



Exploring the relationship between reflexivity and reflective practice through Lesson Study within Initial Teacher Education

Journal:	<i>International Journal for Lesson and Learning Studies</i>
Manuscript ID	IJLLS-11-2015-0040.R1
Manuscript Type:	Research Paper
Keywords:	Reflexivity, Reflectivity, Initial Teacher Education, Internal Dispositions, Agency

SCHOLARONE™
Manuscripts

Review

Exploring the relationship between reflexivity and reflective practice through Lesson Study within Initial Teacher Education

Abstract:

Purpose: A priority for initial teacher education is the development of reflection by pre-service teachers in preparation for transition towards qualified teacher status. Whilst much literature exists on the practice of reflection, little attention has been placed on understanding and developing the processes that inform this practice. Drawing upon the concepts of Strong Structuration Theory, this paper draws attention to the role Lesson Study can play in developing pre-service teachers' processes of reflexivity whilst enhancing their reflective practice.

Methodology: Participants were two cohorts of Secondary Physical Education pre-service teachers (n=40), completing a Postgraduate Certificate in Education course (PGCE). Action research methodology was adopted during school placements, when pre-service teacher dyads engaged in cycles of Lesson Study. Data obtained through group discussion boards, questionnaires, group and individual interviews, was subjected to inductive analysis, comparing key patterns to locate themes.

Findings: Drawing upon illustrations collated when exploring the enhancement of their reflective practice, the findings illustrate how pre-service teachers (agents-in-focus) were able to pre-reflectively and critically draw upon embodied dispositions and practices to engage with the external structural elements of their training programme. Such interactions enabled them to demonstrate enhanced forms of active agency and knowledge, developing practices beyond traditional support structures of the training programme.

Originality and Implications for practice: In drawing upon these illustrations, this paper explores how the application of Strong Structuration Theory further enhances understanding of the underlying reflexive processes that shape pre-service teacher's interaction with the structures of initial teacher education. Furthermore, it draws attention to the part Lesson Study can play in developing creative, confident and reflective pedagogy by pre-service teachers. In doing so this paper contributes to the growing body of literature that illuminates how Lesson Study may enhance the experiences and professional development of pre-service teachers.

Key words: Reflexivity, Reflectivity, Initial Teacher Education, Internal Dispositions, Agency

Introduction

The interest and popularity of Lesson Study continues to grow and be embraced by the teaching community as a mechanism for shaping pedagogy and practice (Stigler and Hiebert, 1999; Lee, 2008; Dudley, 2012; Cheung and Wong, 2014). Whilst previous studies evidence the global variation in the engagement of lesson study methods, a common format prevails, consisting of a cyclical process of planning, observation, reflection and revision, concentrating on learners and also the most effective way to teach particular topics. A fundamental principle of Lesson Study is to build and share practitioner knowledge, involving teachers in learning from colleagues as they research, plan, teach, observe, assess and discuss a lesson (Elliott, 2012). Interest in Lesson Study by those within the initial teacher education (ITE) community has been slower to take hold, despite a growing body of research exploring the potential of Lesson Study to support professional learning in ITE (Chassels and Melville, 2009; Cajkler et al, 2013; Lamb, 2015). Those studies that have explored the potential of Lesson Study within ITE focus on particular subjects, such as Maths (Fernandez, 2010; Gurl, 2011), Science (Marble, 2006) and Primary programmes (Chassels & Melville, 2009). The benefits of integrating Lesson Study into ITE programmes are far reaching, including: developing content and subject knowledge, increasing understanding of pedagogy (Leavy, 2010), and understanding pupils' learning (Parks, 2008) whilst encouraging reflective practice (Marble, 2006; Burroughs and Luebeck, 2010; Myers, 2012). Much literature on Lesson Study within ITE focuses on models involving pre-service teachers (PSTs) working alongside practising teachers (Booth, et al., 1990; Chassels & Melville, 2009; Fernandez, 2002; Gurl, 2011; Marble, 2006; Parks, 2008). Elliott refers to this as an apprenticeship model (Elliott, 2012), involving the PST observing the expert practitioner before imitating what they have seen, and receiving feedback from their school mentor (expert teacher). Further, through the medium of Lesson Study activities during teaching practice placements, PSTs can benefit from additional support mechanisms within this situated learning (Cajkler et al, 2013; Lamb 2015).

A wealth of available literature highlights the value of reflection as being of paramount interest to teacher educators when preparing PSTs for the challenges and realities of classrooms (Tsangaridou and Siedentop, 1995; Borko and Putnam, 1996; Calderhead, 1996; Griffiths, 2000; Macdonald and Tinning, 2003). Within ITE programmes in the United Kingdom (UK), a common platform for reflective opportunities by pre-service teachers is before, during and after teaching (Griffiths, 2000). These reflective processes are conceptual-

1
2
3
4
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
ised by theoretical models in which individuals have the potential to engage at different and deeper levels of reflective development (Van Manen, 1977; Zeichner and Liston, 1987). At their simplest level, these processes of reflection are often understood to be triggered through completion of various administrative and technocratic mechanisms, such as lesson plans and lesson evaluations, which in turn provide the required evidence base for assessment processes (Lamb, Lane and Aldous 2013). Such reflective practices can also take place during the act of teaching (Van Manen, 1995) as well as in prescribed spaces before and after teaching (Tsangaridou, 2005). The importance of these practices and approaches has become increasingly important in westernised education systems that vaunt the individual performativity of educators, and in particular, PSTs (see Ball, 2003). Within such systems, the practice of reflection is hard to cultivate and there are many pitfalls for PSTs becoming reflective teacher practitioners (see Moen-Mordal & Green, 2012). In seeking this reflective-utopia, those involved in ITE, such as universities and schools, have sought to develop and protect spaces, practices and initiatives from which PSTs may develop their reflective abilities. To date the majority of these approaches appear to incorporate self-reflection in a structured, and at times prescriptive, manner (Harford and MacRuairc, 2008), with the intention of assisting PSTs in developing a conceptual understanding of the nature of reflective practice. The concerns of this approach have been highlighted by Moen-Mordal and Green (2012), when discussing ITE within the context of Physical Education,

35
36
37
38
39
40
41
42
43
44
Put another way, a variety of studies have tended to confirm that ITE neither 'shakes nor stirs' newly emerging PE teachers' relatively conservative views and practices in relation to PE, let alone education more generally. This failure to impact, at the outset, upon teachers' beliefs and attitudes has, nevertheless, merely served to reinvigorate calls from scholars (see, e.g. Kirk, 2009) for teacher education to confront the seemingly uncritical, un-reflexive dispositions of each new generation of PE teachers as they emerge from teacher education. (Moen-Mordal and Green, 2012, p.2)

45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
Of more concern is that such conservatism is leading to a position where PSTs may have little desire for investing in their own practices anything that cannot be evaluated or accounted for. With the above in mind, this paper draws attention towards the importance of understanding how reflective practices may be developed through a more nuanced focus around the underlying processes of reflexivity. Such analytical focus has the potential to further contribute to the growing field of Lesson Study literature and its potential in developing critical pedagogical strategies and practice within ITE.

Conceptualising Reflexivity in Education

The terms reflexivity and reflectivity have been central to academic commentaries regarding developments within ITE (Evans et al., 1996; Tinning 2006; Moen-Mordal & Green, 2012). The perceived importance of these terms lies in their role in exploring how PSTs are able to draw upon internalised dispositions to facilitate change in their current practice. However, the search for new meanings and understanding has resulted in the terms reflexive and reflective becoming, at times, transposable, with little attention placed on the connection between reflexivity as a process and forms of reflective/reflexive practice (see Lynch, 2000). Consequently, there remains misunderstanding about how these terms are connected (Tinning, 2006; Green and Moen-Mordal, 2012). One element of this misunderstanding is related to the abstract nature of the term reflexivity as a concept *that informs practice* within forms of ITE. Such abstract terminology has often been acknowledged as problematic and unworkable,

Reflexivity 'unsettles' representation by suggesting that we are constantly constructing meaning and social realities as we interact with others and talk about our experience. We therefore cannot separate ontology and epistemology, nor can we ignore the situated nature of that experience and the cultural, historical, and linguistic traditions that permeate our work. (Cunliffe, 2003, p.985)

The thoughts of Cunliffe encapsulate some of the challenges in conceptualising the relationship between reflexivity and reflective practice. As Cunliffe alludes, attempts to understand this complex relationship often results in artificial ontological (our experience of the world) and epistemological (the knowledge that is created from this experience) binaries between the process of reflexivity and the practice of reflection. One possible way of addressing the limitations of some of these binaries, is through the development and application of theoretical and analytical lenses that focus on structure-agency relations; namely interaction between the practices and dispositions of individuals and the structural properties of social systems. This is highlighted by Cassidy and Tinning (2004) who note,

Numerous researchers have argued for the adoption of a dialectical approach to research in the field of physical education...One consequence of adopting a dialectical approach is that socialisation becomes viewed as a dynamic process that is orientated around the interplay between individuals, societal influences, and the institutions into which they are socialised. (Cassidy and Tinning, 2004, p.176)

As illustrated by Cassidy and Tinning, Structuration Theory has contributed to how researchers have understood the interplay between the individual's experience and the

1 knowledge that is created. Unlike more philosophical and abstract structurationist perspec-
2 tives, (see for example Giddens, 1984), Stones' conceptualization, Strong Structuration
3 Theory (SST) analytically distinguishes between four inter-linked elements of the duality of
4 structure; *external structures*, *internal structures*, *active agency*, and *outcomes*. The prin-
5 ciples illustrated above offer a conceptual language to understand how the actions of
6 agents (in this case the practice of reflection) are created through the *reflexive interaction*
7 between the external structures of a context and the internal dispositions of an agent-in-
8 focus (in the context of this paper that being the physical education). Application of SST is
9 intended to build upon the body of work that views reflexivity as a set of meaningful pro-
10 cesses (see Roberts 2012) in which the individual agent reaches a heightened point of
11 awareness regarding their own reflective practice. Building upon the work of Stones, there
12 are various levels of external structures; those that exist in-situ to the PSTs' interaction
13 (external structures in-situ) and those that exist at a more abstract level (external struc-
14 tures macro). Within, the context of UK ITE, this refers to structures that shape the norma-
15 tive practices of PST's such as those found within the Department for Education Teachers'
16 Standards (see DfE, 2015), the formal mechanism by which PSTs are assessed. While the
17 evaluative criteria are far-reaching, such structures are designed to ensures teachers are,

30 Accountable for achieving the highest possible standards in work and conduct.
31 Teachers act with honesty and integrity; have strong subject knowledge, keep
32 their knowledge and skills as teachers up-to-date and are self-critical' (Depart-
33 ment for Education, 2015).
34

36 Drawing upon the principles of SST, such structures, while existing at an abstract level of
37 ontology, create conditions of action in which the practices of the PST are regulated
38 against a set of specific criteria. The normative expectations of such policy structures also
39 define the nature of specific course structures, namely those within university based train-
40 ing and then during school based training as well. For example, as outlined within the Of-
41 fice for Standards in Education (Ofsted) ITE inspection handbook, such structures 'ensure
42 that the ITE partnership has systems and procedures in place for PSTs to be appropriately
43 assessed and receive feedback to support their professional development' (Ofsted, 2015,
44 p.33). Thus, these sorts of external structures encourage the provision and development
45 of reflective practice. Similarly, the work of Lamb *et.al*, 2013, has also identified structures
46 in the form of school based mentors (expert teachers) and other PSTs on the course.
47 While both studies have alluded to these structures, neither have been explicit in how the-
48 se interact with the individual PSTs. Nor do they acknowledge that such structures act at
49 different levels of ontology. For example, structures that inform reflective practice *in-situ*,
50
51
52
53
54
55
56
57
58
59
60

1
2
3
4
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

will be different to those structures informing reflective practice at an abstract level of ontology (in the case of ITE, policy developments regarding the implementation of ITE). In drawing upon the idea that spaces are created from a duality between structures and agent, we reflect Löw's position (p.33) that 'there is much to indicate that spaces are experienced not only bodily (action level) but also by there being an impact on bodies (structural level), that, in this sense, spaces are not only the point of reference for action or the product of action but, as institutions, also structure action'. Thus, in order to explore how reflexive processes come to be formed, there needs to be further identification of the different types of structures that interact with trainees at an in-situ level. Identifying structures at various levels of ontology, supports the position of Löw (2008) who proposes an idea of space that is both structuring form and structured form. Importantly, these structures are fluidic and are continually transforming in their role in shaping the experience of PSTs during the ITE year.

Central to the premise of SST, is the role played by internal structures. As noted by Stones (2005, p.85), internal structures can be 'analytically distinguished between conjuncturally-specific internal structures and general-disposition structures', Applying this concept to our understanding of reflective practice, internal structures have been conceptualised as dispositions within PSTs that have been developed prior to the commencement of their ITE experience. Accounting for these dispositions reveals what Craib (1992) identifies as the dynamic element of personality. This has strong connotations with what Bourdieu illustrated as doxa; an unquestionable set of beliefs that begin to frame the experience of agents within particular contexts. These have been explored further within physical education (see Brown, 2005; Aldous and Brown, 2010) also playing an important role in beginning to shape the processes of reflexivity. Similarly, Moen-Mordal and Green (2012) have identified how the beliefs and dispositions of PSTs come to shape their reflective practices. The ways in which this occurs is facilitated with the types of conjunctural-knowledge available to agents within a specific context. As acknowledged by Stones (2005, pg. 89) conjuncturally-specific forms of knowledge refers to the knowledge of 'interpretive schemes, power capacities and the normative expectations and principles of a context'. Within the context of ITE, such knowledge is created through different types of spaces, such as universities and schools. Importantly, such knowledge is communicated through different agents, such as fellow PSTs as well as school mentors who shape the transmission of knowledge and practice during school based training.

1 The SST model informed our exploration of the interaction between external structures of
2 ITE and the internal structures of the individual and the development of forms of active
3 agency, in which the PST may routinely, pre-reflectively, strategically or critically draw up-
4 on their internal structures to generate forms of reflective practice. This results in a number
5 of outcomes. Within ITE, outcomes may be attributed as the elaboration and changing of
6 reflective practices of the PSTs. Thus, viewing reflection as an outcome of a reflexive pro-
7 cess moves beyond binary considerations of reflection and accentuates the dynamic and
8 complex interaction between the external structures of ITE and the internal dispositions of
9 PSTs that shape their teaching practices.

10
11
12
13
14
15
16
17
18
19 Previously, we have begun to shape the development of reflective practice through pairing
20 PSTs as training buddies to discuss their teaching practice through the medium of video-
21 analysis. In this case, PSTs interacted with sets of external resources, creating sets of
22 spaces from which they embodied specific dispositions, namely elements of knowledge
23 specific to physical education and successfully securing qualified teacher status (QTS).
24 These peer-review opportunities developed into full cycles of Lesson Study owned entirely
25 by PSTs, conveying its potential to facilitate mutual spaces of learning between peers be-
26 yond formal hierarchical relationships with expert teachers (Lamb, 2015).

32 33 *Context and rationale for the study*

34
35 Shaping the reflective practices of PSTs has been conceptualized by one higher education
36 provider of Physical Education Initial Teacher Education (PEITE) through peer review
37 (Lamb et al, 2013) and Lesson Study dyads between peers during school teaching prac-
38 tice placements (Lamb, 2015). A major driver for the PEITE programme choosing to en-
39 gage in Lesson Study as part of the PSTs experiences, was to cultivate reflective practice
40 whilst exploring connections between the dispositions of individual PSTs, the structures of
41 ITE (university, school, school mentors and peers) and rules of the formal assessment
42 processes associated with achieving qualified teacher status. It was hypothesized that op-
43 portunities to embed reflective practice through Lesson Study (Lamb, 2015) could suc-
44 cessfully scaffold existing self-reflection mechanisms usually occurring during lesson de-
45 briefs and formal mentor meetings (Lamb, et al, 2013). Explicating these spaces contrib-
46 utes a deeper understanding of the strategies, attitudes and dispositions framing PSTs'
47 reflective abilities. While the role dispositions play in shaping practices of physical educa-
48 tion teaching has been highlighted previously (Evans, 2004; Brown, 2005), the study by
49 Lamb et al. (2013) and Lamb (2015) has brought to the surface the meanings the PSTs
50
51
52
53
54
55
56
57
58
59
60

1
2
3
4
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

tend to ascribe to these practices and to their strategies for reflection. In reality, these individual dispositions appear connected to the structures, rules and practices of PEITE. The development of these abilities mirror the stages of reflectivity suggested by Van Manen (1977) and others. Whilst some evidence correlated with a first level of reflection, which Van Manen (1977) called 'technical rationality' and Zeichner and Liston (1987) called 'factual', the evidence of a substantial proportion of the PSTs correlated with the deepest level of engagement which both Van Manen and Zeichner and Liston termed 'critical reflection'. Across the training year and between first and second placements, PSTs demonstrated a cycle of awareness, responsiveness, learning and changed action springing from engagement with engaging in the cycles of Lesson Study with a peer (training buddy). They expanded their ability to reflect effectively on their own and another's practice and increased their capacity to distinguish appropriate generic and subject-specific skills; confirming the need to 'support PSTs in advancing from a focus on the instrumentals of teaching to one where they are more responsive and analytical in evaluating their practice' (Lamb, 2015 pg.11). Additionally, engagement in Lesson Study facilitates a series of reflective stages for PSTs, demonstrating awareness, responsiveness, learning and changed action.

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

Whilst endorsing the process of Lesson Study between peers, such opportunities did not reveal the dynamic interaction between the dispositions of the PSTs and the structures of ITE. Thus, from this, further questions must be raised, following the thoughts of Stones (2005), to delve deeper into the processes that shape the ability for PSTs to become reflective practitioners. Whilst Lamb *et al's* model (2013) explores the nature of reflection through the individual dispositions, this paper moves to acknowledge that whilst a problem-solving approach through mutual peer dialogue can be fostered through a series of spaces (safe, relaxed, equal, pedagogic, alternative and negotiated), there (ibid) may not be sufficient scope to prompt a deeper level of reflexivity, unless action takes place. Lamb (2015) however, suggests that the creation of Lesson Study dyad opportunities between PSTs, acting as training buddies, can stimulate deeper reflexivity, leading to perspective transformation (Mezirow, 2000) or transformative learning (Habermas, 1974; Mezirow, 2000; Moon, 2004). To some this may be viewed as reflection-in-action (Schon, 1983); whilst to others this would be viewed as reflexivity (Taylor and White, 2000).

57
58
59
60

This position necessitates that as well as understanding that practitioners must be reflective in their practice, we also begin to further understand the processes of reflexivity under-

1
2 lying *the outcome of reflection* and how we may support this through the development of
3 spaces within ITE training programmes. Thus, this paper focuses on developing our un-
4 derstanding of reflective practices by focusing on what Stones (2005) refers to as the
5 hermeneutical-core of reflexivity. In adopting this position we intend to reveal not only what
6 the spaces of reflection are but how their construction may inform and develop forms of
7 PST agency within the context of training to become a teacher. In beginning to delve
8 deeper into this hermeneutical-core, we begin to outline the processes of reflexivity that
9 govern such interactions. Following the approach of others who have previously engaged
10 in the theoretical considerations within Physical Education (see Brown, 2005) the data
11 presented here has been used to stimulate a process of conceptual reflection and devel-
12 opment. In doing so, we outline the various processes before concluding that developing
13 the understanding of processes of reflexivity may inform actual and potential develop-
14 ments within ITE. In coming to illustrate the relationship between reflexive process and re-
15 flective practice, we have drawn upon data collected from PSTs as they engaged with both
16 peer review and lesson Study during their school-based training.
17
18
19
20
21
22
23
24
25
26
27

28 *Methodology*

29
30 Participants were two cohorts of Secondary (training age phase 11-18) Physical Education
31 PSTs (n=40: males = 26, females = 14; aged 21 to 30), completing a 38 week Postgradu-
32 ate, Master's level Certificate in Education course (PGCE) in eastern England. Informed
33 consent was sought adhering to the researcher's university ethics procedures. During
34 Placement 'A' (weeks 11-15), PSTs completed a paired placement conducting the peer-
35 review task. Each PST selected a lesson to teach which their peer observed and recorded
36 on an iPad. Immediately afterwards, they watched the recorded lesson, and engaged in a
37 joint evaluative conversation. A template of questions associated with professional teach-
38 ing and pedagogical skills was made available to scaffold discussions (Santagata, 2009).
39 Placement 'B' (weeks 22-36) was a solo placement and PSTs were paired with a different
40 peer in another school by convenience sampling, based on geographical location of
41 schools. Together, they selected an activity they were both teaching and identified who felt
42 the most confident in the subject area (PST 'A') and who felt less confident (PST 'B'):
43
44
45
46
47
48
49
50
51

52 *Step 1: Collaboratively planning the study lesson:* PST 'A' chose a class to conduct the
53 Lesson Study on, and sent their peer their draft plan for them to offer feedback.
54

55 *Step 2: Seeing the study lesson in action:* PST 'B' visited the school to record PST 'A'
56 teaching the lesson, directing the observation towards the learners and their learning.
57
58
59
60

1
2
3
4
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

Step 3: Discussing the study lesson: Immediately after the lesson, they watched the recorded lesson together, engaging in reflective dialogue about the effectiveness of the lesson, delivery methods and learning outcomes and how to improve learning opportunities. During this discussion step 4 was addressed

Step 4: Revising the lesson: Together, they re-wrote the original lesson plan, implementing the revisions discussed. PST 'B' returned to their school and taught the revised lesson to their own class, with PST 'A' observing and recording it. Together they reviewed the revised lesson, evaluating the impact of the improvements. Both PSTs kept the revised model plan. At a later date during the placement, the lesson study process (Steps 1-4) was repeated with a reversal of roles and activity, this time with PST 'B' leading the process in their school. During the study, some logistical limitations became apparent. If it proved problematic for a PST to observe the revised lesson being taught by their peer, they received a written evaluation instead, incorporating feedback from both their peer and the normal class teacher.

Data collection

For both the peer review and Lesson Study, data collection involved a multi-method approach (MacPhail et al., 2003) of surveys, individual and in-depth semi-structured focus group (Kvale and Brinkman, 2009) interviews and the use of the university's Virtual Learning Environment (VLE). For the peer review, PSTs were asked to complete a survey at the end of the first placement (mid-way point of the course) and second placement (final week of the course). Survey A constituted two sections, the first on experiences of *being a training buddy* for the peer review, capturing the nuances of the informal relationship between the PSTs in contrast to the usual formal relationship between PST and school mentor; and the second on experiences of *having a training buddy* for the peer review. Both sections contained five open-ended questions to trigger discussion concerning self- and peer-reflection when engaged in each of the two roles. Survey B posed 9 *yes / no* questions on the peer review process, any differences since first placement and outcomes obtained from the process; PSTs were also asked to substantiate their answers with specific comments. Sixteen completed returns were received from Survey A and again from Survey B. In total, 20 threads of discussion were posted on the VLE, guided by semi-structured questions asking them to reflect on their experience of the peer-review process. Twenty one PSTs volunteered to take part in the focus group interviews, facilitating three focus groups with 7 PSTs randomly assigned to each group and lasting approximately 45 minutes.

1
2
3 During the Lesson Study, PSTs completed individual questionnaires electronically after
4 each cycle, consisting of seven (Placement 'A') and eleven (Placement 'B') open-ended
5 questions aimed at triggering reflective discussion about their Lesson Study experiences.
6
7 Twelve completed questionnaires were returned on each occasion. They were also invited
8 to post their reflections on the VLE discussion board, guided by seven prompts. Fifteen
9 threads of discussion were posted. Twelve PSTs volunteered to take part in individual in-
10 terviews at the end of the course, each lasting approximately 30 minutes, and focusing on
11 their retrospective reflections on their experiences of engaging in the Lesson Study. They
12 were all asked the same open-ended questions with additional questions to clarify and ex-
13 plore responses further (Patton, 2000). A dicta-phone IPad application captured all inter-
14 view data, and later, transcribed verbatim. The interviews also allowed for triangulation of
15 data and helped to ensure rigour and trustworthiness of the interpretations of the data
16 (Curtner-Smith, 2002) during the analytical phase. Pseudonyms have been used to anon-
17 ymise participants in the study.
18
19
20
21
22
23
24
25
26
27
28
29

30 Data analysis

31 Analysis of the initial data from the peer review process was based on grounded theory
32 (Glaser, 1978; Glaser and Strauss, 1967; Strauss and Corbin, 1990) with all pooled data
33 re-visited through constant comparison, eventually elevating the data to a more abstract
34 level of coding and linking identified relationships among the data categories. Feedback
35 from the peer review shaped the structuring of the Lesson Study and subsequent analysis.
36 Analysis of the Lesson Study data took the approach of individual case followed by a
37 cross-case analysis (Patton, 2002) and subjected to inductive analysis (Hastie & Glotova,
38 2012). Similarly, through constant comparison a coding method, informed by Tsangari-
39 dou's (2005) coding schema was adopted to describe the nature of the Lesson Study ex-
40 periences, with key patterns coded manually (Gibbs, 2002) and compared in order to lo-
41 cate common categories for further analysis (Patton, 2002). Analysis demonstrated that
42 the peer review and Lesson Study enabled the dispositions of PSTs to interact with the
43 structures of ITE, creating processes of reflexivity in which autonomy in reflective practice
44 ensued. In this case, PSTs interacted with spaces from which they embodied sets of spe-
45 cific dispositions, namely elements of pedagogic knowledge. In what follows, we highlight
46 how the various elements of the reflexive process resulted in students developing forms of
47 reflective practice.
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3
4
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

The external structures of the reflexive process

The organisation of PST's as training buddies for dyads of Lesson Study, contrasted with usual forms of support provided by school mentors (expert teachers) and university tutors; and consequently developed forms of external structures that were detached from those generated through the ITE programme. As such, alternative opportunities for PSTs to develop their pedagogy and practice beyond the hierarchical apprenticeship model (Elliott's 2012) provided PSTs with opportunities to become more aware of the structures that were informing their practice,

I think the mentor thing is difficult because I know that some people's mentors did GTP¹ or SCITT² and are maybe looking at things in a different way, rather than PGCE pre-service teachers [Focus Group 1: 2011]

And

I think there's an opportunity to discuss the lessons if you wanted to with my mentor, but I think that can't be tied in with teaching so many hours a week. My mentor was just happy with me to carry on with my own planning and discuss with my buddy how to deliver the lesson. [Focus Group 3: 2011]

Interestingly, PSTs in all focus groups highlighted the role of external structures in enabling them to 'look at things in a different way'. As such, this form of structure is important in the reflexive process as it enables them to identify the various structures that were shaping their practice. This space enabled them to make distinctions between the various forms of support in ITE. Such a distinction is crucial in enabling PSTs to form reflexive spaces from where internal and external structures can interact whilst allowing them to draw upon their embodied forms of knowledge more readily,

I thought it was good, like, what I said, but obviously with fellow peers and the majority of us being at the same level, it was quite good that they thought the same as you...Rather than your mentor saying things because there's been times when in my experience my mentor has said stuff to me and I didn't even realize I'd done it, or didn't realize I hadn't done it. So it was quite good to know that things I'd done he'd picked up on, and vice versa. [Focus Group 1: 2011]

And

I think on the second placement I felt myself picking things out that you know your mentor's written down on an observation sheet. So if they're doing good movement around the classroom, or, oh an excellent demonstra-

¹ Graduate Teaching Programme

² School Centered Initial Teacher Training

tion, or whatever it was against the Standards from my mentor. [Focus Group 2: 2011]

These extracts highlight how, through a process of peer to peer dialogue and discussion during the Lesson Study, PSTs began to identify the role of external structures that begin to shape their identity as teachers. In doing so, they were then enabled to draw upon their internal dispositions and begin to shape forms of practice.

Interaction with the internal dispositions of agents

The interaction provided by the peer review and Lesson Study enabled PSTs to begin to cement forms of knowledgeability, through the integration of general dispositions within teaching practice,

He did a bowling exercise with a group of year 10 girls and he just made, like, he didn't make a joke but made things up to help him remember things. He talked about getting in a karate kick position and pretending he was playing an air guitar and things like that. And I said "have you planned that" and he said "no, I just thought of that there and then" and he said that in my lesson I came up with things like that as well...like, talking about things that I hadn't planned but they'd just come. Sort of, part of your personality and how you teach. [Focus Group 2011: Interview 1]

As the quote illustrates, PSTs were able to draw upon their individual dispositions outside the context of the training programme. The processes of reflexivity were facilitated by agents sharing experiences and forms of knowledge, drawn from their internal dispositions,

I was observing Sarah and it was good the way she approached....and it was just a couple of different tactics in terms of question(ing). I would [ask] a question there and I'm strong at, and the way she did it was completely different to the [way] of asking questions that had been asked and so forth. She gave the answer and then they had to think of the questions which I thought was really good. I hadn't even thought about doing that and I thought that was a really good way...It started to get me thinking about my opinions.....sort of, the asking questions, I'd get a pupil up and I'd tell them they were the student and the class then had to become the teacher and they had to go through point after point of the teaching...I think that came about from the experience I had after the Peer Review. So it did pay off but I wish I'd kind of done it earlier. [Focus Group 3: 2011]

Thus, in moving beyond the structures provided by the course, what begins to occur is a process of transformation in which the PSTs normative expectations regarding teaching are becoming embodied within the general dispositions towards teaching. This is illustrated in how the PST is beginning to 'think about their opinions and using the 'asking questions'. This highlights how some of the PSTs are not only re-

1
2
3
4
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

flecting on knowledge and practice but are beginning to *create forms of practice* as well, based on their internal dispositions,

Yeah, I think it does work for the little things, because I think, even though it's good to watch the whole lesson, I think if you have a bad lesson you know about it already, but it's the little things, it's the subconscious things that it picks up on that you don't realise, which is quite interesting. [Focus Group 1: 2011]

Quite early on it was just things like, erm, your body language, your names, praise, question and answering, and kept it quite simple for the first one, and then, you know, it wasn't, because it was constructive and it was stuff that I knew would help him I wasn't that worried when I said something hadn't gone as well as it could have done, because I knew I'd been quite sensitive with it and just said, you know, you have done it, but you could have done it, sort of slightly better, and then I think if you do it in the right way then, because I think by that time you are fairly used to having your lessons observed, and you are getting sort of points to improve all the time [Focus Group 1: 2011]

The extracts further identify how the training buddy structure created through Lesson Study enables PSTs to draw upon their internal structures in a more pre-reflective and critical manner. Indeed, providing a space in which there was a focus on discussion and exchange of knowledge enabled PSTs to 'pick up on the subconscious things' that are normally not acknowledged; namely those dispositions that are embodied within what SST refers to as the general dispositions of internal structures. In doing so, what is created is a reflective practice that is informed by student agency rather than the external structures of the ITT programme.

Student agency and the development of reflexive practice

As a result of being able to draw upon their own general dispositions and increasing awareness in identifying subconscious elements of their practice in a critical manner, PSTs were provided with opportunity to develop forms of reflective practice beyond that provided by the external structures,

Some of the mistakes we found were quite similar so it didn't matter giving them the feedback, because that's what they gave you feedback on. So in terms of, it was different getting feedback from your mentor as such because they literally say "oh you could have done this, you could have done that". That was a bit more casual. [Focus Group 1: 2011]

And

1
2 It was also really beneficial to reflect on the lesson that I taught in more de-
3 tail and to think more critically about how I could improve the lesson I
4 taught. It was good to then see the changes we made in action and to see if
5 the changes we made to the lesson actually improved the lesson. [Male Q
6 after peer review]
7

8
9 Here, PSTs demonstrated the ability and willingness to initiate thoughts and actions, draw-
10 ing upon their imagination - providing what Shaw (2013) and Stevens (1996) have dis-
11 cussed as a capacity to begin transforming some of their reflective practices. Such forms
12 of agency resulted in an outcome in which the PSTs elaborated and shifted the reliance on
13 identified structures of the ITE programme to more organic, horizontal forms of relation to
14 the external structure. As a consequence, PSTs demonstrated new forms of reflective
15 practice,
16

17
18 I think we see different things that our mentor sees. We see things that we
19 view as useful, but we know what we'd like to be told and what we'd like to
20 see highlighted, that need development. Whereas the mentor just have
21 their list, that they have to assess us against to make sure we meet.
22 Whereas we know what we need to develop, so that part of it was really
23 useful. [Focus Group 1: 2011]
24

25
26 It was really helpful to see for someone who's at the same standard as me
27 come in to observe me and 'cause the points that she made on my lesson
28 were obviously valid, but very useful as well, 'cause having always had
29 feedback from someone who's much more experienced is quite nice to
30 have experience from someone who sees it the way I see it [individual in-
31 terview female]
32

33
34 The extracts illustrates the benefits of being able to develop reflective practices specific to
35 their own needs; demonstrating forms of pre-reflective agency in which they are seeing
36 different things to the mentor. Such reflexive processes are crucial in an outcome in which
37 reflective practices become embodied. In what follows we elaborate further on the benefits
38 of enhancing the process of reflexivity for reflective practice.
39

40 41 42 43 44 45 46 47 48 49 50 *Outcomes: Towards the elaboration and development of reflective practice*

51 As a result of the reflexive processes highlighted above, PSTs were able to exert forms of
52 agency in developing reflective practice. Consequently, what emerges is an outcome of
53 change and elaboration, in which different forms of reflective practice are created,
54

55
56
57
58 You can, like Sarah said, look at different things, from someone who is at
59 the same stage in their career as you, who may have faults and weak-
60

1
2 nesses same as you. It's good to talk to each other about those. [Focus
3 Group 1: 2011]
4 And

5
6 I think you definitely see more as well. When you're teaching I think you
7 get so engrossed in what you're doing that you forget to see things, what's
8 going on in front of you. But then you take that with you and you do your
9 journey in your carand you see moments that I think you would miss
10 if you're teaching. [Focus Group 3: 2011]
11

12
13 I think when I watched it, I watched it from a different perspective.
14 So...when you're reflecting on your teaching you reflect very much *on you*
15 *and your teaching*. When I watched it back I reflected on what I did and
16 how that impacted the pupils. I did it from their perspective - how my body
17 language effected what they did, and it was quite good. When I started my
18 teaching I was quite autocratic and not very relaxed. I was quite a stern
19 figure and then that makes them respond very differently. [Focus Group 3:
20 2011]
21

22
23 What begins to emerge from the processes of reflexivity is an outcome in which the PSTs
24 began to transform elements of their practice that often go unnoticed, whilst elaborating on
25 their meaning. It is suggested that such reflective practices were only possible due to
26 PSTS being provided the space during the Lesson Study from which the different ele-
27 ments of reflexivity were able to interact. Thus, the practice of reflection is one that occurs
28 as a form of *durée* - a continuous flow of action (and interaction) within a specific time and
29 space. The importance of facilitating this process is evident within the emerging perspec-
30 tives provided by the PSTs.
31
32
33
34
35
36
37
38
39

40 *Reflections: The future of ITE and reflexive PSTs*

41 The paper has explored and highlighted how Lesson Study and peer review between
42 PSTs can develop the relationship between reflexive processes and reflective practice
43 within the context of ITE. The data illustrates that understanding the processes of reflexivi-
44 ty may enable more specific forms of reflective practices to be shaped. Understanding the
45 processes, structures and dispositions of reflexivity offer a dynamic and complex collage of
46 discoveries and possibilities within ITE, developing the current understanding of reflection
47 we have contributed to. Thus, rather than serving to be a conforming process, one which
48 reinforces the conservative elements of ITE (see Curtner-Smith, 2001) focusing on reflex-
49 ivity as a process that informs the development of reflective practice may act as a starting
50 position (albeit, a challenging one at times, when continually presented with governmental
51
52
53
54
55
56
57
58
59
60

1 metrics and performance outcomes) from which PSTs can challenge, question and reflect
2 beyond the structural constraints of ITE.
3
4

8 *Implications for the context of Initial Teacher Education*

9
10 In coming to understand the relationship between reflexive process and reflective practice
11 we are better placed to develop strategies to enable PSTs to grow and evolve as reflective
12 practitioners. As the paper demonstrates, this may begin with creating dedicated spaces at
13 an in-situ level through peer review and Lesson study which enables PSTs to not only
14 draw upon each other as reflective practitioners, but to be able to use their embodied dis-
15 positions (or internal structures) to inform their teaching practice, independent of the pre-
16 scribed external structures of a course. Thus, the outcomes present PSTs transitioning in-
17 to NQTs who are routinely able to strategically and pre-reflectively engage with the de-
18 mands placed on them by structures such as the UK Teachers' Standards. Over-time, and
19 with patience, this may result in an outcome in which PSTs are more confidently able to
20 adapt to the various challenges of teaching Physical Education.
21
22
23
24
25
26
27
28
29

30 Beyond the empirical findings illustrated, the paper has also highlighted how the adoption
31 of the SST framework enables the understanding of reflective practice to be understood at
32 a deeper level. The complex cycle of external structures, internal structures, active agency
33 and outcomes, provides a sensitising and analytical framework from which the underlying
34 reflexive processes of reflective practice can be understood in greater detail. This is not to
35 say that the adopted framework and the analysis offered is not without its limitations. In-
36 deed, in our own reflections, the use of focus groups to capture the nuances of dyads of
37 Lesson Study between peers offers only a glimpse into what is a complex and messy rela-
38 tionship between the embodied dispositions of the agent and the structures that shape ex-
39 perience. The next step must be to continue to explore the experiences of PSTs in more
40 detail, through a combination of ethnographic methodologies and documentary tech-
41 niques. This methodological approach offers the possibility of greater understanding of
42 how ITT enables PSTs to develop their own forms of reflective practice.
43
44
45
46
47
48
49
50
51
52

53 In doing so, more ITE providers may choose to engage with Lesson Study during school
54 placements, providing further forms of support for PSTs, ones in which they display great-
55 er ownership over the forms of reflective practice they adopt. In continuing to strive for
56 spaces in which PSTs may develop their own processes of reflexivity and thereby forms of
57
58
59
60

1
2
3
4
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

reflective practice, we agree with Moen-Mordal and Green (2012) that we must seek dialogue with academics and practitioners beyond the realms of university based ITE. The development of reflective practices which are shaped by the reflexive processes of PSTs is a precarious venture in ITE. On one hand, these novice teachers must continually attain to the robust criteria of ITE assessment, increasingly framed around the rigorous and unforgiving discourses of performativity, metric evaluation and competition. These discourses also make potential spaces, like the ones illustrated, increasingly challenging to develop. The discourses and practices of performativity make it hard for the PST to engage with their embodied disposition, beliefs and values. One has to conform to survive (see Aldous & Brown, 2010). However, what is evident is the need for such spaces to be created through Lesson Study opportunities between PSTs, in order to facilitate the connectivity between reflexivity and reflection. Whilst acknowledging the constraints within which ITE programmes operate in order to meet statutory requirements, providers need to explore the ways that exist to manoeuvre beyond the instrumental approach to ITE to one that is more conceptual and developmental. Understanding the processes, structures and dispositions of reflexivity offer a dynamic and complex collage of discoveries and possibilities within ITE. Thus, focusing on reflexivity as a process that informs the development of reflective practice may act as a starting position from which PSTs can challenge, question and reflect beyond the structural constraints of ITE.

Acknowledgements

The revision of the article benefited considerably from the comments given by the reviewers whom we acknowledge with thanks. The authors would also like to acknowledge and thank the University of East Anglia Physical Education pre service teachers for their willingness to share their experiences of engaging in Lesson Study during their school-based training.

References:

Aldous, D., and Brown, D. (2010), Framing bodies of knowledge within the 'acoustics' of the school: exploring pedagogical transition through newly qualified Physical Education teacher experiences, *Sport Education and Society*, Vol. 15, No. 4, pp. 411-429.

Ball, S.J. (2003) The teacher's soul and the terrors of performativity, *Journal of Education Policy*, Vol. 18, No. 2, pp.215-228.

1
2 Behets, D., and Vergauwen, L. (2006), 'Learning to teach in the field', in: D. Kirk, D. Mac-
3 donald and O' Sullivan, M. (Eds), *The Handbook of Physical Education*, London: Sage, pp.
4 407-424.

5
6 Booth, M., Shawyer, G. and Brown, R. (1990), Partnerships and the training of student his-
7 tory teachers. In M. Booth, J. Furlong and M. Wilkin (eds) *Partnership in initial teacher*
8 *training*, London: Cassell.

9
10 Borko, H. and Putnam, R. (1996), Learning to teach, in D. Berliner and R. Calfee (Eds),
11 *Handbook of educational psychology*. New York: Macmillan, pp. 673-708.

12
13 Brown, D. (2005), "An economy of gendered practices? Learning to teach physical educa-
14 tion from the perspective of Pierre Bourdieu's embodied sociology." *Sport, Education and*
15 *Society*, Vol. 10, No.1, pp. 3-23.

16
17 Bryant, C. and Jary, D. (2001), *The contemporary Giddens: Social theory in a globalising*
18 *age*. London, Palgrave Macmillan.

19
20 Burroughs, E. A. and Luebeck, J. L. (2010), Pre-service teachers in mathematics lesson
21 study. *The Montana Mathematics Enthusiast*, Vol.7, No. 2&3, pp. 391-400.

22
23 Cajkler, W., Wood, P., Norton, J. and Pedder, D. (2013), Lesson study: towards a collabo-
24 rative approach to learning in initial teacher education. *Cambridge Journal of Education*,
25 Vol. 43 No. 4, pp. 537-554.

26
27 Calderhead, J. (1996), Teachers: Beliefs and knowledge. In D.C. Berliner and R.C. Calfee
28 (eds.), *Handbook of educational psychology*, New York: Macmillan, pp. 709-725.

29
30 Cassidy, T. and Tinning, R. (2004), "Slippage is not a dirty word: considering the useful-
31 ness of Giddens' notion of knowledgeability in understanding the possibilities of teacher
32 education, *Teaching Education*, Vol. 15, No. 2, pp. 175-188.

33
34 Chassels, C. and Melville, W. (2009), Collaborative, reflective, and iterative Japanese les-
35 son study in an initial teacher education program: benefits and challenges. *Canadian*
36 *Journal of Education*, Vol. 32, No. 4, pp. 734-763.

37
38 Cheng, E. (2014), Learning study: nurturing the instructional design and teaching compe-
39 tency of pre-service teachers, *Asia-pacific Journal of Teacher Education*, Vol. 42, No.1, pp.
40 51-66.

41
42 Christiansen, A. and Bell, A. (2010), Peer learning partnerships: Exploring the experience
43 of pre-registration nursing pre-service teachers, *Journal of Clinical Nursing*, Vol. 19, No.5-
44 6, pp. 803-810.

45
46 Cheung, MW and Wong, WY, (2014), "Does Lesson Study work? ", *International Journal*
47 *for Lesson and Learning Studies*, Vol. 3, No.2, pp. 137 - 149.

48
49 Craib, I. (1992), *Anthony Giddens*, London, Routledge.

50
51 Cunliffe, A.L. (2003), Reflexive inquiry in organizational research: questions and possibili-
52 ties, *Human Relations*, Vol. 56, No. 8, pp. 983-1003.

- 1
2 Curtner-Smith, M. (2001), The occupational socialization of a first-year physical education
3 teacher with a teaching orientation, *Sport, Education and Society*, Vol. 6, No.1, pp.81-105.
4
- 5 Elliott, J. (2012), Developing a science of teaching through lesson study, *International*
6 *Journal of Learning and Lesson Study*, Vol. 1, No.2, pp.108-125.
7
- 8 Department for Education (2011), *Teachers' standards*,
9 <https://www.gov.uk/government/publications/teachers-standards> retrieved 18 January
10 2016.
11
- 12 Dudley, P. (2012), 'Lesson study development in England: from school networks to na-
13 tional policy', *International Journal of Learning and Lesson Study*, Vol. 1, No.1, pp. 85-100.
14
- 15 Evans, J., Davies, B. and Penney, D. (1996), Teachers, teaching and the social construc-
16 tion of gender relations, *Sport, Education and Society*, Vol. 1, No. 2, pp.165-183.
17
- 18 Evans, J. (2004), Making a difference? Education and 'ability' in physical education. *Euro-*
19 *pean Physical Education Review*, Vol. 10, No. 1, pp.95-108.
20
- 21 Fernandez, M. L. (2010), Investigating how and what prospective teachers learn through
22 microteaching lesson study, *Teaching and Teacher Education*, Vol. 26, No. 2, pp. 351-
23 362.
24
- 25 Fernandez, C. (2002), Learning from Japanese approaches to professional development:
26 The case of lesson study, *Journal of Teacher Education*, Vol. 53, No. 5, pp. 393-405.
27
- 28 Giddens, A. (1984), *The constitution of society: Outline of the theory of structuration*.
29 Cambridge: Polity Press.
30
- 31 Glaser B.G. (1978), *Theoretical Sensitivity: Advances in the Methodology of Grounded*
32 *Theory*, Mill valley, CA: Sociology Press.
33
- 34 Glaser, B.G. and Strauss, A.L. (1967), *The Discovery of Grounded Theory: Strategies for*
35 *Qualitative Research*, Chicago: Aldine.
36
- 37 Griffiths, V. (2000), The reflective dimension in teacher education, *International Journal of*
38 *Educational Research*, Vol. 33, No. 5, pp. 539-555.
39
- 40 Gurl, T. (2011), A model for incorporating lesson study into the student teaching place-
41 ment: what worked and what did not? *Educational Studies*, Vol. 37, No. 5, pp. 523-528.
42
- 43 Moen-Mordal, K., and Green, K. (2012), Neither shaking nor stirring: a case study of re-
44 flexivity in Norwegian physical education teacher education, *Sport, Education and Society*,
45 Vol. 19, No. 4, pp. 415-434.
46
- 47 Habermas, J. (1974), *Theory and practice*. London: Heinemann.
48
- 49 Harford, J. and MacRuairc, G. (2008), Engaging pre-service teachers in meaningful reflec-
50 tive practice, *Teaching and Teacher Education*, Vol. 24, No.7, pp. 1884 – 1892.
51
- 52 Kvale, S. and Brinkman, S. (2009), *InterViews: Learning the craft of qualitative research*
53 *interviewing, 2nd edn*. Thousand Oaks, CA: Sage.
54
55
56
57
58
59
60

1
2
3 Lamb, P. (2015), Peer learning between pre-service teachers: embracing lesson Study,
4 *International Journal for Lesson and Learning Studies*, Vol. 4, No. 4, pp. 343-361.

5
6 Lamb P., Lane K. and Aldous D. (2013), Enhancing the spaces of reflection: A buddy peer
7 review process within Physical Education Initial Teacher Education, *European Physical*
8 *Education Review*, Vol. 19, No.1, pp. 21-38.

9
10
11 Larrivee, B. (2000), Transforming Teaching Practice: becoming the critically reflective
12 teacher, *Reflective Practice*, Vol. 1, No. 3, pp. 294-307.

13
14 Leavy, A.M. (2010), The challenge of preparing pre-service teachers to teach informal in-
15 ferential reasoning. *Statistics Education Research Journal*, Vol. 9, No.1, pp. 46-67.

16
17 Lee, J.F.K. (2008), 'A Hong Kong case of Lesson Study- benefits and concerns', *Teaching*
18 *and Teacher Education*, Vol. 24, No.5, pp.1115-1124.

19
20
21 Lewis, C., Perry, R. and Friedkin, S. (2009), "Lesson study as action research", in S.
22 Noffke, and B. Somekh, (Eds), *The Sage Handbook of Educational Action Research*
23 *(Chapter 11)*, Sage, London, Thousand Oaks, CA, New Delhi, Singapore, pp. 142-54.

24
25 Löw, M. (2008), The constitution of space: The structuration of spaces through the simul-
26 taneity of effect and perception, *European Journal of Social Theory*, Vol.11, No. 1, pp. 25-
27 49.

28
29 Lynch, M. (2000), Against reflexivity as an academic virtue and source of privileged
30 knowledge, *Theory Culture and Society*, Vol. 17, No.3, pp.26-54.

31
32
33 Macdonald, D. and Tinning, R. (2003), Reflective practice goes public: reflection, govern-
34 mentality and post-modernity, in A. Laker (Ed), *The future of Physical Education: building a*
35 *new pedagogy*, London: Routledge, pp. 82-101.

36
37 Marble, S. T. (2006), Learning to teach through lesson study, *Action in Teacher Education*,
38 Vol. 28, No. 6, pp. 86–96.

39
40 Mezirow, J., and associates, (2000), *Learning as transformation*. San Francisco: John
41 Wiley & Sons.

42
43
44 Moon, J. (2004), *A handbook of reflective and experiential learning*. Abingdon: Routledge.

45
46 Nicol, D., and Macfarlane-Dick, D. (2006), Formative assessment and self-regulated learn-
47 ing: a model and seven principles of good feedback practice, *Studies in Higher Education*,
48 Vol. 31, No. 2, pp. 199-218.

49
50
51 Office for Standards in Education (2015) Initial teacher education inspection handbook,
52 report no: 150033. Crown Publications.

53
54
55 Parks, A.N. (2008), Messy learning: Pre-service teachers' lesson-study conversations
56 about mathematics and students, *Teaching and Teacher Education*, Vol. 24, No.5,
57 pp.1200–1216.

58
59
60 Roberts, K. (2012), *Sociology. An introduction*, Cheltenham: Edward Elgar Publishing.

1
2
3 Santagata, R. (2009), Designing video-based professional development for mathematics
4 teachers in low-performing schools, *Journal of Teacher Education*, Vol. 60, No. 1, pp. 38-
5 51.
6

7 Schon, D. (1983), *The Reflective Practitioner: How Professionals Think in Action*. New
8 York: Basic Books.
9

10 Shaw, R. (2013), A model of the transformative journey into reflexivity: an exploration into
11 students' experiences of critical reflection, *Reflective Practice*, Vol. 14, No.3, pp. 319-335.
12

13 Stevens, R. (1996), *Understanding the self*. London: Sage Publications.

14 Stigler, J., & Hiebert, J. (1999), *The teaching gap*. New York, NY: The Free Press.
15

16 Stones, R. (2005), *Structuration theory*. New York: Palgrave Macmillan.
17

18 Strauss, A.L. and Corbin, J.M. (1990), *Basics of Qualitative Research: Grounded Theory
19 Procedures and Techniques*. London: Sage.
20

21 Taylor, C. and White, S. (2000), *Practising reflexivity in health and welfare*. Buckingham:
22 Open University Press.
23

24 Tinning, R. (2006), Theoretical orientations in physical education teacher education, in: D.
25 Kirk, D. Macdonald and O' Sullivan, M. (Eds), *The Handbook of Physical Education*, Lon-
26 don: Sage, pp. 369-385.
27

28 Tsangaridou, N. (2005), "Classroom teachers' reflections on teaching physical education",
29 *Journal of Teaching in Physical Education*, Vol. 24 No. 1, pp. 24-50.
30

31 Tsangaridou, N, and Siedentop, D. (1995), Reflective Teaching: A Literature Review.
32 *Quest*, Vol. 47, No. 2, pp. 212-237.
33

34 Uhrich, T. A. (2009), The Hierarchy of Reflective Practice in Physical Education: a Deci-
35 sion Map for Technical Reflection-in-Action. *Reflective Practice*, Vol. 10, No. 4, pp. 501-
36 512.
37

38 Watanabe, T. (2002), Learning from Japanese lesson study. *Educational Leadership*, Vol.
39 59, No. 6, pp. 36–39.
40

41 Van Manen, M. (1977), "Linking ways of knowing with ways of being practical", *Curriculum
42 Inquiry*, Vol. 6 No. 3, pp. 205-228.
43

44 Zeichner, K. and Liston, D. (1987), "Teaching student teachers to reflect", *Harvard Educa-
45 tional Review*, Vol. 57 No. 1, pp. 23-48.
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60