees’ efforts on the process of planning rather than the product. It might also be appropriate to
21 consider any alternatives to the use of lesson planning to evidence achievement against the Teacher’s
22 Standards (DfE, 2012). Although trainees need to understand the key principles of planning and develop
23 the discipline of thinking through their lesson plans, which requires them to write out detailed lesson
24 plans early in learning to teach, it might be worth reexamining what information is critical in lesson plans,
25 what trainees should write out fully, why, when, for how long and in what pattern. For Broeckmans
26 (1986, p. 224), writing less on a lesson plan "does not necessarily imply a loss of planning detail.
27 Planning rather becomes more condensed". This still seems relevant today, particularly in light of the DfE

1 (2016, p. 12) recommendation that “ITT providers should review their demands on trainee teachers and
2 concentrate on the purpose of planning and how to plan across a sequence of lessons”.

3

4 ***Limitations***

5 It is important that these results are treated with caution as this empirical, descriptive study was
6 exploratory and hence results are tentative. Further, there were some limitations to the study. Although
7 the questions were piloted prior to the study, the questions might have been interpreted differently by
8 different trainees. Further, although trainees volunteered to participate in the study, because the
9 questionnaires were completed during a lecture, some trainees might have reported what they thought
10 they should say. In addition, this study only looked at what trainees stated about lesson planning, not
11 what actually happened in practice. It is therefore not clear how their planning impacted on practice.
12 Further, this study only asked about planning individual lessons, not sequences of lesson.

13 Despite these limitations of the study, the size of the sample of trainees and the range of courses
14 across three university-school PEITT partnerships on which they were learning to teach add to current
15 knowledge about lesson planning, especially as there has been very little recent research on lesson
16 planning in physical education. However, they also suggest that lesson planning is an important issue for
17 further research in order to better understand lesson planning in PEITT generally and in England
18 specifically, with its emphasis on evidence of meeting standards and on accountability, and to be able to
19 make evidence-based recommendations for practice.

20

21 ***Further research***

22 Although there are a range of possible areas for further research, in this section the focus is on four
23 possible areas for further research. First, trainees could be interviewed to understand what they see as the
24 purpose(s) of planning (e.g. in relation to how lesson planning supports the quality of pupils’ learning or,
25 in England, whether it is something they have to do to meet the Teachers’ Standards) and how that
26 informs trainees’ writing and use of lesson plans and their evaluation of lessons and the focus of their
27 effort on the process or product of planning. This might be linked to how trainees understand the role of
28 planning in the overall teaching and learning process. This would inform teacher educators as to the

1 effectiveness of their teaching of lesson planning in order to ensure that trainees focus their efforts on
2 planning to enhance pupils' learning, not providing evidence of achievement of the Teachers' Standards
3 (DfE, 2012).

4 A further line of research could focus on the relationship between what trainees say about their
5 planning and evaluating, with observations of how they use a lesson plan in practice to inform their
6 teaching. This could be linked to trainees' stage of development in learning to teach (e.g. focus on self
7 and survival in the classroom, on the material/task being taught and then on pupils' learning; what Fuller
8 and Brown (1975) called self, task and impact concerns), which suggested that they may not be ready to
9 focus on pupils' learning at the start of their learning to teach.

10 Another area for research could be on introducing trainees to a range of models for planning and
11 allowing them to choose the model which they find best supports them in their lesson planning. Further
12 research could also consider the planning model in relation to the theoretical underpinnings of PEITT
13 courses in relation to the development of trainees' criticality and reflection. This could also be linked to
14 how trainees write, use and evaluate the plan.

15 Finally, research could look at trainees' perceptions of the use and value of planning individual
16 lessons as compared to a sequence of lessons in a scheme of work.

17

18 **Conclusion**

19

20 Results of this study suggest several positive aspects of the lesson planning and evaluation which trainees
21 in England are required to undertake. However, they also suggest some challenges and raise some
22 questions for both practice and further research. Future practice should be underpinned by further
23 research on lesson planning.

24

25 **References**

26

27 AITSL (The Australian Institute for Teaching and School Leadership) (2011) *Australian Professional*
28 *Standards for Teachers*. Carlton South, Victoria: Education Council. Available at

1 [https://www.aitsl.edu.au/docs/default-source/general/australian-professional-standands-for-
3 teachers-20171006.pdf?sfvrsn=399ae83c_12](https://www.aitsl.edu.au/docs/default-source/general/australian-professional-standands-for-
2 teachers-20171006.pdf?sfvrsn=399ae83c_12) (accessed 8 May 2018).

4 Arthur J, Capel S (2015) How planning and evaluation support effective learning and teaching. In: Capel
5 S, Whitehead M (eds) *Learning to Teach in the Secondary School: A Companion to School
6 Experience*, 4th edn London: Routledge.

7 Bage G, Grosvenor I, and Williams M (1999) Curriculum planning: prediction or response? A case study
8 of teacher planning conducted through partnership action research. *Curriculum Journal* 10 1: 49-70.

9 Barrett KR, Sebren A, and Sheehan AM (1991) Content development patterns over a 2-year period as
10 indicated from written lesson plans. *Journal of Teaching in Physical Education* 11: 79-102.

11 BERA (British Educational Research Association) (2011) *Ethical Guidelines for Educational Research*.
12 London: BERA. There were no preconceived categories; instead categories were allowed to flow
13 from the data.

14 Breckon P (2014) Medium and short-term planning: units of work and lesson plans. In: Capel S, Breckon
15 P (eds) *A Practical Guide to Teaching Physical Education in the Secondary School*, 2nd edn London:
16 Routledge.

17 Briggs ARJ, Coleman M, and Morrison M (2012) *Research Methods in Educational Leadership and
18 Management*, 3rd edn. Los Angeles, CA: Sage Publications.

19 Broeckmans J (1986). Short-term developments in student teachers lesson planning. *Teaching and
20 Teacher Education* 2: 215-228.

21 Brown RH, Cheffers JTF (1991) Identifying key result areas during the planning process: A technique for
22 simplifying lesson planning. *Physical Educator*, 48 2: 58-65.

23 Calderhead J, Shorrock SB (1997) *Understanding Teacher Education: Case Studies in the Professional
24 Development of Beginning Teachers*. London: Falmer Press.

25 Carter A (2015) *Carter review of initial teacher training (ITT)*. Available at
26 [https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/399957/Carter_Review
27 .pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/399957/Carter_Review.pdf) (accessed 27 April 2017).

28 Causton-Theoharis JN, Theoharis GT, and Trezek BJ (2008) Teaching pre-service teachers to design
inclusive instruction: A lesson planning template. *International Journal of Inclusive Education* 12 4:

1 381-399.

2 Derri V, Papamitrou E, Vernadakis N, Koufou N, and Zetou E (2014) Early professional development of
3 physical education teachers: Effects on lesson planning. *Procedia - Social and Behavioral Sciences*
4 152: 778-783.

5 DfE (Department for Education) (2012) *Teachers' Standards*. Available at
6 <https://www.gov.uk/government/publications/teachers-standards> (accessed 29 April 2017).

7 DfE (Department for Education) (2016) *Eliminating Unnecessary Workload around Planning and*
8 *Teaching Resources*. Available at
9 [https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/511257/Eliminating-](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/511257/Eliminating-unnecessary-workload-around-planning-and-teaching-resources.pdf)
10 [unnecessary-workload-around-planning-and-teaching-resources.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/511257/Eliminating-unnecessary-workload-around-planning-and-teaching-resources.pdf) (accessed 29 April 2017).

11 Drost BR, Levine AC (2015) An analysis of strategies for teaching standards-based lesson plan alignment
12 to preservice teacher. *Journal of Education* 195 2: 37-47.

13 Education Council New Zealand (2015) *Graduating Teacher Standards Aoteaora New Zealand*.
14 Wellington: Education Council. Available at [https://educationcouncil.org.nz/sites/default/files/gts-](https://educationcouncil.org.nz/sites/default/files/gts-poster.pdf)
15 [poster.pdf](https://educationcouncil.org.nz/sites/default/files/gts-poster.pdf) (accessed 7 May 2018).

16 Egan K (1992) *Imagination in Teaching and Learning*. Chicago: University of Chicago Press.

17 Egan K (1997) *The Educated Mind: How Cognitive Tools Shape Our Understanding*. Chicago:
18 University of Chicago Press.

19 European Commission (2013) *Supporting Teacher Competence Development for Better Learning*
20 *Outcomes*. Brussels: European Commission Education and Training. Available at
21 [http://ec.europa.eu/dgs/education_culture/repository/education/policy/school/doc/teachercomp_en.](http://ec.europa.eu/dgs/education_culture/repository/education/policy/school/doc/teachercomp_en.pdf)
22 [pdf](http://ec.europa.eu/dgs/education_culture/repository/education/policy/school/doc/teachercomp_en.pdf) (accessed 8 May 2018).

23 Evans J, Penney D (1995) Physical education, restoration and the politics of sport. *Pedagogy, Culture*
24 *and Society* 3 2: 183-196.

25 Fuller FF, Brown OH (1975) Becoming a teacher. In: Ryan K (ed.) *Teacher Education* (Seventy-Fourth
26 Yearbook of the National Society of Education) Chicago, IL: University of Chicago Press, 25-52.

27 Furlong J (2000) School mentors and university tutors: lessons from the English experience. *Theory into*

1 *Practice* 39 1: 12-20.

2 Goc-Karp G, Zakrajsek DB (1987) Planning for learning-theory into practice? *Journal of Teaching in*
3 *Physical Education* 6 4: 377-392.

4 John PD (1991) Course, curricular and classroom influences on the development of trainees' lesson
5 planning perspectives. *Teaching and Teacher Education* 7 4: 359-373.

6 John PD (1992) *Lesson Planning for Teachers*. London: Cassell.

7 John PD (2000) Awareness and intuition: how trainees read their own lesson. In: Atkinson T and Claxton
8 G (eds) *The Intuitive Practitioner* London: Open University Press, 84-107.

9 John PD (2006) Lesson planning and the trainee: re-thinking the dominant model. *Journal of Curriculum*
10 *Studies* 38 4: 483-498.

11 Jones MG, Vesiland EM (1996) Putting practice into theory: changes in the of pre- service teachers'
12 pedagogical knowledge. *American Educational Research Journal* 33 1: 61-119.

13 Kagan DM, Tippins DJ (1992) The evolution of functional lesson plans among twelve elementary and
14 secondary school teachers. *Elementary School Journal* 92 4: 477-489.

15 Lave J, Wenger E (1991) *Situated Learning: Legitimate Peripheral Participation*. Cambridge:
16 Cambridge University Press.

17 Morrissey GL (1983) *Management by Objectives and Results in the Public Sector*. Reading, MA:
18 Addison-Wesley Publishing Company.

19 Mosston M (1981) *Teaching Physical Education*, 2nd edn, Columbus, OH: Merrill.

20 Ofsted (Office for Standards in Education, Children's Services and Skills) (2011) *The Annual Report of*
21 *Her Majesty's Chief Inspector of Education, Children's Services and Skills 2010/11*. Available at
22 [https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/379294/Ofsted_20Ann](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/379294/Ofsted_20Annual_20Report_2010-11_20-20full.pdf)
23 [ual_20Report_2010-11_20-20full.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/379294/Ofsted_20Annual_20Report_2010-11_20-20full.pdf) (accessed 29 April 2017).

24 Ofsted (Office for Standards in Education, Children's Services and Skills) (2015) *Initial Teacher*
25 *Education Inspection Handbook*. Manchester: Crown. Available at
26 [https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/459282/Initial_Teache](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/459282/Initial_Teacher_Education_inspection_handbook_from_September_2015.pdf)
27 [r_Education_inspection_handbook_from_September_2015.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/459282/Initial_Teacher_Education_inspection_handbook_from_September_2015.pdf) (accessed 29 April 2017).

- 1 Placek J (1984). A multi-case study of teacher planning in physical education. *Journal of Teaching in*
2 *Physical Education* 4: 39-49.
- 3 Schön D (1983) *The Reflective Practitioner: How professionals think in action*. London: Temple Smith.
- 4 Siedentop D (1983) *Developing Teaching Skills in Physical Education*, 2nd edn. Palo Alto, CA:
5 Mayfield Publishing Company.
- 6 Siedentop D, Herkowitz J, and Rink J (1984) *Elementary Physical Education Methods*. Englewood
7 Cliffs, NJ: Prentice-Hall.
- 8 Stanescu M (2012) Planning physical education – from theory to practice. *Procedia - Social and*
9 *Behavioral Sciences* 76: 790-794.
- 10 Stenhouse LA (1975) *An Introduction to Curriculum Research and Development*. London: Heinemann.
- 11 Stroot SA, Morton PJ (1989) Blueprints for learning. *Journal of Teaching in Physical Education* 8:
12 107-111.
- 13 Tyler R (1949) *Basic Principles of Curriculum and Instruction*. Chicago: University of Chicago Press.
- 14 Wertsch JV (1991) *Voices of the Mind: A Sociocultural Approach to Mediated Action*. Cambridge, MA:
15 Harvard University Press.
- 16 Wiggins G, McTighe J (2005) *Understanding by Design (expanded 2nd edition)*. Alexandria, VA:
17 ASCD.