Exploring the use of a rating scale to support professional learning in early years pre-school staff: the experience of one local authority in Wales

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#### Abstract

The aim of the study was to explore the use of a rating scale as a tool for driving professional learning for pre-school ECEC staff. A rating scale was used as a measure of children's learning experiences in pre-school provision, which then guided the content of a professional learning programme. The programme was therefore targeted towards provision for children's conceptual and higher order thinking as this learning experience was weak in all the participating settings. We establish whether such an approach had *value*, that is, whether it led to sustainable transformation of professional practice (Sumison *et al* 2015) and explore the tensions that became apparent. While there appears to have been some transformation of practice, the use of a rating scale as a stimulus created opportunities for performativity that are critically discussed. We also consider tensions that are related to the construction of the child and the implications for professional learning. The potential value of targeted professional learning that takes children's direct learning experiences as the focus, is, however, emphasised.

**Five keywords**: conceptual thinking, professional learning, early years, science, rating scale Introduction:

Young children's learning is the focus of attention globally and is seen as the route by which countries can invest in their futures (OECD 2017) as part of Sustainable Development Goals (United Nations; no date). Since one of the key factors considered to contribute to the quality of early years education is the quality of its workforce, including levels of qualification and training (Siraj-Blatchford et al. 2006, Australian Children's Education and Care Quality Authority 2012), there are clear implications of this global project for the professional learning of early years educators to enable them to deliver desirable results, most often measured by children's learning and developmental outcomes. Ball (2013 p.11) describes the ways in which policy is enacted in diverse 'material conditions' to explain how professional learning for the early years workforce is in part driven by regulation and government imperative, but inevitably locally customized according to context.

The desired outcomes of professional learning within the global early childhood education project are usually associated with better outcomes for children (e.g. OECD 2017). The sustainability of better outcomes may not be evident until years after children have experienced ECEC (e.g. Sylva *et al* 2014). Judging the quality, or *value* of professional learning therefore, against its ultimate goal, is not a straightforward process. A proxy for the quality of professional learning experienced by ECEC workforce might be a measure of the quality of the ECEC provided. However, making judgments about the quality of ECEC provision is a highly contested arena (e.g. Moss and Urban 2018). It has been common practice in studies seeking to compare the quality of ECEC provision across time or location to take further proxy measures, for example by the use of environment quality rating scales (e.g. Siraj-Blatchford *et al* 2008; Baustad 2012), that allow observers to assess quality by reviewing the environment available to young

children (e.g. Harms *et al* 2006) and some of the curricular processes inherent in provision (e.g. Harms *et al* 2005). While there has been considerable literature given to the need for deeper consideration of provision from the experiential perspective of the child (Payler *et al* 2016, Georgeson *et al* 2015), it has been common practice in the early years arena in which this study is set to use environment rating scales in order to assess the quality of ECEC provision, and to identify where improvements may be targeted. We believe this is not an uncommon phenomenon and argue that where this occurs professional learning for ECEC staff, therefore, is driven by policy directive and/or proxy measures for quality that focus on the environment rather than children's direct interactional experiences and adults' pedagogical behaviours.

This study sought to take a measure of children's day-to-day learning experiences in pre-school provision as the catalyst to guide the content of professional learning intervention. The measure adopted, the Sustained Shared Thinking and Emotional Well-being (SSTEW) scale for 2-5 year old provision (Siraj, Kingston & Melhuish 2015), is justified and considered in the methods section. Drawing on Hadley, Waniganayake and Shepherd (2015) we sought to match the professional learning strategy to the educator's qualification and experience as well as match the structure of the professional learning experience to the intended outcomes of the initiative which was the development of pedagogic practice.

We sought to establish whether the approach taken had *value*, that is, whether it led to sustainable transformation of professional practice amongst those providing the ECEC service involved. We sought to respond to Sumison *et al*'s (2015, 423) call to adopt an *evaluative stance* in the context of professional learning which is 'geared towards analysing evidence to guide decision-making in the selection and implementation of professional development activities ... to ensure that intended outcomes are reached and programme improvements ensue'. In our analysis and evaluation then, we adopt the following definitions to operationalise the concept of *value* as sustainable transformation of professional practice (see also Author 1 and XXXX 2015,2018):

Sustainable – we take to mean professional learning that has a longitudinal impact for the individual, setting or group of settings;

Transformative – we take to mean professional learning that impacts upon the pedagogical and praxaeological work of the individual, shaping their professional practice and therefore the experiences of the children with whom they work.

This paper sets out the collaborative context in which the research took place, then describes the research design and analytical approach. The findings are presented prior to a discussion about the tensions inherent in using a rating scale to direct professional learning. The paper therefore also responds to the opportunity outlined by Howard *et al.* (2018) to explore the potential of the SSTEW scale for informing practice and in-service learning.

#### Context:

Wales has the highest rate of child poverty in the UK with 1 in 3 children living in poverty (JRF, 2018; Children in Wales, 2016). Within this context the Welsh Government initiative, Flying Start, is the flagship early intervention programme supporting children, aged 0-4, and their families in areas of disadvantage (WG, 2014c), as defined by the Welsh Index of Multiple Deprivation. The initiative includes a comprehensive package of parenting support, additional health visiting services, Early Language Development Team support and 42 weeks of sessional childcare for children aged 2-3. A key element of Flying Start (FS) sessional provision is the qualified status of the early years workforce. Social Care Wales set out a minimum level of qualifications for FS practitioners and managers which is above the minimum qualifications set out for those working in day care, childminders and sessional care. This strategy is the result of research evidence establishing the long term impact of attending high quality provision with high quality staff (Sylva et al., 2014; Nutbrown, 2012; Siraj-Blatchford et al., 2008; Siraj et al., 2002). There is a commitment within the FS service to ongoing professional learning for staff and it is within this context that the current study took place. The research was located in one local authority area in South Wales encompassing the 16 FS childcare settings within.

### Research design:

The study sits within an interpretivist paradigm in which professional practice and children's learning are understood to be shaped by contextual, cultural and personal factors. As such the study adopts a socio-cultural (Rogoff 2003) conceptual framework.

The research project was devised and implemented through a collaboration between the two FS leads in one local authority and two university academic staff. We sought to ensure a systematic approach (See Sumison *et al* 2015) to professional learning for the FS staff and designed a data collection process to allow us to evaluate the value of the approach taken, where value is defined as described above. This project team met regularly to co-design and implement the project. Data collection was undertaken by all members of the team. The team were cognisant of potential limitations of individuals taking part in research as both participant and researcher, however, this study sits within a recognition of the socially constructed nature of lived reality; we recognise the strength and depth of understanding of the practice contexts that resulted from the collaboration within the research team.

The data-collection methods were structured observation before and 6-12 months after the professional learning (PL) programme; an anonymous text-based evaluation by participants via an online questionnaire 6-8 months after the completion of the PL programme, and an interview with the two FS leads a year after the PL programme. The PL programme was designed as an intervention to develop pedagogies to address paucity in children's learning experiences as indicated by the first structured observation.

# Research tools and method:

The tool adopted for the structured observation was the Sustained Shared Thinking and Emotional Wellbeing (SSTEW) scale for 2-5 year old provision (Siraj, Kingston & Melhuish 2015). This scale has been developed from an extensive body of research that focusses on educational practices that support children's 'task focus, problem-solving and imagination ... well-being, self-regulation, and the kind of thinking in children that is supported through sensitive interaction with others' (Sylva 2015, 5). This scale therefore targets practice that supports the kinds of development in children that the FS programme seeks. The SSTEW scale directly attends to professional practice that supports two developmental domains in children: social and emotional development and cognitive development. In doing so the authors explain that the scale in not intended to support 'the outdated view of child development that regards all children as developing in a uniform way and at a uniform rate according to age and stage' (Siraj et al 2015, 8). We would similarly emphasise the point that the use of this observation tool was to consider pedagogical practices and the breadth of provision available, not to consider the children as enacting a pre-determined developmental pathway. We propose that the pedagogy promoted in the SSTEW scale resonates strongly with an emergent/responsive pedagogy (Wood, 2010), despite its roots sitting in research undertaken through the paradigm of effectiveness measures (e.g. see Siraj-Blatchford et al 2002). Within the rationale for the SSTEW scale the authors note:

'In terms of the adult role, what becomes essential is the sensitive, child-centred intervention of the adult when supporting the child's learning and development ... the practitioner requires a clear understanding of their [the child's] current development, cultural heritage and achievement, and their feelings, behaviours and responses to learning' (Siraj et al 2015, 7).

The SSTEW scale focuses strongly on interaction and intentional responsive pedagogy, arguably 'previously overlooked interactional aspects of process quality' (Howard *et al.* 2018, 12) that have been positively associated with children's development (*ibid.*).

The research team received intensive training in using the SSTEW scale and were then formally benchmarked against international standard prior to the start of the study. The scale involves scoring observed practice against a set of descriptive criteria in each of 5 subscales, which are split into 14 items. See appendix for an overview of the items. Each item is scored by matching the descriptor to the observed practice. The descriptors are set out along a continuum from 1 (inadequate provision) to 7 (excellent provision). The practice described in the excellent provision descriptor that has been associated with enhanced outcomes for children (Siraj-Blatchford *et al* 2002, Sylva *et al* 2014).

The first set of structured observations were carried out by the research team across all 16 of the settings over the period of a month. The outcomes of these observations were used to direct the content of the professional learning (PL) programme. The four areas of consistently weak provision were items 9-12, all of which relate to subscale 4: Supporting learning and critical thinking (see appendix), with particular weaknesses in items 9 (*supporting curiosity and problem solving*) and 12 (*supporting concept development and higher order thinking*) where the practice observed was either 'minimal' (score 2) in all but one setting for item 9 and 'inadequate' (score 1) for all settings for item 12.

The PL programme was designed by the university-based research team and two other university-based staff to address pedagogical practice related to these two particular items. The programme was then provided for FS staff from each of the 16 settings, who attended together during setting closure days. This was possible because of the usual practice of closure days for professional learning, and preferable to adopting a 'cascade' (e.g. Hayes 2000) model as it meant that the staff could share the learning experience and collectively consider refinements to practice and reflect upon them once they returned to their settings. A detailed consideration of the PL programme is the subject of another paper (see Tinney *et al* 2020).

The PL programme involved two experiential sessions, including immersion in exploratory science play and talk that prompts curiosity and models metacognition. 'Science' learning in the early years is supported by enquiry-oriented pedagogic behaviour (Andersson and Guhlberg 2014) and directed towards concept development (Cremin *et al* 2016) and higher order thinking, which are the focus of items 9 and 12 of the SSTEW scale. The sessions took place off site approximately 3 weeks apart with a series of directed pedagogic activities and reflection prompts to be undertaken by the staff between sessions. Data collection took place following completion of the PL programme. Research tools are indicated in table 1.

#### INSERT table 1 HERE

Six – twelve months after the PL programme, the research team undertook a structured observation using the SSTEW scale in each setting. The outcomes of these observations are presented in the findings section and provide a backdrop for the discussion about sustainable change in practice.

The study gained ethical approval through the university ethics procedure and adhered to the BERA (2018) ethical guidelines. Children were informed of the researchers' presence and researchers adopted an ethic of care, observation was not intrusive and halted if/as needed. Anonymised local authority data was provided with full permissions and adult participants gave fully informed consent.

There are further ethical considerations that surround the design of this study. The inclusion of the FS leads as part of the collaborative research team meant that we carefully designed the online survey to be transparently anonymous to encourage participants to respond fully. We recognise that asking participants involved in a PL programme to comment on the effectiveness of the programme to the providers is ethically troublesome. We sought to mitigate these issues by firstly ensuring distribution was not from the research team directly but via FS setting manager, thereby ensuring no possibility of traceability of respondents and secondly by ensuring that there was a 6-12 month delay before sending out the survey so the relationship with the university staff providing the programme had diminished. We also designed the survey questions so that respondents referred to their practice and pedagogical thinking at the time of the survey rather than comment on the providers of the PL programme or its content directly. Further, during the interviews with the two FS leads we invited reflective commentary on the impact of the PL programme; we recognise that these staff were invested in the programme having a positive impact in their settings and these inherent tensions are discussed below.

The dataset was coded against the descriptors adopted to define sustainable and transformative approaches to professional learning provided above. Coding of sections of text against the categories was consistent between coders.

As well as this *a priori* coding (Blair 2015), we also undertook a process of open coding whereby material was coded according to content that resonated in relation to the aims of the research, and the context of the project. This open coding was then reviewed and the codes iteratively grouped into themes, which frame the discussion of this paper.

The online questionnaire was made available for staff in each of the 16 FS settings. Of the possible 96 responses, we received 54 which represents a response rate of 56%. The dataset reported in this paper are the text-based responses to questions 9-12, set out in table 2 alongside the numbers of respondents to each question.

#### INSERT table 2 HERE.

The semi-structured interview with FS leads was transcribed verbatim prior to analysis.

# Findings:

#### Was the approach transformational?

In relation to their own professional learning respondents reported a range of learning as a result of the programme. All bar one of the 46 responses to Q9 indicated some form of professional learning. The one that didn't reported that she already puts into practice what the programme offered.

Responses can be summarised in the following two examples:

It was more than just introducing scientific activities, it was looking at our everyday interactions with children and opportunities to problem solve and introduce concepts through different types of questioning and self commentary. *Q9: response 3247076* 

I found the Talking Science programme very interesting. Prior to the training I felt unsure on how to implement Science when working with 2-3 year old children and I felt that it was a difficult topic to focus on with this age group. However the training has totally changed my opinion as it has shown me how easy it is to encourage science through play... also helped me to think carefully about how to encourage problem solving and critical thinking through the way I interact with children and I feel this has improved my practice. *Q9: response 4466399* 

This suggests that there has been some transformation of practice at the level of the individual.

With regard to transformation across settings the respondents tended to provide similar text to Q10 as for Q9 using 'we' rather than 'l'; for example:

We were able to provide more activities to children in relation with science. *Q10: response 3258862* Brought new science ideas to the setting and think about what other areas we can improve on *Q10: response 3546848* We as a setting have improved as a whole in the setting, we are doing more experiments and both us as staff and the children are having fun and learning through experiences.

Q10: response 3772968

In addition however, 10 of the 44 responses include a direct reference to weekly and daily planning being undertaken differently to include science-based activity and/or talk. Further to this, another 23 included reference to provision having changed as a result of the programme, that is there being 'new' or 'more' opportunities for the children. The following response sums up these two points:

The programme has benefitted the Setting by allowing children to discover and find out about science as they play. We have allowed the children to discover at their own individual pace and their interests. The recent cold weather provided lots of opportunities for the children to go outdoors and discover that the water on the table had frozen. Whilst on a welly walk why was the grass white and hard, or why the leaves had frozen. These activities/ interests can then be included on the planning for the next week. The children benefitted lots from these experiences and we as staff felt more confident...

Q10: response 4463279

A small number of respondents referred to there being no change in their setting because they were enacting this practice already. While we cannot interrogate the dataset to find out whether these 3 respondents were from the same setting due to its anonymous nature, this is a strong possibility.

In responding to the invitation to offer an example to demonstrate how their practice has changed the large majority of respondents referred to using language differently, for example, thinking about questioning, thinking or wondering out loud, introducing more vocabulary to the children. The following examples typify the responses given:

When interacting with the children I find myself monitoring my communication to ensure i'm providing the children with opportunities to explore and extend their own learning and apply their own knowledge. Using terms such as 'I wonder' 'what would happen if'

Q11: response 3546581

How I would explain and using new vocabulary in to the activity such how does this melt or will this sink or float

Q11: response 3777268

I always try to think out loud during activities now.

Q11: response 3778191

I am aware of the language I use with the children, I make sure I ask questions and not give answers straight away. Instead of saying "wow, look it's raining" I will ask "what's that" and hold my hands up. Also instead of saying "the ice is melting" I will say "what's happening to the ice?" *Q11: response 3884159* 

Interestingly a number of respondents (about 10%) questioned the relevance of the content for the children, described variously as 'having some sort of delay' (Q12: response: 3704488), 'from deprived areas and may have speech and language delays' (Q12: response 376383). During open coding of the responses to Q9-11 the notion of child readiness for language and exploratory talk was visible. Four respondents indicated this notion in their responses reporting that children may not be 'ready' or at an appropriate 'stage'. This issue is discussed in the final section of the paper.

I felt the programme helped us to think differently how science can be taught through everyday objects we take for granted. However, putting this in place for our children can be challenging as some who attend find it difficult to understand and communicate

*Q9: response 5475309* It has helped us to add commenting and questioning alongside activities to enhance children's learning when they are at a stage where they are ready

Q10: response 4502591

In relation to the description of transformation of practice given previously, the data implies that transformation took place. The sustained, or otherwise, nature of this transformation is considered below.

During the interview with the FS leads they commented on the receptiveness of the FS staff to professional learning. Some staff were described as 'getting it'; this appeared to be associated with ideas about these staff having a natural or innate pedagogic skill. This was contrasted to those who were 'not ready' and/or were unable to 'get it' with the same level of conviction. In exploring these ideas the

interviewees appeared to equate the disposition to enact a responsive pedagogy with 'getting it'. For example, in discussing the approach of setting managers to the development of their staff, as a result of the SSTEW observation outcomes for the setting, the interviewees explained that the required action is not simple, it is changing the 'hearts and minds' of the staff in the setting, enabling them to understand the reason why the changes in pedagogy were beneficial, above and beyond scoring more highly on an observation scale. The interviewees stated:

'the ones that get it, really get it and understand it and then it's applied across the setting but the ones that don't quite get it, don't get it',

'for me I could see how, when a practitioner just got it, it would be applied really naturally throughout their day... and the conversation was, in the best case, phenomenal, but then there would be those forced conversations that had been put together with an activity that had been planned ... and the activity became about trying to force those questions ... whereas in other settings it was a really natural conversation'

'it's like that setting was at the stage where they think, right, I need this, I need to say this, I need that vocabulary ... like a tick list of things... that understanding was just missing'.

It appears that in some settings the staff and managers were more comfortable 'performing' to an external scale than openly discussing pedagogy with one another, or the advisory staff. This issue is discussed further below.

#### Was the approach sustained / sustainable?

The proxy measure taken for the sustainability of the approach is the post-PL programme observations undertaken 6-8 months afterwards. Figure 1 shows the average item rating score across the 16 FS settings for each of the 14 items before the PL-programme, in blue, and after it, in red. This indicates that there were improvements in the quality of provision for the target items 9 (*Supporting curiosity and problem solving*) and 12 (*Supporting concept development and higher order thinking*). An average of 2.5 for item 12 indicates that this area of provision requires further improvement in order to reach good or high standards though the provision is now above the weakest rating of inadequate. It is interesting to note that the average item scores have improved across all 14 items. It is beyond this study to ascertain the reasons for this or verify any causality, though we conjecture that changes in dialogic style between adults and children will improve the item rating across the sub-items in the scale (see also Howard *et al* (2018)); familiarity with the expectations of provision outlined in the descriptions within the SSTEW scale may also have impacted upon practice.

#### **INSERT FIGURE 1 HERE**

#### Discussion:

The discussion is structured to consider the themes created as a result of the open coding of the dataset; namely regulatory power; emotion; development and 'getting it'. The themes were generated to account for the information available to us from the dataset that referenced the experience of the PL process and the understandings of those involved around purpose and intention. *Regulatory power* encompasses the references made to processes of accountability and performance, and notions of objectivity and resistance, and draws out tensions in the methodology. The *emotional* experience of professional learning was highly visible in the dataset, it was associated with perceptions of power and

judgement, and also professional worth indicated by descriptions of pride, effort and motivation. *Development* was conceptualised in a number of ways. For example, the development of processes such as setting planning, and cycles of professional learning; the development of pedagogy as indicated by notions of 'shift' in professional culture; and the notion of children 'being ready' for the intended learning. '*Getting it*', as previously intimated, was a judgement made by the FS leads about some setting managers and staff.

There is a significant literature pertaining to the increasingly regulated arena of early years practice and subsequent creation of performative behaviours (e.g. Osgood 2006a,b, 2009; Fenech and Sumison 2007, Roberts-Holmes 2015, Kilderry 2015). Performativity is arguably a risk associated with using any scale that will judge the behaviour of others. The education sector in Wales has been highly regulated and accountability-driven for over a decade (e.g. Donaldson 2015) and so the risk of performativity may be increased in such a context. Respondents report emotional responses such as fear, anxiety and exposure. These relate to the process of being watched and the associated perceptions about being judged, the possibility of being judged negatively and the possibility of exposure if negative judgements are shared. Conversely, respondents report that use of an objective scale inspires a level of trust and confidence in the judgements being made, de-personalises the process and allows the focus to be on the behaviours in practice, *ie*. the pedagogy is under scrutiny not the individual. Respondents also report pride in attainment of high scores for aspects of practice and the motivation to improve against the descriptors in the scale. Further, respondents reported that action planning for pedagogic improvement against the descriptors in the SSTEW scale provided two positive outcomes: one, that the pedagogic change was explicit and accessible and two, that this action planning gained elevated status as a result of the perceived objectivity of the scale. We might frame these responses as from a group of professionals working within a performative culture, reflecting both the inner conflicts generated when one might be exposed as not conforming to expectation, or performing badly, and the reification of the performance measure as an object against which they can 'know themselves and their quality' reprising Holloway and Brass (2018, 361).

Bradbury (2012, 175), reviewing the state of play of EY teacher professionalism in England argues that for some the regulatory regime can lead to 'engaging in practices of 'cynical compliance', where they [EY teachers] adhere only to the minimum standards'. In this study the FS leads refer to some staff 'getting it' and some staff not 'getting it'. We took this to mean an evaluation of the extent to which EY practitioners understood their own practice in the context of the promoted EY practice; however it may reflect a position where some staff are cynically compliant (not 'getting it') rather than reflexively engaged ('getting it') in the process of pedagogical development. As described by the FS leads this may manifest in those who appear to take literally the scale descriptors and perform them when 'the understanding is missing'. The notion of some EY practitioners 'getting it' and 'not getting it' was persistent yet the distinction between these positions was not explicit. We might ask whether 'getting it' reflects a dispositional orientation to practice displayed by the EY practitioners and perceived by the FS leads as aligned with their intentions, and whether 'not getting it' may be aligned to a performative response (doing it right) as outlined above. Without discussing this further with the interviewees at the time, we cannot conclude either way.

A further consideration is the conceptualisation of competence. One respondent stated that prior to the PL programme she hadn't felt able to 'implement Science' as she did not think the children were able to access it [*Q9: response 4466399*]. We might understand this response as the respondent holding a view

that 'Science', as a defined body of knowledge, is relevant for older children and/or inaccessible to young children. Once 'Science' (capital 'S' Science) was re-framed, in the PL programme, as early and exploratory concept development (small 's' science), enhanced through play and playful talk including metacognitive modelling, it became not only accessible for the practitioners (see Tinney *et al* 2020) but also - in their eyes - for the children. We conjecture that this shift in perspective about the nature of 'Science'/ science may also have been associated with a shift in the perceived relevance of this activity to the children accessing the settings.

In addition to the reframing of Science/science we might wonder whether the PL programme challenged the apparent construction of the children attending the FS provision held by the practitioners. Clearly these are children who, against normative measures, are not demonstrating expected outcomes for their age. The provision is explicitly targeted towards families who are living in circumstances that are not considered to be optimal for children's long term positive outcomes, and may fall into periods of short or long term crisis. Children receiving FS provision may be routinely considered to be deficient and incapable in some aspects of development, in need of adult support, protection and direction. It is glib to suggest to the practitioners working with children, who, at 2 and 3 years of age may be pre-lingual and highly dependent on others for personal care, that these children should be viewed as 'active, competent and capable agents' (e.g. Prout & James 1997), even when we may firmly hold this view ourselves. The PL programme demonstrated the ability of very young children to explore and develop concepts through playful engagement with adults responsive to their exploration and thinking. We note however that the persistent deficit views indicated by a small number of respondents indicate that the programme did not challenge these particular individuals to alter their position. Such a shift in position would support the sustainability of the professional learning since, we would argue, once a practitioner constructs a child as capable, this threshold concept (Meyer & Land 2003) forms the basis of praxis. This is an area of exploration that we will be developing in both in our future collaborative research, and in our professional learning provision.

#### Conclusion:

We sought to establish whether the systematic approach taken to PL for a sector of EY provision across one local authority led to sustainable transformation of professional practice. All bar one of the participants indicated some form of transformation of their day to day practice though the extent of change varied across individuals, and may be related to personal constructions of the learning child. Sustainability is implied from the outcomes of the post programme observations, however this is arguably a loose proxy measure and ongoing follow-up data collection may better respond to this aspect of the research aim.

The apparent benefits and tensions made visible in the context of this study may offer insights to those responsible for planning and/ or implementing PL for the EY workforce whether at setting level or at scale. We noted tensions in three areas:

Tensions in use of an audit tool: the tendency towards performativity may be exacerbated by adopting an externally validated scale; this risk needs to be managed carefully in order that engagement in pedagogical development is enabled rather than EY staff experiencing feelings of being judged to be lacking.

Tensions in notions of development: the tendency towards classification of children as 'ready' or 'not ready' for learning is unhelpful in that such classification promotes a passive view of the individual in relation to learning and implies a linear model of development.

Tensions in relation to 'getting it': further exploration is needed to explore whether this notion reflects a model of pedagogic practice and/or professional skills as innate or learnt; either model will necessarily frame the provision of professional learning for practitioners, and will shape the judgements made as a result of professional learning.

One of the follow up studies to this research project will explore further notions of 'getting it' in order to contribute to our own understandings of the interplay between performative culture, personal values and promoted practices within a sector that is driven explicitly by the intention to reduce the barriers to school engagement for young children living in areas of multiple deprivation. This will help us understand more about the sustainable and transformative aspects of professional learning in this context.

We would advise sensitive and careful consideration of how to use audit tools such as the SSTEW scale in the provision of PL for the EY sector. Ball (2003, 215) suggests that 'performativity produces opacity rather than transparency as individuals and organizations take ever greater care in the construction and maintenance of fabrications'; we want to guard against inadvertent promotion of opaque performance rather than engaged reflective professional learning.

However, in conclusion, the value of targeted and evidence-informed approaches to professional learning that take children's direct learning experiences as the focus is emphasised as a result of the outcomes reported in this paper. Such an approach appears to 'speak' to the EY professional learner (Perry and McDonald 2015) and we hope that by making visible the tensions inherent in this regional approach our work may support others in aligning their provision of PL experiences to the intended outcomes of that professional learning (Hadley et al 2015).

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# Appendix: SSTEW subscales and items

Subscale		ltem number	Item title r	
1.	Building trust and confidence	1	Self regulation and social development	
		2	Encouraging choices and independent play	
		3	Planning for small group and individual interactions/ adult deployment	
2.	Social and emotional well- being	4	Supporting socio-emotional well-being	
3.	Supporting and extending language and communication	5	Encouraging children to talk with others	
		6	Staff actively listen to children and encourage children to listen	
		7	Staff support children's language use	
		8	Sensitive responsiveness	
4.	Supporting learning and critical thinking	9	Supporting curiosity and problem solving	
		10	Encouraging sustained, shared thinking through storytelling, sharing books, singing and rhymes	
		11	Encourage sustained shared thinking in investigation and exploration	
		12	Supporting concept development and higher order thinking	
5.	Assessing learning and language	13	Using assessment to support and extend language and critical thinking	
		14	Assessing language development	

Research tool	Commentary	Data set	
Anonymous online questionnaire	Flying Start practitioners were invited to contribute via an email link sent to all settings and then distributed to staff email inboxes.	The text-based responses to questions 9-12 (see table 2) form the dataset analysed and reported in this paper.	
Semi-structured interview	The two Flying Start leads chose to be interviewed together.	The semi-structured interview took the form of a prompted discussion and was transcribed prior to analysis.	

Table 1: Data collection tools

Question	Number of responses (of
	54 total responses of a
	possible cohort of 96)
9. Please explain to what extent the Talking Science programme had an	46
impact on your own understanding	
10. Please explain to what extent the Talking Science programme had an	44
impact on your setting	
11. Please explain to what extent the Talking Science programme had an	42
impact on your own practice, please give an example if you can	
12. Please think about your experience of the SSTEW scale being used to	44
identify a professional learning programme across a local authority. Do	
you think this process has been valuable for you/ your setting/ across the	
Flying Start Provision in XXXX? Why/why not?	

Table 2: numbers of respondents to Q9-12 in the online questionnaire



Figure 1: Average SSTEW item rating score (vertical axis) across the 16 FS settings for each of the 14 items (horizontal axis) before the PL-programme, in blue, and after, in red.