What Do Teachers Do When They Say They Are Doing Learning Rounds? Scotland's Experience of Instructional Rounds

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Abstract: This paper reports on research into the practice of learning rounds in Scotland. Learning rounds are a form of collaborative professional development for teachers based on the instructional rounds practice developed in the USA. In recent years learning rounds have gained high profile official support within education in Scotland. The research finds that what teachers in Scotland do when they say they are doing learning rounds varies widely from school to school and deviates significantly from the practice of instructional rounds. The implications of this for who is learning what in the practice of learning rounds is considered. The wider implications of the Scottish experience for the development of in structional rounds practice in other countries is also considered as are the implications for promoting collaborative professional development practice more generally.

Keywords: *Instructional rounds, learning rounds, collaborative professional development*

Introduction

Learning Rounds is a collaborative professional development practice used by teachers in Scotland. It is based on the instructional rounds practice developed in the United States of America (City et al., 2009; Roberts, 2012). A measure of its perceived importance to teachers' professional development in Scotland is that it is referred to in Teaching Scotland's Future (Scottish Government, 2010a), The Framework for Educational Leadership in Scotland (Scottish Government, 2012), Leading Change 2: Learning from Schools of Ambition (Scottish Government, 2010b) and the ICT in Excellence Group Final Report (Scottish Government, 2013). As a form of professional development it has been promoted by the Scottish Government funded National CPD (Continuing Professional Development) Team (National CPD Team, 2011). A National CPD Team and Education Scotland overview report (Education Scotland, 2011) estimated that 24 (out of 32) local authorities had engaged in learning rounds. Education Scotland is the national body in Scotland responsible for supporting quality and improvement in learning and teaching.

Despite the fact that Instructional Rounds has been sufficiently influential internationally to inform official teacher development policy and practice in Scotland and to be subject to academic scrutiny in Australia (Stephens 2011), there is almost no peer reviewed academic literature on the practice. In addition to Stephens' paper there is only one other (Roegman and Riehl 2012). The remainder of the literature on instructional rounds is either books intended to help educators adopt the practice (City et al., 2009; Roberts, 2012) or shorter papers with a similar purpose in non peer reviewed publications. Most of these are authored by writers associated with the original Harvard team who developed instructional rounds (Elmore 2007, Blanding 2009, Teitel 2010, Rallis et al 2006, City 2011, Hough 2009). Some are authored by other educators and present variations on instructional rounds (Marzano 2011, Guild 2012).

A particular absence from the literature is any empirical data relating to teachers actually engaged in the practice of instructional rounds. Rallis et al (2006) refer to the existence of transcripts of instructional rounds practice but these have not been published. In Scotland, the Learning Rounds Overview Report 2008-2011 (Education Scotland 2011) provides a generalised account of the progress of learning rounds in Scotland and supports this with 'vox populi' quotes from participants. However, it does not include any detailed data on the nature of the actual learning rounds practices found in Scottish schools and local authorities.

What is evident from the US literature is that much of the reported instructional rounds practice there has been developed with the direct involvement of the Harvard associated educators who were responsible for its initial development. These educators have repeatedly emphasised the difficulty of embedding instructional rounds practice and the vigilance that this requires (City et al 2009; Roberts 2012). It is likely, therefore, that instructional rounds practice developing in countries outside the US, away from the expertise of the original

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developers, will experience at least the same level of difficulty, if not more. In the case of Scotland the Learning Rounds Overview Report 2008-2011 (Education Scotland 2011, p2) reports that "many educators have taken this forward without engagement with their local authority or with the national CPD Team … "word of mouth" has been a prime driver in its adoption". In this situation, given the reported difficulty of embedding the practice close to its origin in the US, it is unclear how much learning rounds practice might have changed from instructional rounds and what the effects of those changes are on the nature of what teachers learn. It is possible that questions of this kind are also relevant to other countries outside the US where instructional rounds have been adopted as a model for collaborative professional development.

This paper presents extracts from transcript data of teachers in Scotland engaged in learning rounds. It considers the extent to which the practice revealed in these transcripts corresponds to the practice propounded in the instructional rounds literature. In doing this it also considers who is learning what from the current practice of learning rounds in Scotland evident in this sample. The value of this to an international audience is to add to the very small body of peered reviewed literature published on what has become an influential practice internationally. It will also currently be the only example of empirical data of teachers actually engaged in the practice of instructional rounds outside of the US. Proponents or practitioners of instructional rounds in other countries may find it useful to compare this data with their own experiences or use it as a lens to begin to explore their own experiences.

Before discussing the transcript data, we will first summarise the key elements of instructional rounds practice as presented in the instructional rounds literature. We will then briefly identify different emphases on practice that can be found in the learning rounds literature in Scotland. This will allow us to relate the transcript data to these advocated models of practice.

The nature of instructional rounds and learning rounds

Instructional rounds is a method for collaborative professional development in which educators come together to observe teaching and learning across a number of classrooms in a single school. In a post observation debrief they use notes and other forms of recording, such as diagrams, taken during the observations to build up a detailed picture of teaching and learning in the school. The intention is to use this to develop understanding of the teaching and learning practice in the school and make plans for what needs to be done next to develop that practice. In the case of most reported instructional rounds in the US literature these educators have been district superintendents. In the case of learning rounds in Scotland they have most frequently been teachers. The aim of instructional rounds is system improvement rather than developing

the practice of the particular teachers observed or of the observers.

The question of where instructional rounds claimed efficacy comes from is important as instructional rounds is only one approach to collaborative professional learning among many others (Stoll et al 2006, City et al 2009, Stephens 2011). In part the claimed efficacy of instructional rounds arises from "four step process: identifying a problem of practice, observing, debriefing, and focusing on the next level of work" (City at al: 6). This process is considered so essential that "[a]dding an element into the mix could still remain true to the rounds model. Taking out any one of the four elements, however, would no longer constitute rounds" (City at al 2009: 100).

Identifying a problem of practice, the first "critical component of rounds" (City et al 2009: 102), is not envisaged as straightforward. City et al state that "[i]t is not a whim and does not emerge from thin air. It comes from data, dialogue, and current work. The problem of practice is grounded in some kind of evidence, preferably shareable evidence … [it is] not just … a hunch" (City et al 2009: 102). A "rich problem of practice" (102):

- Focuses on the instructional core;
- Is directly observable;
- Is actionable (is within the school's or district's control and can be improved in real time);
- Connects to a broader strategy of improvement (school, system)
- Is high-leverage (if acted on , it would make a significant difference for pupil learning)(City et al 2009: 102)

Among the possible "challenges" (106) for developing a problem of practice are: too much packed into the problem; implementation/audit syndrome (i.e. formulating a problem of practice that is about checking whether a prescribed strategy is actually being carried out); too broad or vague a statement of a problem; too little or too much context; a network with inadequate knowledge or skill for the problem at hand (City et al 2009: 106-110). From this it is clear that considerable work is needed to develop a problem of practice if the rounds process is to be effective. Developing a problem of practice can't be treated as a simple procedural step before the 'real work' gets underway.

The requirements for a "rich problem of practice" include focussing on the instructional core. This focus on the instructional core is claimed as one of the essential elements for the efficacy of instructional rounds. City et al define the instructional core as "the teacher and the student in the presence of content" (22). Instructional rounds needs to focus on the relationship between these three and how changes to any one of them requires or creates changes in the other two. Focusing on one without connecting it to the others will not be effective.

The second step, observing, is intimately linked to the debrief step and most of the important requirements for the observing step are considered in relation to debriefing. The debriefing step is sub-divided into four stages: description, analysis, prediction and evaluation. City et al (2009) insist that it is always "Description before analysis, analysis before prediction and prediction before evaluation" (34). They are particularly wary of the evaluation stage, stating that "[o]nly after people have developed the disciplines of description, analysis and prediction do we raise the issue of evaluation" (34). The word "disciplines" is significant as City et al repeatedly emphasise the hard work necessary to develop the ability to describe in appropriate ways. They comment on a well-established culture in education that results in moving prematurely to evaluation after observation. They state that

The discipline of description is the core practice on which rounds are based and is quite novel and counterintuitive for most educators. It must be learned, and some other habits – like using general or judgmental language or jargon – must be unlearned" (84)

To be effective there are two other requirements for the describing stage. The first of these is the "grain size" (92) of the description. The finer grained the description, the more useful it is. This means that participants in rounds need to develop the skill of not just describing but of describing in fine grained ways. The second requirement is that participants should not describe what they do not see, only what they do see (94). This is because describing what we do not see is an indication of what we think is important (i.e. evaluative) rather than evidence of what is happening in the room. Taken together these descriptive requirements take time and effort to develop The instructional rounds literature repeatedly returns to how difficult it is to develop the required skills of description, how long it can take and the tendency to revert to old and inappropriate ways of speaking about practice if we are not vigilant.

Developing a shared culture is another of the essential elements of instructional rounds. City et al argue that instructional rounds "is not a cook book of recipes for transforming schools … in five or six or seven steps" (xi) and that "rounds in and of themselves will not raise student scores" (xi). Instructional rounds will only be effective if they change the culture of schools and (in US terms) districts. It is this cultural change that will produce improvements not the practice of rounds itself.

Just as cultural change is essential to the efficacy of instructional rounds, City et al (2009) also assert that to be effective instructional rounds need to produce system wide change "not just isolated pockets of good teaching in the midst of mediocrity" (5). The main way in which instructional rounds can lead to system wide change is through the connection between the practice of rounds and a wider improvement strategy. In fact City et al assert that "[h]aving an improvement strategy … is a precondition for the effective use of instructional rounds" (5) and that "the more developed the strategy, the more you are likely to benefit from the practice of rounds" (5).

Another element of the effective use of instructional rounds is a "theory of action" (City et al 2009). A theory of action needs to be a "statement of a causal relationship between what I do … and what constitutes a good result in the classroom … [i]t must be empirically falsifiable [and] [i]t must be open ended" (City et al 2009: 40, italics in original). The open ended requirement means that it must be able to be amended as more is discovered about the situation(s) being observed. In fact having a finished theory of action is not the goal and once it is viewed as finished it "ceases to function as a learning tool and it becomes a symbolic artefact, useful primarily as a tool for legitimising … authority" (53). Developing theories of action is not viewed as easy or straightforward and, like problems of practice, requires practice and support. Theories of action may be developed at the start of the process of developing the practice of rounds or they may emerge from the rounds.

In summary, the defining features of instructional rounds as an effective practice are:

- A rich problem of practice based on shared evidence focused on the 'instructional core'
- Fine grained descriptive data about what is happening (not what isn't happening) in classrooms that can be used for later analysis and prediction and, finally, evaluation
- A wider strategy for improvement that is linked to the problem of practice and the observations
- A developing theory of action about how different actions affect outcomes
- A changed culture for schools and districts

How are these defining features reflected in the literature on learning rounds? (Education Scotland 2011; National CPD Team 2011). The Learning Rounds Toolkit (National CPD Team 2011) includes references to the importance of a "plan of action" (National CPD Team 2011, p.9) emerging from the post observation stage that relates to instructional rounds emphasis on a theory of action. However, it may be worth noting that this is a plan and not a theory so it could become a set of actions to be carried out rather than a developed understanding of the cause and effect of particular actions. The learning rounds literature also refers to the link between learning rounds and "medium to long term planning which relates CPD activity to determined outcomes" (Education Scotland 2011: 6). This echoes instructional rounds "wider strategy of improvement".

Most of the guidance on the practice of learning rounds, however, focuses on the observation and the debrief (National CPD Team 2011). Perhaps the most conspicuous absence in comparison to instructional rounds is the lack of attention given to developing a "rich problem of practice". This is treated more briefly in learning rounds as "the theme of the observation is

agreed by the group" (9). The relative lack of attention given to this area, and to the importance of connections with a broader school improvement plan, CPD strategy and a theory of action (although these are mentioned) could result in learning rounds practice in Scotland that focuses on observation and debrief at the expense of other equally important parts of the process.

These differences raise questions about how much instructional rounds practice can be adapted and altered without adversely affecting their claimed efficacy. City et al (2009) pose this question as "What variation from rounds is innovation and what is deviation?" (151).

In general, the developers of instructional rounds do not see the process as a fixed prescription. Elmore writes that he views their work in instructional rounds as "a continuous learning process rather than a process of teaching people how to implement a fixed design" (Roberts 2012, x). He and his colleagues "regard the practice of Instructional Rounds as never becoming a settled set of routines but always subject to challenge and learning" (ibid x). City et al (2009) pose the question "what are the non-negotiables for network development, and what can be adapted to meet local circumstances and needs?" (63). They answer, "There is not one cookbook set of answers to these questions" (ibid 63)

So adaptation to local circumstances and continued development of practices is considered possible and, perhaps, both necessary and desirable. However, claims about the superior efficacy of instructional rounds as a practice compared to other approaches (City et al 2009) suggest that some changes to the practice would not be a desirable development but would be a change that resulted in a loss of efficacy, particularly if they were compromises with some of these other approaches. Roberts (2012) claims that the "important differences between instructional rounds and other ways of doing classroom observations in schools ... are critical to an understanding of how difficult" they can be (4). If the defining features of instructional rounds are the ones that make it difficult then it is possible that local adaptations may be driven by the desire to make the practice sit more comfortably with existing practices and that this will be a compromise that will weaken what was considered to be potent in the original model. City et al (2009) comment on the strong "pull to the Black Hole" (90) of some aspects of well established school practice and also observe that "many people like best the changes that are least disruptive" (27).

Data Gathering and Method

In Table 1 shows the four schools involved in the data gathering, their experience and training with learning rounds and the nature of the participants in the data. Each school was in a different local authority and they were chosen as a both a convenience sample (Walliman and Buckler 2008: 154) and a purposive sample (Jupp 2006). A convenience sample because they were known to be carrying out learning rounds at the time that we wanted to gather the data and a purposive sample

because they represented four different Local Authorities and were, therefore, more likely to present a wider picture of practice than might have been found in a single Local Authority where experiences and training were more likely to be shared. Post observation debriefing meetings were audio recorded and then transcribed. Each of these meetings was about an hour long. This is shorter than is typical for instructional rounds in the US and this is probably because the learning rounds model has been adapted to fit into the pattern of an average school day without causing too much disruption by taking teachers away from their other work.

Data Analysis

The following analysis and discussion of the transcript data is organised according the essential elements of instructional rounds that we identified earlier. The purpose of this is to consider how the learning rounds practice captured in the transcript data relates to the instructional rounds model that underpins it. During this analysis we will also offer some reflection on how this affects what teachers are learning from the learning rounds that are represented in these transcripts. This is important because adaptation and development of instructional rounds practice in learning rounds is not in itself significant. What is significant is the effects that these differences have on professional learning.

A rich problem of practice based on shared evidence focused on the 'instructional core'

The nature of transcript data of post observation debriefs means that there will be some aspects of learning rounds practice that might not be entirely visible. One of these will be any work done on developing a problem of practice before the observations. However, it is likely that the salience or otherwise of the problem of practice in the process will be reflected in what is discussed in the post observation debrief.

All four schools were making use of agreed foci for observations and it is worth remembering that the learning rounds toolkit emphasises agreeing a focus for observation rather than developing a problem of practice. Agreeing a focus does not guarantee that the focus will share the requirements that City et al set out for a "rich problem of practice" which are that it

- Focuses on the instructional core;
- Is directly observable;
- Is actionable (is within the school's or district's control and can be improved in real time);
- Connects to a broader strategy of improvement (school, system)
- Is high-leverage (if acted on , it would make a significant difference for pupil learning)(City et al 2009: 102)

Table 1. Schools and participants represented in the data

Type of school	Experience with learning rounds	Preparation for Learning Rounds	Nature of participants	Coding in transcript	Focus of learning round observation
School A: primary school	None	Guidance from national CPD coordinator; information accessed on Education Scotland website	Teachers including Head Teacher plus 3 Local Authority representatives	AA-Depute Head Teacher (facilitator); AB- Head Teacher; AC-class teacher; AD-LA representative; AE- LA representative; AF-LA representative; AG-class teacher; AH-class teacher Transcript line numbers 1-370	Pupils' awareness of learning intentions and success criteria; differentiation; challenge and pace; independent learning
School B: secondary school with feeder primary school	Second time	Guidance from national CPD coordinator	Teachers including CPD co-ordinator	BA-teacher (facilitator) BB-teacher BC-teacher BD-teacher BE-teacher BF-teacher Transcript line numbers 1-312	Learning intentions Plenaries Formative assessment
School C: community secondary school	Third or fourth time for different participants	Some support at Local Authority level	Teachers including CPD co-ordinator	CA-teacher (facilitator) CB-teacher CC-teacher CD-teacher CE-teacher Transcript line numbers 1-312	Learning intentions Target setting Opportunity to work at increased pace Questioning
School D: community campus School (nursery, primary, secondary)	Fourth time	Visit to another school in another Local Authority that had experience	Teachers including CPD co-ordinator	DA-teacher (facilitator) DB-teacher DC-teacher DD-teacher DE-teacher DF-teacher DJ-teacher Transcript line numbers 1-285	Development of skills Pupil participation Questioning Behaviour management Group work Use of ICT Active learning Challenge and extension/differentiation Uniform Use of learning intentions

The observation foci of the four schools overlapped and some foci recurred in all schools. Most of the recurring foci grouped around techniques associated with assessment for learning (Wiliam, 2011) and this probably reflects teaching and learning techniques that have been considered to be good practice recently in Scottish education. These are clearly 'directly observable' and 'actionable' and could 'connect to a broader strategy of improvement'. Recent interest in the value of formative assessment in teaching and learning would suggest that it is, at least potentially, 'high leverage'. Arguably this problem of practice is 'based on shared evidence' if we consider the evidence that has underpinned the academic interest in

formative assessment in recent years. However, not everybody agrees that some of the teaching and learning practices that have arisen from it are actually beneficial (for example, Klenowski 2009; Bennett 2011; Dixon, Hawe & Parr 2011; Swaffield 2011; Willis 2011; Hawe & Parr 2014). It is less clear that the focus for observation is underpinned by evidence shared among the participants in the learning round. This is both in terms of how familiar participants are with the academic evidence that has underpinned the interest in formative assessment (including voices critical of some classroom practices that supposedly derive from this evidence) and in terms of whether they have shared evidence generated within their own school for the effectiveness of these formative assessment processes.

The generation of shared evidence for the effectiveness (or just the effect) of a practice relates to focus on the 'instructional core' in the problem of practice. That is on the relationship between teachers, learners and content rather than just on one of these to the exclusion of others. In schools B and D the observers spent almost all of their time recording what teachers were doing and comparatively little time recording what pupils were doing. This meant that they recorded whether teachers had used a particular strategy but they did not record what the effect had been on pupils' learning. This became particularly evident in school B in the exchange between teachers BA and BB below.

> BA: … in few lessons there was challenge to SC [success criteria], so the SC wasn't really a challenge like eh… one of the teachers uses a problem, so the SC is being able to solve this problem by the end of the lesson, so it's a challenge. Do we want to say something about that or do we leave it?
>
> BB: It's one of the hard ones because we didn't know the kids so it was hard to say if they were being challenged in that lesson because it wasn't obvious
>
> Line 301-306

The focus on teachers' use of strategies rather than on what pupils are doing has made it difficult to judge if pupils were being challenged whereas a focus on pupils would have yielded evidence for this. So the problem of practice here is teacher behaviours rather than the instructional core.

City et al (2009, p. 30) state that one of the hardest things to achieve in instructional rounds is to get teachers to look what at what is on pupils desks rather than what is happening at the front of the room. This certainly seems to have been the case with schools B and D.

As previously mentioned, one thing to avoid when developing a problem of practice, according to City et al, is using it as an audit to check whether particular strategies are being implemented. In School B and School D there is a strong sense that the learning round is being use to report back on the extent to which teachers are using certain preferred teaching and learning techniques in the classroom rather than the observations focusing on generating evidence for the effect of these strategies on learning.

This sense comes across particularly strongly in the frequency with which the groups discuss how to articulate what they have seen and the effects that different ways of articulating it might have on the audience for their report back. A particularly clear example is given below.

> BE: I think what I was trying to say when I said I didn't want judgement was I didn't want secondary staff to take any sort of offence (yes) and that's what I mean by …you know
>
> BC: I don't know you would take offence
>
> BB: Some people would (laughs - they would)
>
> BE: That's what I'm thinking
>
> BA: OK
>
> BE: And plus, we could then be saying, well we seen this in secondary but we didn't see this in primary you know with the same
>
> BA: It's a bit like what I'm saying about the departments
>
> BF: I don't feel we should be looking at it as a dividing ..
>
> BA: So shall we just leave it out?
>
> Lines 62-72

The end purpose of capturing the data is clearly conceived as reporting back in positive terms rather than generating a collection of evidence that would allow the relationship between teaching strategies and their effects to be better understood so that future developments can be planned. This has effects on whether the data they generate is fine grained or not. We consider this in the next section.

The transcript for school A differs significantly from schools B and D. The majority of the discussion in school A focuses on pupils rather than on what the teacher was doing. For example, in the extract below AB uses observation of pupils to start to unpick the distinction between pupils being *aware* of learning intentions and pupils *understanding* learning intentions:

> AB: It's interesting for me the use of the word "awareness of learning purpose" and for me there is a difference between awareness and understanding … because I would say across all four classes that almost all children were aware that there was a learning purpose and there was really only one child I felt that was disengaged and wasn't even aware there was a learning purpose and then I would then split that down further to say that within that there was quite a range of children in terms of what they understood the learning intention and that reflected sometimes the ability of the groups and the discussion groups they

were in so there was a difference even within groups of how well the children were understanding the learning intention and across the whole class …

<div align="right">Lines 109-116</div>

In places this discussion also seeks to make connections between the variations in approaches that teachers were using within the same general technique of sharing learning intentions and the effects these had on pupils. Early in the post observation discussion AB says:

AB: …the whole point of this is to get a feedback on the activities and the impact on pupils …

<div align="right">Lines 8-9</div>

This is a succinct expression of the focus on the instructional core. An example of this follows on from AB's observations in the extract from lines 109-116 where AB says

Some teachers chose to write up the LIs as I can statements, others didn't so there was a difference in terms of how the staff were presenting the LIs …..

<div align="right">Lines 116-118</div>

So AB is beginning to reflect on the particular ways in which teachers chose to share learning intentions and the differing effects this might have had on pupils' understanding. Similar examples can be found in the discussion between AF, AE and AD below.

AF: I think the learning intentions and success criteria were shared with children so that they had a good idea of the purpose of their learning. There was one where children had to use the LIs to set their own success criteria ehm and the children had found that more difficult, and I think there was some confusion about whether it was LIs or whether it was SC and that that possibly meant that the children were a little more unclear about the purpose of their learning

AE: I would agree with that I found that in one particular class I found in another class that the LI had been set very clearly and the success criteria also had been set clearly I found that the children were asked before they saw the success criteria what they thought the success criteria would be and in doing so that engaged the children more in terms of the purpose of the learning but em only some pupils engaged in setting that success criteria therefore I would like to have found out if I'd had more time what the other children were getting from that .. I would say that all of the children were very clear on the task and the purpose of the task but in terms of the purpose of the learning it would be good to explore that a bit further.

AD: I would agree with you that's the point I had also – about why are we learning this rather than the task itself … not only at the beginning but throughout the lesson most teachers were about saying this is what we're doing this is why we're doing it, but you're right,

the wider context of the learning, how that fits in with transferable skills and various other things – why are we doing it here but how is it going to help us elsewhere.

AF there was one … example that I saw where that was shared and the bigger picture was shared about the transferable learning emm and in terms of acknowledging the children's bigger questions because it was through their thinking that that came out

<div align="right">Lines 81-101</div>

These discussions that focus on the instructional core begin to show the potential to inform a refined or developed theory of what is effective in classrooms in this school (a theory of action). This in turn might lead to a refinement of the overall improvement strategy that the school is using. The focus on the need to share learning intentions and success criteria might be redefined as a more precise statement of the types of technique for doing this that seem more effective in terms of effects on pupils' learning.

However, towards the end of this episode, when the key information from the observations is being recorded, an audit approach reappears and what is captured is the frequency with which certain general techniques have been seen rather than the developing understanding of the differing effects of different ways of implementing these techniques on pupils' learning.

AA: OK well I'm going to try to I don't know if this is …thinking about our discussion so the LIs and SCs were evident displayed and shared in most or all classes; most children had an understanding of purpose, confusion in one class – difference between LIs and SCs; children had clear understanding of the purpose of the task but not so clear about the purpose of the learning in some classes. There's a difference in terminology between awareness and understanding . Em if we're looking at it this way awareness of learning purpose – all, almost all, most, some or few children in how many classes, kind of summing up on the discussion we've just had

AE: I've certainly got an aggregate score of most

A(unkown): Yes

AA: That would be my feeling

A(unkown): Yes

AA: so most children in all classes? Or most children in most classes

AD: Most and most

A(unkown): Yes

A(unkown): Yes

AA: OK……. right so if we look at differentiation now

<div align="right">Lines 160-175</div>

So some rich insight was being developed into a problem of practice that could have been used to refine the school's approach to improving teaching and learning (a theory of action) but it appears to not have been captured for use by the wider system. Participants in the conversation might well carry away developing insights with them but it is not clear how this can be used to inform the thinking of the wider system.

This pattern is repeated in relation to each of the remaining observation foci. The impact of different techniques in relation to differentiation, pace and challenge and independent learning begin to be reflectively explored through considering pupil responses. However, in each case the focus ends with a return to numerical data in terms of counting the frequency of occurrences of the general strategy rather than the qualitative capturing of the detail of the differences and their effects.

Like Schools B and D, School C begin their discussion by focusing on a checklist of whether they have seen teachers using certain classroom strategies that are considered good practice. The extract below is typical

CA: When you went round did anyone use the descriptor?

CB: I used it (yep...yeah ...)

CA: Em, did you see any of the things? Written on it?

CB: Most of them , all bar one I didn't see any target setting

CC: I've got nothing for that box

CA: I put em target setting and aspirations as learning intentions (that's what I did) I saw that in the majority of lessons they were, in learning intentions and did they meet that intention because if that happened in any of the lesson I didn't know

CB: Shared and written down I wrote (Aye, shared with the class)

CC: ...(inaudible) he was the only one I seen that was the problem coming in halfway through...you weren't sure of what the LI was and things like that

CA: I did see it on the board in G's lesson initially and in L's lesson and in M's as well (yes M's lesson as well) so those were the lessons where I was in at the start so that's possibly why I saw those

CB: Did you see in those lessons did you see them going over the intention at the end cos I always feel that if you're going to put it up at the start for me it only becomes target really then if you evaluate, if people evaluate themselves at the end as to how far did they meet that intention so did that happen in any of the lessons it didn't in mine

Lines 5-21

So this begins as an audit of certain preferred teacher behaviours rather than as a focus on the effects of these strategies on pupils' learning. However, school C does move relatively quickly to talking about what pupils are doing. The extract below is an example.

CE: What I liked about it was very much it was peer – supportive as well and in the group – I think we seen that in nearly every lesson and even in, when it wasn't so deliberately saying I want you to work in pairs and I spoke to the Kids in X's lesson and said is he happy for you to work with each other and they said absolutely he doesn't mind so (inaudible)

CD: It's a culture isn't it

CA: So what I thought about that well what I noticed was it was very similar to the way I organise my class is that because he's got a mixed ability class and it's almost the same class that I've got in science that there seemed to be students of differing ability in groups together which automatically means that you've got I think (inaudible) and I definitely saw, I think peer support where the students were helping each other

CB: That was one thing I was wondering in that we watched so much group and pair work had the pairs been put together intentionally or are they fitting where they want are they with friendship groups I wanted to know that so I wonder

CC: I asked Y and a couple of pupils at the back – I asked is this just where you sit she said oh we just chose our seats - we work with who we sit next to

CB: Example I saw see when we were in French and there was the task obviously with the verbs and I Z actually said to S work with my partner clearly pairing him up with a more able student.

CE: I noticed that – I've written that down that I hear her more than once say – and have you asked your partner yet, and they were encouraged to work together.

CC: we saw M doing it at the start she said that on the whole you line up – it was in hair length and then you number them and that's how she does her groups – hers is totally at random. I've used that before I think it works really well because it is random

CB: I think in a set group that you could do a random selection like that but transform that in to mixed ability class would mean more ... saying now we're having this discussion saying, you know you would need to almost mentally set them in your head and make sure that each group had one from or whatever to actually make that work in a mixed ability class

Lines 59-84

Although this extract does focus on the instructional core, what also begins to become apparent is that the participants in school C are focusing on the perceived value of particular classroom techniques in isolation rather than linking this to a broader theory of action as

participants in school A were beginning to. The same tendency can be seen in the extracts below where teachers identify particular classroom techniques that they like and consider using them in their own classrooms.

> CD: One thing that, I don't know whether you saw it but at the front he had this worksheet basically on the smart board to help them out but it was all jumbled up. The information was all there to help them with the problem solving task and he just said to the kids if you're l capable of doing it if you can do it go and help out go and do that worksheet at the front (inaudible) I thought that was a really good strategy (it was like a multi-layered) multi-layered yes not only was he stretching a really bright class , he was also stretching the brightest within the bright class
>
> Lines 133-138

> CC: I liked how A specifically showed examples you guys wouldn't have seen it but before the task started he gave them the task of like explaining, convincing him why their bit was the best and he gave two arguments like this is a good argument so he had a kind of example like my bits the best because it has a metaphor in it and then the next one was this is a better argument and he put that on the board and he was like my bit's the best because it has a metaphor and then explaining what a metaphor is so the kids could see, if I write that it's fine (inaudible)
>
> Lines 196-201

> CD: See to evaluate anything – I'm always thinking about how I could take things to science you know from that lesson, and in science there is a lot of correct answers, in maths there's a lot of correct answers but you could still evaluate the process of getting to that answer can't you or you can evaluate … I'm talking science here or you could evaluate write-ups of an investigation (agreement) You know you could take that … that's what I'm taking from it really that you can really go into some depth and why it was a good piece of work
>
> Lines 245-250

So while participants in school C are considering the effects of the details of teachers' actions on pupils' learning, they are largely gathering isolated techniques that they like and might want to use themselves rather than using their observations to develop a more general theory of action in relation to teacher actions and their effect on learning.

Fine grained descriptive data about what is happening (not what isn't happening) in classrooms that can be used for later analysis and prediction and, finally, evaluation

One of the things we noted in the transcripts was the apparent levels of awareness of what the key elements of learning rounds practice were. Focusing on the instructional core was not an element of the practice that we saw a great deal of evidence of either in practice or in the understanding of learning rounds practice that participants explicitly articulated during the debriefs. The sole exception to this was the comment from teacher AB quoted above. The requirement to use descriptive language, on the other hand, was the requirement most frequently explicitly referred to by participants. It occurred explicitly in the transcripts for schools A, B and D. However, it was rarely adhered to in practice. Throughout the transcripts there are frequent examples of evaluations of what has been seen. This is even after participants have agreed that language must be descriptive rather than evaluative.

The second requirement of generating descriptive data is that participants should only describe what they see, not what they do not see. For the most part this is observed in the transcript data. However in school C there are extended passages where discussion is about what was not seen. An example can be seen in the extract below.

> CB: … I didn't see any target setting
>
> CC: I've got nothing for that box
>
> CA: I put em target setting and aspirations as learning intentions (that's what I did) I saw that in the majority of lessons they were, in learning intentions and did they meet that intention because if that happened in any of the lesson I didn't know
>
> CB: Shared and written down I wrote
>
> CD: …(inaudible) he was the only one I seen that was the problem coming in halfway through…you weren't sure of what the LI was and things like that
>
> CA: I did see it on the board in G's lesson initially and in L's lesson and in M's as well (yes M's lesson as well) so those were the lessons where I was in at the start so that's possibly why I saw those
>
> CB: Did you see in those lessons did you see them going over the intention at the end cos I always feel that if you're going to put it up at the start for me it only becomes target really then if you evaluate, if people evaluate themselves at the end as to how far did they meet that intention so did that happen in any of the lessons it didn't in mine
>
> Unclear: No, I didn't see
>
> CA: I didn't observe that..I did not observe that no …
>
> Line 8-24

Later in the discussion CA specifically asks participants, "was there anything anybody felt they didn't observe?" (line 168) and this prompts a similar sequence to the one above. Although the most extended examples of

discussion of what was not there occurs in school C. There are also examples in School D.

A third requirement of generating data in the debrief is that description should be as fine grained as possible. In the last section we discussed School B and School D's apparent desire to report back summative data in positive terms rather than using it to inform a developed understanding of the relationship between particular teacher actions and their effects on pupils' learning. An important effect of this is that they begin to use increasingly broad and accommodating categories for their data in a way that reduces its value as fine grained evidence of what is happening in terms of the relationships in the instructional core. An example of this can be seen below from school D.

DC: We said that we saw plenty of challenge and extension for the pupils in most classes

DB: We had that in some

DA What did the other groups think?

DD: we had that for some… differentiation

DA: shall we say in some classes we saw challenge and extension? Is differentiation not different from challenge and extension?

DD: We I think differentiation and extension are the same thing, just opposite ends of the scale or extension is differentiation

DH: meeting their needs

DB: Differentiation appropriate to the learning?

DD: But again you have to be careful not to put it in a negative way not to … it wasn't that they you can't say that some …classes at the beginning weren't into it wasn't that they weren't challenging them challenging them they were just setting the scene

DB: but this is just like a snapshot

DA: So maybe what we should be saying is in…. most or all challenge and extension, differentiation where needed?

DA: Could we take out the differentiation part and say in most classes we saw differentiation by outcome?

DG: I think if I was … some classes where a whole class approach to things at which point if all the class is on the same task then you've still got the challenge in that task with a varied outcome, it can be differentiated by outcome which we saw in the whole class approach, the differentiation was there even if it wasn't different pupils doing different activities in different task it was differentiation by outcome so I would have said I saw differentiation in most classes

Lines 79-101

In this extract the teacher strategies of 'challenge and extension' and 'differentiation' become fused and

progressively broadened so that, by the end of the extract, almost anything can count as challenge, extension and differentiation. This is not an isolated process. It can be found in other places in the school D transcript and also appears in school B as shown below where the discussion is about formative assessment.

BC: I think in every lesson there was (at least one type of that) one, at least some form of

BA: Shall we put in every lesson and make a comment about in every lesson and then maybe make a more refined statement after that?

BC: Do we need to make a more refined statement?

BE: Was it every single lesson? I just wonder if it's most or every

BC: If you take like peer, self formative

BA: I don't think there wasn't a lesson where pupils weren't assessing where they were at or teachers assessing C: you see I don't think I did either) I think in every one I saw it

BD: It's hard to say if the teacher is assessing discretely or not sometimes to us it maybe looked like there wasn't any form of assessment , just doing the task and

BB: I suppose and are you thinking about our last one? Just a few actually

BE: Cause I suppose like CDT on the computers, although he never actually said anything but he'd go round an look and see everything was alright

BD: There was questioning so I supposed he done it thru questioning

BA: So do you want to say in all lessons assessment of learning intentions or something? (Don't know) cos we only have a short period of time so we're almost finished our checklist

BB: Well if you don't feel we've seen it in every lesson we can't say every lesson

BA: No we can't – do we say most then? (It would have to be _ agreement)

BB: I think that's fair because if you didn't see it you didn't see it so

BE: Sometimes when I think about it there was questioning and that was formative assessment so … you don't want it to be that you're presuming it has to be obvious

BA: So shall I say in most lessons (some form of assessment took place whether it be peer self or teacher) so in most lessons some form of assessment took place – whether it be peer led, self assessment teacher led of how pupils were performing? …

Lines 204-227

In this extract, what counts as evidence of formative assessment is progressively broadened so that it can be

said to have been seen frequently. It even begins to be applied to cases where nothing explicit was seen as in the contributions from BE in the preceding extract: "Cause I suppose like CDT on the computers, although he never actually said anything but he'd go round an look and see everything was alright" and "you don't want it to be that you're presuming it has to be obvious".

For the most part the data from schools B and D discusses what happens in classrooms in molar units rather than fine gained descriptions of the specific actions of teachers and learners and the link between them. This means that the observations were talked about in terms of pupils and teachers engaging in, for example, peer assessment or self assessment. There is very little record of what specific actions teachers performed and the specific effects these had on pupil activity. This is exacerbated by the tendency of participants in Schools B and D to create ever more encompassing categories for these activities. This meant that the participants lost the chance to consider how different specific ways of implementing the general category of peer assessment or self assessment, for example, affected what pupils did and what they learned. It also played little part in challenging what was already regarded as good practice by looking at the actual effects it had on what pupils were doing. This has implications for a developing theory of practice which are discussed in a later section.

School A's discussion shows more signs of moving towards fine grained description in which, rather than talking in molar units like school B and D, teachers discuss the specific actions of specific teachers and pupils. This can be seen below in the extract that was discussed earlier in relation to the instructional core.

AB: It's interesting for me the use of the word "awareness of learning purpose" and for me there is a difference between awareness and understanding (uhuh) because I would say across all 4 classes that almost all children were aware that there was a learning purpose and there was really only one child I felt that was disengaged and wasn't even aware there was a learning purpose and then I would then split that down further to say that within that there was quite a range of children in terms of what they understood the learning intention and that reflected sometimes the ability of the groups and the discussion groups they were in so there was a difference even within groups of how well the children were understanding the learning intention and across the whole class. Some teachers chose to write up the LIs as I can statements, others didn't so there was a difference in terms of how the staff were presenting the LIs ..... so in terms of understanding it you can look into some of the other categories and see how that develops then because if they didn't have the understanding at the beginning obviously that had an impact on what they were learning from the whole activity.

In this extract AB begins to break data down to the level of specific pupils. AB also attributes significance to the relatively small differences in teachers' ways of sharing learning intentions rather than tending to elide significantly different teacher actions as schools B and D do.

A similar tendency towards more discrimination and fine grained data can be found in the school A extract below where the discussion is about approaches to differentiation.

AE: Em I saw a real range as well there was one particular class where there was differentiation of LIs so the groups were differentiated in terms of their learning intentions em and different groups working on different tasks. I then saw specific LI, the same SC as well – the whole class working on that and the only differentiation I saw was really the teacher and the auxiliary targeting support for specific pupils during that, ehm I also saw the same tasks throughput the lesson but there was a system where they had to rotate and there weren't, for me, maybe it was timing that I came in at I didn't see the LIs specifically for the task but I questioned, I grilled pupils what it was they'd been asked to do and they explained to me what they'd been asked to do it was clear to me what they'd been asked to do, within their own level they'd been challenged to take it to another level, now the children would have to have an implicit and inherent understanding of what that next level was because that hadn't from my point of view been demonstrated

In this extract AE also generates data at the level of individual pupils by 'grilling' them and begins to distinguish between the effects of different ways of differentiating. Again, this contrasts with schools B and D in which discussion focuses on the molar unit of differentiation (i.e. whether differentiation happened or not) and wide differences in approach to differentiation are elided in the construction of increasingly broad categories for reporting back.

Schools B and D's tendency to focus on teacher behaviours, discuss data in molar units and construct increasingly inclusive categories for these, can link to premature evaluation on the basis of insufficient evidence that the proponents of instructional rounds warn about. There is some evidence in the transcript data from schools B and D that using, for example, peer assessment was considered to be good practice so where it happen this can be evaluated positively. What this does not do is generate any fine grained evidence on whether peer assessment is having a positive effect on these pupils in this classroom and how variation in how it is done has different kinds of affects. In other words, there is no clear evidence in the data the school discusses for assuming that peer assessment is a good strategy.

Like school A, school C (in the extract below) also begin to discuss assessment for learning in the classroom in relatively fine grained ways that looks ate the impact of specific actions on pupils' learning. However, school C does nit use this data to inform a broader understanding of cause and effect in teaching and learning but rather sticks to discussing isolated examples of practice that they like.

> CC: I liked how A specifically showed examples you guys wouldn't have seen it but before the task started he gave them the task of like explaining, convincing him why their bit was the best and he gave two arguments like this is a good argument so he had a kind of example like my bits the best because it has a metaphor in it and then the next one was this is a better argument and he put that on the board and he was like my bit's the best because it has a metaphor and then explaining what a metaphore is so the kids could see, if I write that it's fine (inaudible)
>
> CE: I would agree with L because just going back to your point where it was the you know the comparison and the two answers, for me A went a lot deeper and was actually exploring their thinking skills as well in the comparison of the two answers
>
> CA: I definitely agree with that I thought the questions were designed to encourage them to use their imagination and to encourage them to think (agreement) and some of the students I felt could express that very well, some of them could express it less well but all the students who were giving answers it seemed to me had gone through that process, they had thought about it
>
> Lines 196-208

A wider strategy for improvement that is linked to the problem of practice and the observations

As commented above, transcript data from post observation debriefs meetings cannot necessarily make visible all the work and thinking that might have gone on in relation to these learning rounds. It can however reveal the salience of this work in the post observation debrief. This is significant because it is the post observation debrief that is the key site in the process for generating understanding and planning the next steps in improvement. As noted before, the use of an agreed focus for the observations and the debrief discussion shows that these learning rounds were linked to a wider strategy for improvement, in this case the greater use of certain strategies that were considered to be good practice and that the school wanted to encourage further in the classroom. However, the relative lack of focus on the instructional core and the tendency to use molar units rather than fine grained description means that the transcripts show little evidence of the observations informing, revising or improving this wider strategy. So whereas the focus for the observations might be informed by the wider strategy, the observations and debrief do not

close the loop by informing an enhanced understanding of the strategy and how it needs to be implemented beyond an implementation/audit approach. So in this case the link is one directional.

School A shows more possibility of the link being two directional. They begin to explore the links between some specific details of how teachers implement preferred strategies such as sharing learning intentions and differentiation and the effects these have on pupils. This means that they have the possibility of revising their strategy for improvement on the basis of the new insights they gain from their data. However, in practice, school A reverts to the audit approach of recording the frequency with which certain strategies were seen rather than capturing this developing insight collectively for wider use within the school or wider educational system.

School C's focus on individual teachers collecting individual examples of techniques they like, similarly, does not look as if it will feed into a school or local authority wide strategy for improvement.

A developing theory of action about how different actions affect outcomes

For the reasons discussed in the last two sections, there is limited evidence in the transcript data that the observations and debrief are used for theory building. Schools B and D focus on auditing the frequency with which prescribed 'good practice' is being used without focusing on the effects of what teacher are doing and how variations in that alter the effects. In School C the participants are picking up classroom techniques that they might choose to use themselves but these insights are not integrated into any developing theory of teaching and learning in the classroom. In school A, there is evidence that detailed consideration of different approaches to implementing what is considered to e good practice could refine a theory of how particular teachers actions affects what and how pupils learn. However, by the end of this transcript, these fledgling insights have not been captured collectively.

A changed culture for schools and districts

It is obviously beyond the scope of transcript data of the kind discussed here to decide conclusively whether school or (in the case of Scotland) Local Authority culture is being changed by the practice of learning rounds. What can be considered though is the evidence in the transcripts that more established ways of doing things are persisting. We would contend that the evidence of the transcripts discussed here suggests that the 'pull to the black hole' that City et al refer to is strongly evident here. It is evident in the tendency to focus on teachers' actions rather than on the connection between teacher actions and evidence of effect on pupils learning. It is evident in the pervasive tendency to evaluate on the basis of preconceived notions of good practice rather than to build up a fine grained descriptive evidence base for the actual effects

of different actions. It is evident in the implementation/audit approach of some schools in this data. It is evident in the concern to dilute the detail of the observation data and elide differences in the recording of it so as not to cause offence. It is also evident in the lack of evidence that the observation data generated during the learning rounds has influence on revising the wider strategy for improvement and theory of change. What is not being generated here is a body of professional evidence for a refined theory of change that can be shared across the profession.

Who is learning what?

While scrutinising the transcript data we asked ourselves the question who is learning what in these debriefs. Instructional rounds are intended to promote system learning. This means that it is a process in which the system as a whole (school, local authority, or entire education system) develops a better understanding of how to achieve its desired outcomes. It is not intended as a process through which individual teachers develop their own practice independently of others. City et all identify this latter case as one of the fundamental problems of education as a profession. They argue that if instructional rounds results in this happening then it will be exacerbating the problem it set out to address. Instructional rounds are intended to generate the professional knowledge base and understanding that can underpin the entire teaching profession. Similarly, it is not intended to audit the frequency with which existing ideas of good practice are happening.

In School B and D the answer to the question who is learning what seems to be that the school will learn the frequency with which prescribed practices are being implemented. However, given the tendency in both of these schools to make what counts as each type of practice progressively broader and more abstract, arguably, they will not learn anything. In school C it seems clear that the participants are picking up useful teaching and learning techniques that they will use in their own classrooms. This could well improve the overall standard of teaching and learning practice in the school through the aggregation of individual improvements. However, it will not contribute to any development of a theory of action such that the system as a whole has a better understanding of how to achieve what it wants. In school A there is the beginning of refined understandings but these are not captured for the system. It is perhaps significant that in the transcripts for school A mist of these developing insights are articulated by AA. This hints at the ways in which the discussion in school A might develop the understanding and practice of specific teachers participate but is not being articulated at this stage in a way that is likely to inform the understanding and practice of the wider community.

Discussion

Obviously a small sample of data such as that reported here cannot claim with any confidence to be representative of practice across the whole of Scotland. Conversely, we have no particular reason to believe the sample is unrepresentative as we tried to avoid selecting schools that are more likely to have a shared culture and history in relation to learning rounds.

The first thing to note is that the range of practice that is labelled as learning rounds by schools and teachers is diverse. This means that the Education Scotland's statement that 24 out of 32 Local Authorities are engaged in learning rounds tells us little about what is actually going on in terms of collaborative professional development.

Among the difficulties that we noted with the learning rounds practice in the four schools we looked at were

- A focus on teacher actions rather than the connection between teacher actions and pupils' learning
- A tendency to talk in terms of molar units of classroom activity rather than fine grained focus on the specifics of individual actions
- An implementation/audit approach to looking at what was going on in classrooms that consequently did not question whether what was prescribed as good practice was actually have a positive effect
- A lack of link between observation data and the development of a better understanding of what is and is not working in classrooms and why (i.e. a theory of action)
- A tendency to premature evaluation on the basis of unclear evidence

Although not all limitations were present in the same way in all schools, there was still an overall pattern of similar limitations with at least one of these limitations appearing in all schools and most of them appearing in at least some parts of the transcripts for all schools. As the four schools were not in the same local authority and as they developed learning rounds practice from different origins, there is less chance that these similarities resulted from shared culture or training. So, what accounts for these similarities? We can only speculate here.

Firstly, we believe there is the "pull to the black hole" of existing educational practice and culture that is broader than single schools and local authorities. The tendency to start with evaluation and the tendency to accept orthodoxy in terms of what counts as good practice rather than generating a fine grained empirical evidence base for what was happening in classrooms can both be seen as examples of prevailing school culture and practice reasserting itself within the practice of learning rounds. The same can be said of the tendency of teachers in school C to use the learning rounds as an opportunity to pick up discrete techniques that they might use in their own classrooms rather than using their observations to build up a

theory of action that could inform the practice of the whole profession.

Secondly, we speculate that the pattern of similarity in practice may relate to which aspects of learning rounds are easiest to grasp. We commented earlier that when reading the transcripts we noted which aspects of learning rounds practice teachers seemed most aware of. In terms of explicit references in the transcripts, teachers seemed most aware of the ideas that only descriptive language should be used and that you should not talk about what was not there. These, we suggest, are both straightforward ideas to grasp in the abstract even though they were not adhered to in practice. This ideas of a rich problem of practice (that is not included in the learning rounds literature), fine grained description and a developing theory of action we suggest are more complex or difficult to grasp.

We commented earlier that City et al (2009) and Roberts (2012) both emphasise the difficulty and the amount of effort required to embed what they call the disciplines of instructional rounds practice. We commented also that accounts of the development on instructional rounds in the US indicate that the original developers of the approach often work closely with groups of educators for some months to help embed the practice. In Scotland a different approach has been taken and learning rounds practice has often been developed through single training sessions and the use of printed or online support material. It is also the case that much of the learning rounds practice has spread as a result of word of mouth without the experience of any training from the agencies who are trying to develop the practice in Scotland. The result of this, it seems to us, is that learning rounds practice in Scotland has developed in ways that show the continuing influence of educational culture and practice that instructional rounds practice was developed to remedy.

Another consequence of this is that many of the practitioners of learning rounds in schools have limited if any familiarity with the instructional rounds literature that underpins learning rounds. This in our view has two consequences. The first is that some aspects of the instructional rounds process are overlooked in learning rounds. We have commented on some of these above. Another one that we have identified elsewhere (Authors, under review) is the role of the existing body of educational knowledge and theory in the process of using observations to develop a theory of action. In Authors (under review) we argue that one of the attractions of learning rounds to schools and Local Authorities in Scotland is that it apparently removes the need for 'expert' knowledge from outside the school system. This can be attractive financially and it can also be a response to a feeling that external experts do not really address the practical needs of teachers in schools and perhaps too abstract, theoretical or unrealistic. However, a closer examination of the instructional rounds literature

indicates that externally generated theories and perspectives are important in developing a theory of action (Authors, under review). In the transcripts discussed in this paper the absence of theorised external insights into classroom practice was most evident in discussion around assessment for learning. In schools B and D assessment for learning was regarded as good practice and wherever it was seen this was taken as an indication of good practice. However, some research into the classroom implementation of assessment for learning is critical of the ways in which assessment or learning theory is applied in practice (Klenowski 2009; Bennett 2011; Dixon, Hawe & Parr 2011; Swaffield 2011; Willis 2011; Hawe & Parr 2014). If the teachers in schools B and D had been aware of this research they would have been able to more fine grained and critically reflective in their observations on the details of the practice in the classrooms they visited. In school A the more fine grained observations that focused more frequently on the instructional core began to identify limitations to some of the assessment for learning practice that they saw. However, the beginnings of a developing theory of practice were never properly captured by the group. If these discussions had been informed by greater knowledge of recent research into the implementation of assessment for learning, they might have had more chance of 'naming their practice' (Brookfield 1995) and been able to articulate and therefore capture more clearly the significance of what they saw.

A second consequence of the lack of familiarity with the instructional rounds literature that underpins learning rounds is that teachers seem to have learned learning rounds as a series of techniques or protocols to be applied rather than learning the underlying goals or purpose of those techniques. This was evident in some places in the transcripts where there was disagreement or misunderstanding about what the protocols actually were. It seemed to us that this disagreement or misunderstanding arose from a limited understanding of the purposes or aims that shaped the protocols.

Conclusion and Implications

So what are the implications of what we found about Scotland's adaptation and implementation of instructional rounds for the spread of instructional rounds internationally and for fostering collaborative professional development in general?

1. Models of training and support are important. If we want to embed countercultural professional development practices we need to work alongside school colleagues in the long term rather than offering one off training and written support materials. Failure to do this tends to lead to existing culture and practice reasserting itself. We liken this to an analogy of bees and gardeners. Bees spread pollen that might propagate beautiful flowers. However, they do not stay around to tend to these flowers. In these circumstances flowers may well grow but conditions such as poor soil,

prevailing winds, lack of sunlight and appropriate nutrients might cause growth to be stunted or malformed if it occurs at all. Gardeners, on the other hand, stay to tend their flowers and can make adjustments and interventions as necessary as they watch the course of growth. This means that they maximise their success in creating the flowers they want. The development instructional rounds based practice needs gardeners not bees.

2. We need to focus efforts to foster new collaborative professional development practices in schools on developing an understanding of the underlying rationale or purpose for particular practices rather than focusing on the techniques of the practice itself. This is likely to result in a better understanding and application of the original practice, a better sense of how it can be developed ort adapted without negative consequences and more informed vigilance in relation to the 'pull to the black hole'

3. Although no approach to collaborative professional development is sacrosanct in the sense that you cannot develop and adapt its practices, we need to think carefully about the effects of these adaptations on who is learning what and whether this is consistent with our original intentions. Some of these adaptations may be unintentional and result from the 'pull to the black hole'. However, some may be intentional, such as the replacement in learning rounds of developing a problem of practice with deciding a focus for observation.

4. Access to and awareness of existing educational research is important in instructional rounds and in collaborative professional development approaches in general. They should not be seen as replacing this body of knowledge or as not requiring it.

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