

**PROJECT QUALIFICATION SUPERVISION AND TEACHER  
DEVELOPMENT: A GROUNDED THEORY**

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01-08-2018

## Abstract

**Theoretical context:** The effectiveness of teacher professional development is unsubstantiated by the best evidence. New ways of thinking about it are needed. Eraut's (2007) concept *learning as a by-product of working with clients* provides a way.

**Purpose:** To establish whether and how teachers develop through project qualification supervision, a distinctive mode of teacher work.

**Method:** A grounded theory study involving semi-structured interviews with seven experienced supervisors.

**Findings:** Supervision is educative conversation demanding intellectual virtue. Teachers develop, albeit insignificantly, as a by-product.

**Implications:** Refinements to Eraut's (2007) workplace learning theory are proposed.

## Theoretical context

The proposition that the professional development of teachers is important is widely accepted. Scholars claim that it is a key factor in the improvement of teaching and learning (e.g. Bubb & Earley, 2007; Stoll et al., 2012; Bubb & Earley, 2013). Organisations assert that evidence shows that good professional development improves standards and results (e.g. European Commission, 2012; BERA & RSA, 2014; OECD, 2014; Sutton Trust, 2015). The government insists that school leaders prioritise professional development because it improves teaching and outcomes (DfE, 2014; 2016a; 2016b; 2017). Ofsted has consistently valorised professional development (e.g. Ofsted, 2006; 2010; Harford, 2016) and made it a criterion of inspection judgements (Ofsted, 2017).

But the proposition is unsubstantiated by the best available evidence. The latest iteration of the well-reputed systematic review of meta-analyses conducted by Hattie (2015) found that the mean effect size of professional development on pupil achievement was medium (0.45), only moderately above the average effect size (0.40). Professional development was ranked only sixty-ninth out of 195 influences, or interventions, for its effect on achievement outcomes.

Research with a more qualitative orientation leads to a similar verdict. Bubb et al. (2008) found that strong schools could have weak professional development systems and that weak schools could have strong ones. There is, at best, a correlation between teacher development and school performance.

Proponents of professional development might respond by bemoaning the low quality of professional development activity. But studies (Garet et al., 2011, 2016; Jacob et al., 2017; see Hill et al., 2013) suggest that professional development programmes exhibiting the features that researchers consider desirable (e.g. Cordingley et al., 2015) are not especially effective (Fletcher-Wood, 2017).

The importance of professional development appears to have been overstated.

## Literature review

The literature on professional development is vast. I started with a 'connoisseurial sample': key texts suggested by an expert. Their reference lists were used to identify additional sources. The search was broadened using resources including the British Education Index.

The literature is in a conspicuously chaotic state. There is no shared vocabulary. Only occasionally does the surfeit of terminological differences reflect theoretical differences (e.g. Kelly, 2006). Definitions are invariably imprecise or conceptually confused. Take:

Professional learning encompasses all the opportunities offered for teachers and leaders to learn something new, update skills... (Porritt et al. 2017, p. 122)

But opportunities to learn do not *constitute* learning. For the object of learning is knowledge. Evidence supports the claim that such confusion exists (Friedman & Phillips, 2004). Popular theories of professional learning and development (e.g. Kolb, 1983; Dreyfus & Dreyfus, 1986; Engeström, 1987; Lave & Wenger, 1991; Schön, 1991; Grimmer & MacKinnon, 1992; NCATE, 2010) are unempirical. Yet these things are too complex to encapsulate in speculative theory. There is a need for more robust ways of thinking about professional development.

The field of workplace learning has been largely ignored in education (McNamara et al., 2014), although Eraut's work has some purchase (Philpott, 2014). Eraut (2007) formulated a tripartite typology of early career professional learning, including (a) work processes with learning as a by-product and (b) learning activities located within these processes. Effectiveness depends on

learning factors (e.g. challenge) and contextual factors (e.g. relationships).

Eraut identifies *working with clients* as a concept in category (a):

*Working with clients* also entails learning (1) about the client, (2) from any novel aspects of each client's problem or request and (3) from any new ideas that arise from the encounter. (p. 411)

Eraut's (2007) research concerns early career learning across many occupations, exclusive of teaching. His theory may not apply to experienced teachers. The concept *working with clients* is likely to be undertheorised, given that it is elemental in his theory.

What Eraut offers is a new way of thinking about teacher development: Teachers develop expertise as a by-product of working in new and novel ways with pupils. Work that is different may induce the cognitive and affective dissonance that some researchers (Bransford et al., 2000) have found is integral to learning.

One distinctive form of teacher work is project qualification supervision (henceforth, 'supervision'). The project qualifications are three research-based qualifications designed to promote autonomous, self-regulated pupil learning: the level 1 Foundation Project Qualification, the level 2 Higher Project Qualification, and the level 3 Extended Project Qualification (EPQ). Supervision involves teachers working one-to-one with pupils to facilitate project investigation.

There is little research on the project qualifications. Cartwright (2012; 2016) has sketched out some reflections. Three studies have considered pupil perspectives on the EPQ (Daly & de Moira, 2010; Stoten, 2013; Yeoman et al.,

2017). One of these studies also focused on teacher perspectives (Stoten, 2013), though not in relation to professional development.

## Method

### Research question

What are the perspectives of teachers at Hilltop school (pseudonym) on project qualification supervision and its impact on professional development?

### Grounded theory

Grounded theory was used. It aims to generate or construct theory, rather than merely test theory, through empirical investigation of specific instances and abductive reasoning (Reichert, 2010). Data collection and data analysis proceed iteratively (Orton, 1997), starting with a convenience sample (Morse, 2007), and ending with theoretical saturation, when theoretical needs are satisfied (Morse, 2004).

There are different versions of grounded theory (e.g. Glaser & Strauss, 1967; Clarke, 2005; Charmaz, 2014). A version underpinned by virtue theory, a largely untrodden paradigm (Fancourt, 2008; see Oancea & Furlong, 2007), was devised and executed. Virtue theory acknowledges that the researcher is necessarily implicated in the researched; propositional knowledge emanates from the researcher's epistemic virtues. It also maintains scope for the assessment of constructions for truth: the accuracy condition (Sosa, 2007).



## **Research context**

Hilltop is a comprehensive girls' secondary academy that admits boys to its sixth form. Approximately 120 teachers, 15 teaching assistants, and 40 support staff provide for 1,500 pupils. The proportion of pupils with special educational needs is below average, as is the proportion of socio-economically disadvantaged pupils. The most current validated Progress 8 score is above average; achievement at A-level is average. In its most recent inspection, it was adjudged outstanding overall and good for teaching.

## **Researcher**

I am Leading Practitioner at Hilltop. This means that I am responsible for leading professional development. To this end, I co-ordinate Hilltop's project qualification programme. Currently, 52 teachers are voluntarily involved in supervising 102 pupils from Years 8 to 13. Through supervision, I suspected that teachers would develop new understandings and skills transferable to the classroom.

## **Participants**

In grounded theory, a quality sample comprises 'excellent participants' (Morse, 2007, p. 231): reflective, articulate, and willing participants with relevant experience. These criteria were used to theoretically sample (Strauss, 1987) participants. Seven highly experienced teachers participated in the research. All

had supervised several pupils before, and six were presently engaged in supervision.

### **Semi-structured interviews**

The semi-structured interview is a good research instrument in grounded theory (Charmaz, 2014, p. 85). Seven interviews were conducted. Each took place in a private office and was recorded. Interviews lasted 25-54 minutes.

Techniques used included: piloting (Seidman, 2006); six-stage interview guides (Legard et al., 2003; appendix 1); paraphrasing (McMurray et al., 2004); philosophical questioning (Fisher, 2003); and repeating (Gillham, 2000).

Interview guides and techniques were used dialogically rather than formulaically. Prepared questions were formulated based on theoretical concerns (Glaser & Strauss, 1967). Questions were framed in teacher-friendly language and only asked if respondents were positioned to answer them (Patton, 1990).

### **Data analysis**

Interview recordings were transcribed, promoting 'descriptive validity' (Maxwell, 1992; appendix 2). Transcription conventions of Torrance and Pryor (1998) were adapted (appendix 3). Grounded theory analytical techniques were used: constant comparison (Glaser & Strauss, 1967); core category (Corbin & Strauss, 2008); in vivo coding, memo writing (appendix 4), and focused coding (Charmaz, 2014); initial line-by-line coding (Glaser, 1978; Charmaz, 2014); and

theoretical sensitivity (Glaser, 1978). NVivo was used to apply these techniques and to create an 'audit trail' (Halpern, 1983; appendix 5).

## **Ethics**

The research complied with the most applicable ethical guidelines (i.e. BERA, 2011). It was also consonant with applicable legislation and school policy.

Standard ethical principles were upheld, including non-maleficence, beneficence, voluntary informed consent, privacy, confidentiality, anonymity, non-traceability, and dissemination (see appendices 6, 7, 8, 9 & 10 & 11). The technique of member checking (Lincoln & Guba, 1985) was used to make sure that interpretations were fair.

## Findings

Project qualification supervision is educative conversation. Teachers serve pupils by discussing things through with them. Positive relationships are key. Conversations support independent, free, and meaning-making pupil engagement, and demand teacher intellectual virtue and interest. Teachers benefit as a by-product.

### Supporting pupils

Support involves guiding pupils. *'You are steering them'*. The nature of the guidance varies by pupil ability. *'I'd calibrate...the steer differently'*. More able pupils are given guidance that leaves scope for interpretation. The less able need something more concrete.

Supervisors must exercise judgement when guiding *'The hard thing [is]...not to direct pupils too much'*. Pupil freedom needs to be balanced with educational meaningfulness. Meetings *'have to be [just] directive enough in order for pupils to'* progress.

Supervision is different from teachers' normal day-to-day activity: it is voluntary, pupil-led, and one-to-one; content is not imparted. *'We're not giving them any contentual information'*. Although supervision resembles coursework teaching, it is still differentiated by maximal pupil freedom.

### Teacher as servant

Teachers sacrifice themselves for pupils. They volunteer without tangible gain. Supervision *'speaks volumes of the general commitment of our colleagues'*. It adds to teacher workload, though marginally. *'[Workload's] not a massive concern'*. It is definitely work. *'I wouldn't be doing it outside the role of being a teacher'*. Supervision has administrative and educative aspects. Although administration is laborious, the educative aspect is enjoyable. *'Frankly [supervision's] a kind of pleasure'*.

Scarce teacher time is consumed. *'It's another thing that eats into your time'*. Meeting preparation is not labour-intensive. Meetings can be informal, co-incident, and short, yet meaningful. *'Often [meetings] don't have to be long'*. Vitally, supervisors must make themselves available.

Supervisors sacrifice because *'you feel like you're making a difference'*: promoting pupil achievement, preparing pupils for university. Supervision is ultimately valued because of what it encourages pupils to *become*. It can improve their dispositions and lives. Thus, most teachers volunteer *'probably because they feel morally obliged to'*.

### **Supervision as education**

Supervision promotes the joy of enquiry. Conversing with pupils can be a joy. What *'I enjoy the most is when you are just talking about the subject with them'*. Supervision is co-enquiry that facilitates thinking. *'By the end of the meeting, we generated more [thoughts]...[including some] that neither of us had thought of before'*. Co-enquiry is enjoyable. *'You are genuinely excited about sharing this*

*journey*'. Supervision is also teacher freedom. *'You can operate...more as an individual'*.

The aim is to help pupils: clarify and evaluate their own ideas; broaden their outlook; and be discerning and healthily sceptical. *'It's getting them to be circumspect, [to grasp] that not everything they read might be of equal value'*.

Teachers follow pupils. Supervisors *'give pupils the freedom to walk, but still bring them back'*. Following *'includes making sense of pupils' thinking. 'You've got to keep pushing them to clarify their thoughts'*. It includes *'letting' pupils exercise freedom, 'allowing them to take control'*. Pupils *'go away'*, geographically and intellectually. Sometimes, teachers need to *'chase' and wait for pupils to arrange meetings. Some teachers feel impelled to resist this lack of control. 'I might give in and email them'*. Sometimes, teachers need to *'rein' pupils back in intellectually. 'You've really got to do some more review stuff'*.

### **Supervising as discussing and relating**

Teachers serve by discussing things through with pupils, mainly in pre-arranged meetings. But discussions can be informal. *'I bumped into one pupil in the dining hall...so I asked her how she was getting on'*. Discussions concern content and indeed anything pertaining to the project. *'We talked about his audience and what they needed to know'*. Supervisors listen carefully, *'being there for them to use as a sounding board'*, and speak caringly, *'giving them the confidence that their ideas are valid'*. Attending to pupils' feelings is sometimes the priority. *'The main thing...was stopping him from being overwhelmed'*.

Teachers check pupil understanding and give them feedback, ensuring scope for pupil judgement. *'You can't make a judgement for them about what they ought to be doing'*. Sometimes, supervisors withhold their views. *'I hope I'm not giving them too much of my own opinion'*.

Educative conversations presuppose good teacher-pupil relationships. *'They have a good relationship...that will help'*. These relationships may pre-exist or need to be created. Good relationships are perhaps especially important for less able pupils. *'That's the only reason why [such pupils] are going to...work after school with you'*.

Other relationships have a bearing. Supervisors might involve pupils' peers. *'I suggested he went through it with his friends'*. Similarly, dialogue between pupil participants can be encouraged. *'Having the two students together...they are talking to each other about their ideas'*. Supervisors may try to include *'other people, if they can support pupils'*, for example, academics. Supervisors may *'end up talking [to colleagues] about things that...come up as a result of the EPQ'*.

### **Teacher intellectual virtue**

Supervisors may be ignorant of the project content but still able to supervise successfully. *'I know nothing about cancer treatments'*. But *'actually in a way it's the questions you will ask'* that matter. Sometimes content knowledge is essential; in projects requiring specific skills, *'they need technical advice'*.

Teachers certainly need *some* relevant content knowledge. Often, general knowledge suffices. *'Something...that's...really helped me...is*

*what...my own children have done in science [at university]*'. Essay skills, acquired at university, can suffice to support a pupil engaged in an essay-focused project. *'If you're skilled at writing long essays then the student's got to benefit from that'*. Teachers may research the content to learnt about it. *'You do a little bit of research yourself, just so that you can support them'*.

Importantly, the teacher must be interested in the content or, what is largely the same thing, the pupil's education. Pupils need to *'feel that...their project... matters to you'*.

Supervisors must know about the supervision process itself. Teachers need to *'feel confident knowing what it's about'*. The centre co-ordinator is key here. *'The guidance you [centre co-ordinator] provide is crystal clear'*.

Teacher self-efficacy is less important and includes being organised, independent, approachable, rounded, and accepting. Pupils need to have *'confidence in you being reliable, being welcoming'*.

### **Teacher gains**

Supervision benefits teachers. It can improve their skills, relationships, and working environment. But teachers do not supervise because it benefits them. *'I don't believe...that any colleague is doing it because they think..."I'll get some gained time"'*.

Nevertheless, supervision helps teachers acquire knowledge. Teachers engage in active learning. *'You can't help but dig a little bit deeper yourself'*. Teachers also learn from the supervisee. *'His knowledge was such that I was*



*sitting at his feet*'. Although such knowledge contributes to teachers' education, it may be irrelevant to their practice.

Teachers learn about pupils and pupil motivation. *'You learn a bit from them in terms of...what makes them tick*'. Teachers learn how pupils exercise intellectual freedom, *'seeing how they develop their ideas*'.

Supervision can help teachers understand how to teach research skills. *'Working with the EPQers...highlights...areas that need addressing...in terms of students being able to conduct research profitably*'.

Supervision presses teachers to broaden their outlook. *'It challenges us to think differently about how we're supporting students*'. A less parochial, subject-centred view is needed. One teacher *'felt he was breaking the mould...of his teaching*'.

Supervision advances teacher relationships which can have future benefits. *'You might also benefit from it two years down the road, when you...start teaching the child*'. However, future relationships are likely to be positive regardless. *'The ones that are doing [a project] are probably not ones that you would have a weak relationship with*' anyway.

Supervision can sustain positive relationships with colleagues. *'It's kind of teamwork*'.

The final, but least salient, benefit of supervision is the cultivation of a thriving learning environment. *'The intellectual buzz as you are going around...on the [presentation] night*'.

## Implications

### Teacher learning as a by-product of teacher-pupil work

My grounded theory suggests that teachers learn about clients--pupils--as a by-product of working with them (Eraut, 2007, pp. 409-412). This encompasses learning

- *about clients* (p. 411): *learning about pupils* emerged as a distinct concept from the data.
- *from novel aspects of each client's problem or request* (pp. 411-412): this resonates with my category *engaging in learning*, exemplified well by the participant comment: *'You can't help but dig a little bit deeper yourself'*.
- *from any new ideas that emerge from the encounter* (pp. 411-12): this is consonant with my concept *supervision as co-enquiry*, and it reverberates with my more abstract category *developing knowledge*.

One key category in Eraut's theory is *learning activities located within work processes*. This category includes *asking questions, getting information, listening, and giving feedback*, which map seamlessly onto my concepts of *questioning, researching, listening, and 'feeding-back'*. My grounded theory suggests that these activities, located in teacher-pupil work, lead to the development of teacher knowledge. Teachers learn from engaging in these activities through work with pupils, not only with colleagues; a fact implied by, but not altogether clear in, Eraut's work (2007).

In the professional context of education, some refinements to Eraut's theory may be needed. Eraut's (2007)

- concept *working* may be imprecise. My category *teacher working* and my concept *increasing workload* explained much of the data, but not as much as the more abstract category, *servitude*. The term 'serving' may be preferable to the term 'working'.
- category *learning activities located within work processes* may not yet be sufficiently analysed. My research identified general activities such as guiding and more specific activities such as modelling as candidate concepts for this category.
- implicit distinction between learning *about* and learning *from* is not exhaustive. At least one new category is probably needed, namely, learning *with*. This category emanates from my concept *co-enquiry*.

It would probably be imprecise to limit *learning about* to *learning about pupils*. For teachers can learn about many things from teacher-pupil work, especially content. Similarly, it is probably imprecise to limit 'learning from' to *learning from novel aspects and new ideas that arise*. Teachers can learn from many sources, especially pupils. One supervisor said of her supervisee: '*He taught me far more about the Middle East...than I knew*'.

Learning is perhaps not the only developmental by-product of teacher-pupil work. At least, the term 'learning' does not adequately capture these by-products. For instance, teacher-pupil work can *broaden teacher outlook*. Therefore, the concept *teacher self-development* may be preferable.

Eraut's (2007) theory does not concern, substantively, the axiological. My findings suggest that teacher learning and development through teacher-pupil work is not significant for experienced teachers.

### **Limitations**

The findings are context-dependent and might not apply elsewhere. This is evident in the findings themselves. Hilltop is a comprehensive school; some schools, however, are selective. *'In a grammar school, it's...a pushover'*.

Similarly, at Hilltop, no curriculum time is apportioned to the projects.

Elsewhere, supervision occurs through taught lessons. *'I had 15 students...I was supervising all of them...it was very much the lesson format'*. This limitation is exacerbated by the small sample. Each participant was amongst the most accomplished practitioners at Hilltop and is not necessarily representative.

Research in other contexts with dissimilar participants is warranted.

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**Word count:** 3,300 exclusive of reference list

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## Appendices

### Appendix 1: Example interview guide

Interview Number:	01
Interviewer:	J Stone
Interviewee:	Humanities teacher 1 [pseudonym]
Location:	Hilltop school [pseudonym], office X2a
Time:	11:00 to 11:30
Date:	[DATE]

#### *Stage 1: Arrival*

Shake hands with interviewee; thank interviewee for attending. Invite interviewee to take seat. Offer light refreshments.

Engage in brief, pleasant conversation unrelated to the research e.g. about how the interviewee's house move is proceeding.

#### *Stage 2: Introducing the research*

Set out the nature and purpose of the research.

Reiterate interview arrangements e.g. duration, audio recording.

Articulate the ethical entitlements of the participant; ask interviewee for written consent before continuing.

#### *Stage 3: Beginning the interview*

Once the interviewee has granted consent, record the conversation using a digital voice recorder (Olympus DS-50). Make sure that two spare AAA batteries and another digital voice recorder are available in case of malfunction.

There is no need to gather and record contextual information because, as a colleague and the leader of the project qualifications, I am already conversant with the context.

[The formal interview will begin with a relatively easy open-ended question in order to set the interviewee at ease:]

#### *Stage 4: During the interview*

Provisional questions and topics, for flexible use

What if anything do you like about supervising pupils through the project? What do you dislike?

What, if anything, have you gained from supervision? And what, if anything has supervision costed you?

Why did you volunteer to engage in project qualification supervision?

What do you think makes a good project qualification supervisor?

How do you make sure that you supervise your student[s] well?

How far is project qualification like day-to-day classroom teaching?

Do you think it is true that it's the project qualification supervisor can make little difference to how well students do? Why? Why not?

Should all teachers be compelled to supervise at least one student through the project?

Would you advise a colleague to engage in EPQ/HPQ/FPQ supervision?

To what extent, if any, do you think students need to be supervised by a teacher, as opposed to, say, a teaching assistant or graduate?

Is the teacher's subject knowledge significant in effective project qualification?

#### *Stage 5: Ending the interview*

About 5 to 10 minutes before interview end, indicate that interview is ending e.g. by using the phrase 'in the last few minutes of the interview' or similar phrase.

In the last minutes of the interview, ask interviewee if they have any questions or anything further they would like to add.

#### *Stage 6: After the interview*

Thank the interviewee for participating.

If appropriate, discuss arrangements for follow-up interview.

Clarify that the interview will be transcribed and that the interview will be sent a copy.

Make clear that the participant will be invited to check analysis; checking is optional.

Outline arrangements for dissemination including feedback session on Tue 24 Apr 18.

## Appendix 2: Example transcript

1 **Transcript 01 – Teacher of Religious Studies**

2 **Interview location: X2a, on school site**

3 **Interview date: Friday 15 December 2017**

4 JS [00:03]: ...[]...Just a few questions for you. How do you feel that your project qualification  
5 supervision is going?

6 INT [00:13]: Okay, I don't see them as much as I thought I would. - So actually I haven't had  
7 to do as much as I thought I would for it, but I assume it's going okay, >every time I've  
8 spoken to them.< =

9 JS [00:25]: = >So what do you have to do<, or what have you done?

10 INT [00:28]: So, I've read their project proposals, so I've sat and listened to them and what  
11 they're planning to do, guided them on their project proposals, read them, gave them verbal  
12 feedback and filled in the logbook. Seeing how far they are getting on, give them some  
13 advice.

14 JS [00:45]: And do you feel they are doing okay?

15 INT [00:47]: Yes they seem to be doing okay. I've got two very conscientious girls to be fair,  
16 and yeah they're just getting things done.

### Appendix 3: Transcription conventions

Adapted from Torrance and Pryor (1998, pp. 171)

(*)	inaudible (probably one word)
(**)	inaudible phrase
(***)	longer inaudible passage (e.g. sentence)
(*hello)	inaudible word, 'Hello' suggested by transcriber
-	short pause
disapp\	incomplete word
<u>these</u>	word emphasised
COME	word said loudly compared to other utterances of this speaker
=	rapid change of turn of speakers (used at the end of utterance and beginning of next utterance)
%John%	pseudonym
>it's mine<	simultaneous speech
<i>Italics</i>	non-textual material (transcriber's commentary)
~	rising intonation, slowing (invitation to other speaker to complete sentence)
09:42	time reading from digital audio file
...[ ]...	duration of transcript omitted – extraneous material (e.g. interruption not relevant to point under discussion)

...[X]...	duration of transcript excluded or redacted for ethical reasons
102	transcript line number
JS	interviewer, Jed Stone
INT	interviewee
Transcript 01	Transcript number

#### Appendix 4: Example analytic memo (text only)

From first four nodes, clear that project supervision involves infrequent contact with pupils and therefore not too much work involved. Pupil progress monitored/tracked/ascertained mainly through conversations.

'Progressing' - is language that I'm using and perhaps imposing - be careful.

Check audio: the chase should presumably read 'the chase'

Pupils shouldn't be chased because they need to learn organisational skills themselves

"it's quite nice the idea of allowing them to take control and giving them that opportunity to thrive **for** themselves." Perhaps suggests that *normally* pupils thrive because of teachers.

The teacher in this interview seems to feel that she needs to be chasing pupils - and perhaps feels guilt for not doing this where necessary because this is a typical part of her normal practice.

Teacher has sometimes helped pupils to organise themselves e.g. by reminding them of deadlines and of what they still need to do.

Supervising does not require subject knowledge – nor good subject knowledge

Language:

Teacher, supervisor

Pupil, student [learner]

A few coding errors - not quite highlighting the whole phrase e.g 'go off and research'

The language of going off is recurrent. It suggests that independence is somehow related to the geography of learning - ie.g. when teachers are not in the **vicinity** of the teacher. Quite what vicinity means has scope for further investigation. Relation to 'contact with pupils', which has appeared in a few codes.

The interviewee claims that for supervision to be successful, at least one of the following conditions need to met: joint interest in the topic, or a positive relationship. Presumably, the ideal is both a joint interest and a positive relationship. Implication is not necessarily that the relationship needs to be pre-formed, though that might be a suggestion. There is no implication here that the supervisor must be expert in the area - just interested.

Missed a code for pupil work EPQ - so go back and find it

Distinction between staff wants and what staff feel would benefit them - in light of developmental needs. My questioning here may have been leading - so careful!

## Appendix 5: Screenshot of NVivo nodes

Nodes			
	Name	Sources	References
[-]	SUPERVISION	9	937
[-]	Educative conversations	9	459
+	Servant role	8	193
[-]	Supporting pupils	6	163
+	Supervisor not doings	5	85
+	Advising	4	33
+	Guiding	6	22
+	Helping	3	18
+	Checking	3	3
+	Discussing things through	7	54
[-]	Relating	4	49
+	Building relationships with	3	35
+	Involving others	3	8
+	Focusing on pupils' emotio	2	6
+	01 - Educative conversations	0	0
[-]	Independent pupil engagement	7	239
+	02 - Individual pupil engageme	7	90
+	Pupil engagement	5	54
[-]	Pupil freedom	7	41
[-]	Decidina	7	21



**Appendix 6: Invitation email**

[DATE]

Dear [PARTICIPANT INVITE]

I am researching project qualification supervision. The research concerns the link, if there is one, between teacher learning and project qualification supervision.

I wondered whether you would be willing to participate in the research. I'd like to interview you for up to thirty minutes to ask you about your perspectives on these things.

I'm endeavouring to make sure that the research is ethical. Further details, the ethical small-print, are attached herewith.

If you'd prefer not to participate, that is of course fine. If you'd like further information, then please let me know. If you are happy to be interviewed, then please reply to this email and we can fix a mutually convenient time.

Many thanks in advance.

Yours sincerely

Jed

## **Appendix 7: Text attached to invitation email**

### *Research Project into Teacher Development and Project Qualification Supervision*

I am researching project qualification supervision. The research concerns the link, if there is one, between teacher development and project qualification supervision.

Participation in the research is voluntary, and if you'd prefer not to participate, that's fine. If at any time you would like to withdraw from the interview and research process, then you can do so without needing to give a reason. Similarly, if there are questions that you'd prefer not to answer, please indicate, and that's not a problem.

If you choose to participate, then that choice will facilitate the research project: thank you, your contribution will be appreciated. I'll record the interview using a digital voice recorder. The interview discussion will be transcribed and you'll be sent a copy of the transcript. You'll also be sent a copy of the interpretation and analysis at some time during the research, which you will be invited to check, though there's no compulsion on you to do so.

Your responses will be treated confidentially, unless there is a need for disclosure in accordance with school policy, for example, in relation to child protection.

You may be quoted in the final report to illustrate themes and ideas. If so, then your name will be anonymised to protect your identity, though you will be afforded the opportunity to be identified with your comments in the final report where appropriate. That being the case, you'll need to give your written consent for this.

It may be necessary to share the audio-recording and transcript with others. If this proves to be the case, then those accessing the recording and/or transcript will be asked to sign a binding non-disclosure agreement. I will redact recordings and transcripts if necessary to protect your identity.

The interview is likely to last up to 30 minutes; if more time is needed, then we can agree to continue, if convenient; or we can arrange another interview, if you are happy to do so.

I will send you a copy of the outcomes of the research project in due course, and I will be leading a twilight CPD session in Room W2 on Tue 24 Apr 2018, starting at 15:30 and lasting approximately one hour. The session is titled 'Teacher learning and development: Insights from the research literature and school-based research'.

Many thanks in advance for your consideration.

Jed

## **Appendix 8: Consent text and form**

### *Research into Teacher Development and Project Qualification Supervision*

I am researching project qualification supervision. The research concerns the link, if there is one, between teacher development and project qualification supervision.

Participation in the research is voluntary, and if you'd prefer not to participate, that's fine. If at any time you would like to withdraw from the interview or research, then you can do so without needing to give a reason. Similarly, if there are questions that you'd prefer not to answer, please indicate, and that's not a problem.

If you choose to participate, then that choice facilitates the research: thank you. I'll record the interview using a digital voice recorder. The interview discussion will be transcribed and you'll be sent a copy of the transcript. You'll also be sent a copy of the analysis of your interview at some time during the research process, which you will be invited to check, though there's no compulsion on you to do so.

Your responses will be treated confidentially, unless there is a need for disclosure in accordance with school policy, for example, in relation to child protection.

You may be quoted in the final report to illustrate themes and ideas. If so, then your name will be anonymised to protect your identity, though you will be afforded the opportunity to be identified with your comments in the final report where appropriate. You'll need to give your written consent for this.

It may be necessary to share the audio-recording and transcript with others. If this proves to be the case, then those accessing the recording and/or transcript will be asked to sign a binding non-disclosure agreement. I will redact recordings and transcripts if necessary to protect your identity.

The interview is likely to last at least five minutes and up to 30 minutes. If more time is needed, then we can agree to continue, if that is convenient to you; or we can arrange another interview, if you are happy to do so.

I will send you a copy of the outcomes of the research project, and I will be leading a twilight CPD session in Room W2 on Tue 24 Apr 2018, starting at 15:30 and lasting approximately one hour. The session is titled 'Teacher learning and development: Insights from the research literature and school-based research'.

*Written consent to participate*

I understand what participation in the *Teacher Development and Project Qualification Supervision Research Project* entails, and I am happy to participate voluntarily.

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## Appendix 9: Non-disclosure agreement

### *Non-Disclosure Agreement*

Project title: Teacher Development and Project Qualification Supervision Research Project

Project leader: Jed Stone (Leading Practitioner)

Project team: Jed Stone (Leading Practitioner)

**Brief Description:** A grounded theory approach involving semi-structured interviews of teachers involved in project qualification supervision. Interviews were recorded using a digital voice recorder device, and then transcribed. Transcript text was then subjected to analysis including analytic memos, coding, categorising, and the identification of core categories. The analytical interpretation is articulated in a final report.

This agreement, dated [DATE], is between (1) Jed Stone of [SCHOOL NAME] and (2) the [NAME OF VERIFIER] ('the verifier').

### *1. Background*

- 1.1. Jed Stone owns and controls proprietary data (the 'data') in relation to the Teacher Development and Project Qualification Supervision Research Project.
- 1.2. Jed Stone considers the data to be strictly confidential.
- 1.3. Jed Stone proposes to disclose this confidential data to the verifier, in connection with the verifier's role in quality assuring the project.

This agreement's purpose is to set forth the terms under which (1) Jed Stone will disclose confidential information to the verifier and (2) the verifier will keep this information confidential.

### *2. Agreement*

- 2.1 The verifier will treat of the data in strict confidence. This includes, but is not limited to, not disclosing the data, or interpretations of the data, with teachers, learners, school leaders, school governors, media organisations, inspectors, visitors, friends, family members, the public, or those who work in Higher Education Institutions.
- 2.2. The verifier is authorised to access the data and to use it for the sole purpose of verification.

2.3. The verifier will exercise all reasonable care to protect the confidentiality of the data. This includes storing electronic forms of the data on a device with 128-bit Advanced Encryption Standard or higher encryption.

2.4. If the data gives rise to any concerns from the verifier, for example, relating to the safety or well-being of respondents, then the verifier will notify Jed Stone at the earliest reasonable opportunity.

2.5. If the student receives a request for disclosure from any other party, then the verifier will promptly notify j Stone.

2.6. The student will securely destroy the data within twenty four hours after verification.

2.7. The data disclosed to the verifier remains the property of Jed Stone.

### 3. *General Provisions*

3.1. This is the only agreement of the parties respecting this subject, and it supersedes any prior written or oral agreements between the parties regarding this subject.

3.2. The parties may not amend this agreement except in writing, dated after the date of this agreement and signed by each party or each party's representative.

Signed: \_\_\_\_\_

Print name: [VERIFIER NAME]

Date: [DATE]

Signed: \_\_\_\_\_

Print name: Jed Stone

Title: Leading Practitioner

Date: [DATE]

**Appendix 10: Consent slip for identification**

I wish to be identified with the quotation(s) below in the reports relating to the *Teacher Development and Project Qualification Supervision Research Project*.

[QUOTATION(S) HERE]

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Appendix 11: Written consent to use excerpt from transcript**

I give my consent for the Excerpt, attached herewith, from Transcript [No.], to be used as an example in *Teacher Development and Project Qualification Supervision Research Project* reports.

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_