Devotion to Data

Early Childhood teachers' negotiations of a policy-driven *retreat from data* in England

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Abstract

The early childhood sector for children (0–5 years) in England has been a site of intense datafication in the last decade, with implications for how teachers see themselves and their roles (Bradbury & Roberts-Holmes, 2017). However, policy reforms beginning in 2020 have changed the curriculum and assessment demands for school-based early childhood teachers, with a move away from a data-driven ›tick box‹ approach of assessing children's development against set criteria presented as a positive step. At the same time, these policy changes have proved controversial with some professionals, provoking a grassroots movement which produced an alternative set of guidance described as ›by the sector, for the sector‹. Interview data from early adopters of these changes are used in this paper, alongside social media discussion of the changes, to examine the tensions between this retreat from data and established expectations about collecting and analysing data. It is argued that this shift has provoked complex responses and debates in the early childhood sector, including, for some, a continued dedication to collecting and recording data on young children as a key part of being a professional early childhood teacher. The case of England's early years thus presents a first step towards a post-datafication phase, where data are not required but are still collected.

1. Introduction

The early childhood sector for children aged 0–5 years in England, known as the early years, has been a site of significant policy reform since 2010 (Roberts-Holmes & Moss, 2021). Research into this sector has explored how nurseries, children's centres and early years classrooms in primary schools have been increasingly sites of datafication (Bradbury & Roberts-Holmes, 2017). Datafication has meant a shift towards data collection and analysis as major drivers of professional decision making and as significant components of educational contexts, with implications for how teachers see themselves and their roles (ibid). The extent of this datafication marks England

out as an outlier internationally, as few other systems have such intense data demands. However, policy reforms beginning in 2020 have changed the curriculum and assessment demands for early years teachers, with a move away from a data-driven ›tick box‹ approach of assessing children's development against set criteria, with particular significance for those teachers based in primary schools (where children are aged 3–5). This policy-based ›retreat from data‹ has been suggested by some within the early childhood sector as a positive result (Grenier, 2021), due to the reduced workload and increased focus on interacting with the child. It has also been regarded as indicative of a wider shift in education in England away from a focus on data, hastened by changes in how schools are inspected (Ofsted, 2019) and also perhaps by the lack of assessment data during the Covid pandemic. This paper explores this shift – which represents what we might see as a nascent post-datafication phase in early years in England – in order to explore what happens *after* datafication, when the cultures and values of datafied systems become embedded within educational contexts.

While these policy changes might be regarded positively by some, at the same time they have proved controversial with some professionals, who have raised concerns over the content of the new iteration of statutory assessment at age five (the Early Years Foundation Stage Profile, or EYFS Profile) (ECMG, 2020), and the revision of existing, well-respected non-statutory guidance (a document named *Development Matters*). In response, a grassroots movement produced an alternative set of guidance described as ›by the sector, for the sector‹, called *Birth to Five Matters*, which has been well received. This context is important in considering how teachers respond to the reforms, as is the timing of changes, as the UK was emerging from the Covid pandemic. Using data from interviews with teachers who were ›early adopters‹ of the changes, taking them on a year before they were required, in this chapter I discuss how early years teachers' reactions to these changes demonstrate their complex relationship to data, and the role of using data within their conception of their own professionalism. This is an area where further research is required, to consider the longer-term impact of the policy reforms, but the responses from these teachers do allow us to begin considering what happens when the requirement to collect data is taken away, but the teachers still feel they need to collect it. In this sense, the paper aims to add to the existing literature on the relationship between data and teachers, using the case of England's early years as an example of a highly datafied system which is moving into a post-datafication phase.

2. Context: Datafication in Early Years

»…for years we've been supplying ›data‹ to local authorities, Ofsted, PVI owners and management boards and senior leaders in schools. But we were getting

> things the wrong way round. It was like putting the cart before the horse.« (Grenier, 2021)

The early years sector of England's education system is unusually focused on data, in comparison with other nations. Since 2003 children in Reception (age 4–5) have been assessed by law, using various versions of the Early Years Foundation Stage Profile (EYFS Profile). At first this involved making a positive/negative judgement against 117 statements, but from 2012 it involved making a three-way judgement (›emerging‹/›expected‹/›exceeding‹) against 17 for long statements across all areas of the curriculum. Along with the introduction of a Baseline Assessment (in 2015, and then again in 2021) on entry to school, the EYFS Profile is a key part of the datafication of early years (Bradbury & Roberts-Holmes, 2017; see also Pierlejewski, 2019, 2020).

Younger children are also subject to extensive data collection, with the Development Matters framework (non-statutory) often used by settings to measure children's progress across several areas of development. For the last decade, *Development Matters* (2012) has been used extensively to track children, even though it was originally intended as a curriculum guide rather than an assessment tool (Roberts-Holmes & Bradbury, 2016). For example, in research in the mid-2010s, we found examples of practitioners producing spreadsheets which set out which children had achieved or were ›working towards‹ each statement set out in *Development Matters*, as assessed every six weeks. This tracking of children, from ›nursery through to Year 6‹ (age 11), as noted by one participant, meant early years were part of datafied culture which regarded the collection of information as a key function of the school, in order to demonstrate effectiveness. This was in part due to the high importance placed on data by Ofsted, the inspection service in England, who based their inspection visits around the schools' attainment and progress data, leading to a need for school leaders to manage their data to produce a good ›Ofsted Story‹ (Bradbury & Roberts-Holmes, 2017). School leaders prioritised producing data that justified a narrative where the quality of the school was demonstrated through numerical progress, or ›value added‹, for example though an increased percentage of children reaching benchmarks at age 11 compared to at age 6.

Datafication in this context can be seen as relating to what I have called the five P's: pedagogy, practice, priorities, people and power (Bradbury, 2021). Datafication is not simply about what is going on in the classroom – the ›malicious minutiae‹ (Bradbury & Roberts-Holmes, 2017, after Foucault) – but also about the wider impact. These five P's are *practice* and *pedagogy*, such as spending time photographing what children are doing, and organising activities in ways which produce the right data; then *priorities*, such as teachers spending time inputting data rather than planning, or taking photographs rather than interacting with a child; and *people*, as

the role of different actors is changed through datafication, so that teachers become data collectors, and children become data to be mined, and school leaders become data analysts, monitoring the quality of their staff through data. Finally, we have a shift in how *power* is distributed, for example in the power of the data analyst to decide how to present information, or the power of the data as a representation of a teacher's professional skill. Understanding datafication, I have argued, involves taking into account all of these five elements, and particularly power. This analysis has built on the extensive work of international colleagues who have explored different forms of datafication around the world (such as Jarke & Breiter, 2019; Selwyn, 2015; Hardy and Lewis, 2017). This work continues to go in new directions and explores the complexity of impacts in different educational contexts, further emphasizing the usefulness of the concept of datafication. Recent work explores the relationship between data and trust in teachers (Daliri-Ngametua et al., 2021), compares datafication in different countries' schooling systems (Hartong & Piattoeva, 2021), and explains the use of data to group children (Neumann, 2021). At a more theoretical level, scholarship on datafication is evolving to encompass postdigital theory (Macgilchrist, 2021).

In my work on datafication, I have argued that it is intertwined with ideas about ability as measurable – for example in that assessment data solidify ideas about who is ›high ability‹ – and this has consequences in terms of equity (Bradbury 2021). Thus, datafication has consequences beyond the classroom for both teachers and children. In this case, I want to focus on *practice, pedagogy* and *people* – or teacher subjectivities more specifically – to think about how recent changes are affecting the professional identities of early years teachers, and the complexity of power relations as expectations are altered. This is a group which has a unique place within the education system in England, as on the one hand specialist holders of highly useful knowledge of child development, and on the other as lower status professionals, who do not always ›fit‹ within the primary school context (Bradbury 2019). As I have argued previously, their specialist status and a perception that the rest of the sector does not understand or appreciate their skills often leaves early years teachers in a position of opposing the government, and also school leadership (Bradbury 2021), so much so that being resistant forms part of the professional identity of the early years teacher. It is to a more organized form of this resistance that I now turn.

3. Policy changes and grassroots ›rebellion‹

The Conservative government has made a large number of changes to the education system since 2010, including recent changes to the statutory and non-statutory frameworks for children in Nursery and Reception (see Table 1 below). This followed earlier changes to the EYFS Framework in 2012, and a number of significant changes

relevant to early years teachers including performance-related pay and reform of inspections. The most recent changes thus represent the latest set of reforms in a period of considerable change.

The key difference between the two age groups under consideration here – Nursery and Reception – is that at age 3–4 school attendance is not compulsory, and the guidance document *Development Matters* is non-statutory, whereas in Reception (age 4–5) the EYFS Framework has to be used in state schools by law, and the EYFS Profile results have to be reported to the local authority. Baseline Assessment, which is conducted on entry to Reception, is also statutory, though this is not my main focus here (see Roberts-Holmes et al., 2021).

Table 1: Changes to the guidance and statutory requirements for early years in 2020–21

	Age 3–4 (Nursery)	***Age 4–5 (Reception)***
Previous system	*Development Matters (2012)*	*EYFS Framework (2012)* *17 Early Learning Goals which make up the EYFS Profile*
New system	*Development Matters (2020)*	*EYFS Framework (2020)* *17 revised Early Learning Goals which make up the revised EYFS Profile* *Baseline Assessment (in first six weeks)*

The revised ELGs and revised *Development Matters* have been promoted by the government as reducing the need for data – as suggested in the quote above from a supportive headteacher and prominent early years advocate. A key change within Development Matters is a reduction in the bands which children can be allocated to, from multiple age ranges based on months (e.g. 40–50 months) to just three options only in Nursery, called age 0–3, age 3–4 or Reception. This is a huge simplification of the guidance, compared to the old Development Matters. There appears to be recognition from government that data have become too dominant, and were taking teachers away from children. On the government website, notably, in a section titled ›Why the changes have been made‹, reads:

> »The changes to the EYFS statutory framework have been made to: improve outcomes at age 5, particularly in early language and literacyreduce workload such as unnecessary paperwork, **so you can spend more time with the children in your care**« (UK Government, 2021, my emphasis)

Despite this, the content of the revised *Development Matters* provoked strong criticism from those within the sector, and as a result a coalition was formed of 16 early years organisations to produce an equivalent document more in line with their principles. Working together, they produced a free alternative document, emphasising the non-statutory nature of the new *Development Matters*. The *Birth to 5 Matters* document has been downloaded more than 100,000 times, and has sold more than 30,000 hard copies (by September 2021), suggesting a strong desire to engage with this alternative guidance. While this debate is not my concern here, it provides important context for the changes. Notably, the alternative *Birth to 5 Matters* document has more numerous statements, with age ranges for practitioners to use to judge progress. However, it is also presented as just as much of a retreat from data as the new *Development Matters* by the organisers, who state:

> »The key difference from some previous practice is that judgements should be based on practitioners' professional judgement, **with recording of supporting evidence kept to a minimum**, and that there should not be an excessive level of frequency or detail – no more expecting »three steps per term«, for example.« (*Birth to 5 Matters*, 2022, my emphasis)

This emphasis indicates the strength of feeling that early years needs to move away from ›tick box‹ approaches. The authors also state that despite considerable interest in embedding the document in software, it will only be allowed if the possibility ›to use it as a ticklist for assessment purposes‹ is excluded (*Birth to 5 Matters*, 2022). Thus both the government and the ›early years resistance‹, as they have been termed, appear to be engaged in a retreat from data.

Although the debate was less volatile, there was also criticism of the changes made to the EYFS Framework, particularly the changes to the Early Learning Goals against which children are assessed. In the area of mathematics, for example, there were concerns that the changes increased the level of difficulty (for instance by including areas previously taught in Year 1, the following year) and might lead to rote learning. The removal of an ELG on Shape, Space and Measure caused fears that this area of mathematics, highly important for children's spatial development, might be neglected if it was not part of the assessment (ECMG, 2020), though the extent to which this has happened is not yet clear (Bradbury et al., under review).

Coming as the education system was in the process of recovering from the Covid pandemic, with all the impacts of school closures emerging (Moss et al., 2021), these changes to the EYFS Framework and Development Matters were the latest in a long line of challenges for early years teachers. Nonetheless, some teachers took the opportunity to take them on a year early (in 2020–21 rather than 2021–22), becoming ›early adopters‹, which allowed research on these changes to also begin early.

4. Methods

The empirical data presented here are drawn from six interviews with early years teachers who were early adopters of the new EYFS framework or the revised *Development Matters*, in the year 2020–21. They were recruited through early years contacts and via the ›EYFS Early Adopter‹ facebook group. A summary of the six participants is given in Table 2. These interviews were conducted as part of a larger project exploring the new changes, which also included a survey of early adopter teachers (Gilligan-Lee et al., 2023).

Table 2: Participants

Pseudonym	***Type of School***	***Role***	***Region of England***	***Other information***
Caroline	*Large primary school*	*Reception teacher*	*South East*	*Using new EYFS Profile. Not in Facebook group; experienced. School in deprived coastal town.*
Susan	*Small primary school*	*Reception teacher on senior management team*	*North West*	*Using new EYFS Profile. Very involved in Facebook group; experienced. Very mixed cohort.*
Heather	*Small primary school*	*Reception teacher*	*South East*	*Using new EYFS Profile. Experienced.*
Kirsty	*Small primary school*	*Reception teacher*	*North*	*Using new EYFS Profile. Part of Facebook group; experienced.*
Debbie	*Preschool*	*Nursery teacher*	*North West*	*Using new Development Matters. Experienced.*
Andrea	*Nursery School*	*Nursery teacher on senior management team*	*East Midlands*	*Using new Development Matters; experienced. High level of deprivation.*

A semi-structured interview approach was selected as the ideal method to engage the teachers in in-depth conversation about their practice, probe their responses further, and to encourage them to reflect on their experiences, in line with much research into education policy (Brooks & Normore, 2018). A list of the questions asked is in Appendix 1. Participants were asked questions about their experiences of using the new framework, advantages and disadvantages, impact

on particular groups, and their overall opinion of the changes. The focus was particularly on Maths for some questions, as there were concerns raised by early years specialists about the changes to the Maths ELGs, as mentioned above. The research was approved by the UCL IOE Ethics Committee. Participants provided informed consent, and all names are pseudonyms.

Interview data were transcribed, and uploaded to NVivo software after a careful initial phase of familiarisation with the texts. In NVivo the first process of coding used codes drawn from the research questions and existing literature; a second phase included additional codes and sub-codes arising from the dataset.

A second set of quotes presented here are drawn from teachers' groups on social media. These illustrate some key points about how teachers were adapting to and responding to this retreat from data. They were located by searching for relevant terms within two early years facebook groups. The comments have not been analysed systematically; rather they are used to represent some divergent views and add to the findings from the detailed interviews with six participants. As some of the comments are from the academic year 2021–22 when the new EYFS framework became compulsory, they provide further information on the impact of these changes on a wider group of teachers, although again no claims to representativeness are made. These data are all publicly available and the authors of the posts have not been included.

5. Findings

In this section I set out the complex and sometimes contradictory responses to policy change present in the data, which overall I see as indicating both a welcoming attitude to a retreat from data, and a continuing desire to keep collecting data. While on the surface, teachers might appreciate a less pressured environment where they are required to collect information on children every day, they are also able to remain devoted to that very data collection process.

5.1 Responses to a retreat from data

First, I consider the following question: What does a world with fewer data feel like for early years teachers? The DfE framing of the new framework as reducing workload and allowing more focus on the child suggests a significant change in practice and focus; this was reinforced by some of the participants:

> »So before, I would do a lot of observations on Tapestry [online platform]. It was immense the way we were doing it. I think we were doing too many observations but it was to collect evidence. […] Oh, and then I used to assess

them every half term against *Development Matters*, and then I would have a tracker and I would report to the Head Teacher and it was very sort of tick list orientated. Whereas now, I've really taken a step back from all of that. The only things we do now is I looked at the new *Development Matters* and when the children came in I just looked generally whether they were on track at ›three to four‹, and then I looked at the children that weren't, and they were the children that I really focused on in the maths lessons.« (Kirsty)

»I would say that we are doing a lot less written assessments, so we're having to do a lot less focused, fewer focused activities, fewer written observations. It is more really being able to play with the children and get them to know their personal levels and leave the ones … so it has … I think, purely because the linking is so much easier. So previously I might do an observation of a child, but I'm thinking, right, so where is this. Is this ›30-50‹? Is it in this area, this area, this area or this area? […] It's a lot simpler and there are far fewer bullet points to be considering. So it is a lot quicker. You're not thinking about anything really apart from is it ›age three to four‹, is it ›Reception‹, is it ›birth to three‹. So it does make it quicker and easier.« (Debbie)

These teachers suggest the simplicity of the decision making due to the reduced number of options (with three options only in Nursery – age 0–3, age 3–4 or Reception) has made the entire assessment process ›quicker and easier‹. Kirsty elaborated ›I've not been spending so much time sat behind an iPad or writing things while they're doing things and I'm actually in the moment with them‹. The workload of tracking every half term and reporting to the senior leadership is also reduced. Similarly, Debbie notes that her focus is now more on understanding ›their personal levels‹ through play.

Kirsty, who taught Reception, was very welcoming of the new framework and associated reduction in data in comparison to the old system:

»[In the past] it was almost like, you could almost fill it in at the beginning of the year to the end of the year. It was almost like, well, ›they'll do two jumps and then they'll get to here‹. And it all just became a numbers game, in a way. And I just really like the fact that they've got rid of that and we're not just ticking it, and we know the children more. I think it needed to go a long time ago.« (Kirsty)

For Kirsty, the new framework has allowed a more thorough engagement with assessment, which was less performative. Her description of a formulaic approach to making sure each was recorded as making ›two jumps‹ through the statements is strongly suggestive of processes of datafication, or more specifically, ›cynical compliance‹ (Bradbury, 2013). The new system avoids this ›numbers game‹, allowing her

to ›know the children more‹. Heather had a similar understanding of the advantages of moving beyond the old *Development Matters* statements, saying ›It always felt like a bit of a game that you were playing or trying to make these points progress‹. She went on to describe the shift as ›really liberating‹, because:

> »I'm now saying to my head teacher what I'm doing is I've identified the children who are where they should be, and I'm identifying the children who are not, and then I'm putting in place interventions for those children who are not. And that seems much more of a truthful way of the way I teach than counting how many points they've moved up.« (Heather)

For Heather, the new system allows her to identify children and allocate them to intervention activities, reflecting a ›more truthful‹ way to teach than the previous system. She finds it ›liberating‹ to no longer have to play the game of counting points of progress. In this way, we see these teachers as relieved to no longer be subject to the demands of datafication, particularly those elements that seemed meaningless. However, this new freedom came at a price of uncertainty, as noted by Andrea:

> »I used to look at it [*Development Matters*] and think, but this is suggesting that children do things like robots: ›Then at that point, you will do that, and you will automatically move to that. And then you're going to beautifully move to that‹. And, and that's not real either. So I think, you know, there's pros and cons, it's difficult to assess, again, because you don't have it broken down for you. So in terms of points progress, and all the standard things that we're used to trying to mark against, it leaves you a little bit lost, you know, in a boat in the middle of the river without a paddle bought, you find your paddle.« (Andrea)

For this teacher, the reduction in the specificity of categories used to designate children is an opportunity to avoid assumptions about children moving automatically through set stages, but it is also a challenge, leaving you, up the river without a paddle bought. Andrea has a solution, using this as an opportunity to ›find her paddle‹ by seeing the changes as ›a licence to make it your own… you can be creative with this‹. There is an additional workload in finding a way through the new framework of course, but the freedom appears to be welcomed by these teachers. Reducing the need to produce data allows them to engage in different practices, including more engagement with children. Interestingly, Susan made similar points to Andrea in arguing that the framework allowed her to be more ›reflective‹, but that she had already ›moved away from doing lots of observations and tick sheets and things like that – just because I couldn't cope with it‹. Thus, the new framework has justified her previous shift away from ›providing and producing all this stuff‹. Some of these experienced teachers are making the reforms work for them in ways which cohere with their existing interests and ethos.

There was one exception to this positivity, however, which was Caroline, who notably was not in the Early Adopter facebook group. Caroline had a far more negative view of the changes to the EYFS, and had been forced to become an early adopter rather than choosing it like the other participants. Caroline was struggling in the context of the Covid pandemic to adapt her assessment practices; for her a retreat from established data practices was overwhelming:

> »We're fire-fighting, really, through this year with a scheme of work against a curriculum we don't feel matches up, and not knowing quite which way to go with it, which one to follow the most. So that's been difficult. […] Where we do need to produce evidence, mostly for SLT [leaders] and parents, we are not getting the right evidence. We're not catching new learning because we're still unsure about what the new learning is supposed to look like in terms of, you know, corresponding with the new *Development Matters* and Early Learning Goals […] So I think there are opportunities being missed, which causes anxiety in the teachers.« (Caroline, Reception teacher)

Caroline has concerns about the impact on the curriculum, what evidence to collect when she is less familiar with the detail of the new frameworks, and about the anxiety caused for teachers. As she continued,

> »I know, we all know it's not a tick box and that, you know, it's ›build on, build on there and there‹, but if you can't hook it onto anything we just don't know. So we've got evidence but we don't know what it's evidence for.« (Caroline)

While Caroline understands the aim to avoid a ›tick box‹ approach, she does not feel able to make the links between the learning she is observing and the new statements. Along with her teaching assistants, she is still collecting evidence as prescribed by the old system, and unable to connect this to the demands of the new frameworks. For her, a reduction in data collection has not meant a reduction in workload, but confusion and anxiety.

5.2 How does a retreat from data affect practice?

As indicated, the reduction in the need to collect and produce data appears to have an impact on what teachers do in the classroom, and their interactions and relationships with children. Susan's comment was typical:

> »I think because I'm not worrying so much about the observations and data collection and all the rest of it, I think me and my TA, we're sort of, we're feeling more relaxed when we are just sat with the children and we're trying to dig deeper their understanding, and we're trying to sort of maybe give a

> question that will lead to more open ended, you know, creative discovery, you know, with that child. I think we're doing that sort of more naturally now rather than actually looking at the time and thinking, oh, crikey, we've got to move on, or, you know, I'd best go to that child or that child. We're sort of finding that we're more chilled with it.« (Susan)

In Susan's case, this move was part of a longer-term shift away from using platforms for recording observations over the previous two years; she also commented ›it's given me that acknowledgement of what I've been doing for the last few years, and it's given me that sort of, yes, it's all right, Susan, you can actually do it legally now‹. However, the other teachers made similar points, such as Debbie's comment about ›being able to play with the children‹ above.

One of the challenges of the new system for Nursery teachers, as mentioned, is the reduction to having three large age bands to designate children to. As Debbie noted, ›It's a bit too broad just having the three age bands now‹. This also leads to an issue where children may transfer to Reception classes labelled as within the 0–3 years age band, or as already ›Reception‹. Debbie mentioned the risk that summer-born (and therefore younger) children, and those with additional needs might be labelled as 0–3:

> »Obviously, children with additional needs are going to show less progress, very slow progress for some, and they might sit in that ›birth to three‹ even into Reception class, which, on the one hand will be better for getting additional support for those children and highlighting that they do have additional needs. But on the other hand, it can be quite demoralising for parents, children and practitioners when it looks like a child isn't getting anywhere. And that's down to the fact that there's only the three age bands now and, within those age bands, there's far less than there used to be.« (Debbie)

Here Debbie recognizes the fact that labels are still important, and having wider labels within a system which remains hierarchical, means some children will appear to be not making progress; this can be ›demoralising‹ for children, parents, and staff. The suggestion here is that the age bands are what matters in terms of understanding a child's progress, rather than more nuanced discussions about what children can do. These comments suggest that despite a reduction in the use of data, the labels drawn from the assessment still have real power in designating children in relation to a norm. This reminds us that reducing data reliance is not the same as removing it. The new data systems in place do not disrupt the labelling of children as below or at expectations, or as ›low‹ or ›high‹ ability which are so pervasive in the education system in England (Bradbury, 2021).

5.3 The continued importance of data

As we have already seen, the retreat from data is not total, and the use of labels and categories remains powerful. After all, these teachers remain within a system which designates all children at age five as having reached ›a good level of development‹, or not, and labels children going into Reception as birth to three, three to five, or Reception. Nonetheless, the changes noted above might appear at first to represent a clear phase beyond datafication, where teachers are allowed more freedom and are able to spend more time with children. However, the research data also indicated a continued desire to collect data, even when it was not required.

While the participants suggested there had been significant changes due to adopting the new framework, there were still vestiges of the old framework present in their discussions of practice. For example:

> »Well, because we were still using Tapestry [online platform] for ›wow moments‹ and things, I could use that as an aide memoire, in a way. I could go back as well and keep a check on it. So I think having those photos and those observations is really useful still. I don't think I would ever not have Tapestry, except I do find it a useful tool.« (Kirsty)

> »What I'm also mindful of, which is quite hard to kick the habit, is the message that you don't need to record everything. You don't need this massive sort of back catalogue of evidence. And it's quite hard to stop yourself to say, actually, I don't need to rush off and get the iPad, I can just sit and play with these kids because I'll remember this.« (Heather)

Kirsty continues, despite her comments that she has more time, to still use the software that records observations. She explained that Tapestry remains a ›useful tool‹ that she will always keep. Similarly, Heather, who also uses Tapestry, finds it hard to ›kick the habit‹ of recording everything on her iPad. They appear to doubt their own ability to remember what they have seen, and thus need an ›aide memoire‹; data in the form of observations remain ›useful‹.

What is interesting in this discussion is the need to still use systems that help teachers assess children's progress; Debbie noted that the new system worked because she had the old Development Matters ›ingrained‹ into her brain. Caroline (who was overall less positive), questioned the logic of removing the old system:

> »Why would you step away from those natural stepping stones? Why would you take those away? It doesn't make sense to me.« (Caroline)

For this teacher, the old system reflected the reality of ›natural‹ development; these have been ›taken away‹ by the new system. Removing the complexity of the old sys-

tem has left her feeling unsure, suggesting she felt some sense of security in the previous data-driven system. Like several other participants, Caroline appeared to feel rather ›lost‹ without the need to collect data, revealing how intertwined her professional identity is with the collection of data as proof of children making progress.

These concerns were also present in the teachers' explanations of others' views of the new system, such as in the early adopters facebook group:

> »a lot of it's been teachers worried that, oh, well, how am I going to show progress?, and how am I going to show this?, and … but that's up to schools and SLTs to really iron out. But yes, that's been the worries for most people, data, and how do you know that they're on track. You know, if I go to this how will I know they're on track? If I use this very simplified way of data collection, how will I know?« (Susan)

Here we see the continued importance of data in teachers' working lives – without it, they fear not being able to show progress, suggesting the idea of being visible as a good teacher has become embedded. Their subjectivities as teachers are tightly related to demonstrating that the children are ›on track‹. Moreover, they will not actually know if they are on track, if they do not have the data – it is not enough to observe and assess, but the very act of collecting and recording data has become the only way through which they can ›know‹ the children. This contrasts with research in the late 2000s where data were seen as representations of teachers' knowledge of the children (Bradbury 2013); here instead, data collection is the way to gain that knowledge.

One result of this uncertainty was a desire to adapt the new system to be more like the old system:

> »What concerns me is on some of these facebook groups people are still saying ›I've split the new *Development Matters* up into statements‹ that, you know? It's like so people are still doing it despite all the information saying don't do that. … as onerous as it was having to do these half termly assessments where you minutely assessed every single child against how many early learning goals there were, in great depth, there was some reassurance to that, that you then had something concrete to do and show someone and say, look, I know how …« (Heather)

Heather was concerned about the continued desire among some teachers to split up the new age bands into more detailed statements (akin to the old *Development Matters*). While she is sympathetic to teachers trying to adapt their practice, explaining how the ›solid evidence‹ of the old data-driven system was reassuring, she located the source of tension among senior teachers who were unaware of the new system:

> »I think the message needs to go out to the SLTs [senior leadership teams]. From what I can see of what I can see on facebook is that it's SLT coming back and saying, oh, yes, but how will you know exactly where they are? How are you going to track them?« (Heather)

This explanation suggests the strength of existing practice in relation to tracking and measuring progress, a key component of datafication, among senior teachers, which feeds into the expectations and values of the early years teachers. As well as still wanting the data for themselves, the teachers may be encouraged to collect it by school leaders, who may be less aware of how the reforms were intended to reduce data collection. In this early stage of reform, data still have power to represent evidence of good teaching to senior leaders; that relationship between teacher and manager is still, perhaps, constrained by data. As suggested, this is an area for further research as the reforms become more embedded and the role of data may shift.

5.4 Wider views: a post-datafication phase?

In the autumn of 2021, the revised EYFS Profile became statutory in Reception, and thousands more teachers had to engage with the new framework, including grading children in the summer term of 2022 using the new goals. These results were published by the Department of Education in late 2022 (UK Government, 2022). At the same time, the new *Development Matters* and the ›grassroots‹ alternative *Birth to Five Matters* have become more widely used in Nursery classrooms. Some insights into the response of teachers to this change can be gleaned from exploring two key facebook groups for early years teachers: the New EYFS Early Years group, and the Keep Early Years Unique group (KEYU), which was formed by teacher Elaine Bennett and is positioned as broadly resistant to government policy (KEYU, no date). Here I discuss some data from comments and threads on these groups, not as representative, but as illustrations of the continuing tensions around data. Again, I make no claims to systematic analysis of all the posts, but rather use these as indications of the continuing complexity of the issue. In order to preserve anonymity, these are paraphrased. These are examples of questions asked about the new framework:

> »How is everyone planning on recording progress with the new framework? How will we measure it? I want to talk to my headteacher about how we can still keep track of where children are, and show her that progress is being made.« (May 2021, KEYU)

> »My headteacher and I can't agree about using tracking software. We used to use one and do lots of tracking, but I want to move to doing one point. The head says this won't show progress, only that they are ›on track‹. Everyone seems scared of not having data!« (November 2021, KEYU)

> »Does anyone have an assessment grid for 0–3 years in *Development Matters* please? I need it for some nursery children. Response: Don't worry about assessments at this age!« (November 2021, KEYU)

> »How are you recording progress with the new framework?« (February 2022, New EYFS group)

> »My headteacher wants me to prove progress through data. Tapestry doesn't help us with this. Does anyone know how to show rapid progress? Response: We use [different system] to measure progress as it has bands like the old bands.« (March 2022, New EYFS group)

> »I've got real problem with assessment and data: at first the headteacher was understanding about the changes and we agreed to do two assessment points only. Then I was asked to do an extra one, and now to do four a year. SLT say that's what they need. It doesn't help the children at all!« (March 2022, KEYU)

These comments echo a number of concerns raised by the interviewees. There is anxiety over using the new *Development Matters* and EYFS framework to track and show progress, particularly for senior leaders. Discussions over the use of software are often intertwined with this anxiety. Some suggested solutions involve using alternatives which are similar to the old system, or ›not worrying‹ with younger children. Shifts in expectations about the volume of assessments are clearly challenging, not just for the teachers but also the senior leaders in schools. There is still a strong desire to record and measure progress. There was also a comment which suggested the continued deep relationship between data collection and pedagogy:

> »With the ›exceeding‹ grade gone, what are you doing when the children have got the ELG? How are you extending their learning? We've got some children who have already get the ELG but not sure what to do with them.« (February 2022, New EYFS group)

For this teacher, the removal of the grade above the expected level as an end of year designation affects how she approaches their learning. She is unsure what to teach them, as there is no further to go on the assessment system. This suggests that for this teacher, learning which is not recognised through assessment is not as useful or worthy, otherwise she could simply do what she did previously with children who were labelled ›exceeding‹. Again, these comments – though they may not be representative – suggest a continued perception among some teachers of practice as only important if it can be demonstrated through data.

6. Discussion

This discussion of how teachers respond when faced with policy which ostensibly encourages a retreat from data has identified some of the tensions between a desire to reduce data collection and spend more time with children, and the continued pressures to prove teachers' worth through demonstrations of their impact through progress data. The teachers interviewed (early adopters) appear to maintain the importance of not simply ›knowing‹ where children are, but also recording it. This is perhaps unsurprising, given the pressures in the last 15 years to record and analyse data; after all, practices and expectations do not change overnight. They are often welcoming of the changes, however, and keen to use their professional expertise more, or engage in new practices. The sample, who were all more experienced teachers, were perhaps able to remember a ›time before data‹, and thus able to embrace the changes more willingly (with the exception of Caroline). A sample of less experienced teachers might provoke even more concern, if they had never known a different system, or indeed less concern, if they were new enough to never experience the data-driven era. These are areas for further exploration.

The complex tensions present where policy is layered over previous policy have to be placed in context; it is important not to underestimate the continuing power of statutory accountability systems in English early childhood classrooms. After all, one change not discussed here was the introduction of an additional statutory assessment in Reception, namely Baseline Assessment. As Heather explained:

> »I think in a data driven school which likes spreadsheets and likes to be able to … that kind of accountability, to move away from that is going to be very difficult. […] [Trainers said] ›It's more important that you're, you know, you're honest with your assessments and that they have got what they need then you send them‹. And I thought, that's fine and you can say that, but as a Reception teacher I have a percentage I have to meet.« (Heather)

The bottom line, in Heather's view, is that she has ›a percentage I have to meet‹; accountability systems still dominate, whatever the nuances around collecting more or less evidence and the organisation of different age bands. Her performance (and indeed her pay) is still determined by the proportion of children who reach the expected standard. This overall context still shapes teachers' views of their own roles and responsibilities, however much the policy change in early years retreats from data. The underlying drive to prove the teacher's worth by showing progress – the ›reification of progress‹ – appears untouched by the retreat from data.

As such, it can be argued that early years teachers, for all the grassroots organising and ›rebellion‹ among those linked to *Birth to 5 Matters*, remain engaged in a model of professionalism where data are significant. They might welcome the need

to do less recording, and the trust that that implies, but they still want to allocate children to age bands or stages and use this data to show what they do. Being left between the push to reduce data and an opposing system which prizes datafication, they remain dedicated to data.

7. Conclusion

This paper has explored how some teachers in England respond to policy which represents (and is sold to them as) a retreat from intense data collection. It has discussed how, in what we might see as the beginnings of a post-datafication phase, teachers remain devoted to collecting data and thus to a model of teacher subjectivity where data are key representations of teachers' worth and success. In exploring this topic, I want to emphasis the potential disruption here to one of the grand narratives of policy sociology, which tends to portray teachers as reluctant data gatherers within a context of ever more performative cultures and more datafication. Within this, datafication is often seen as a slippery slope, whereby once you start, you cannot stop (Selwyn et al., 2015). This policy-driven rupture in this process, in the form of new legislation and guidance, provides us with a deeper understanding of datafication, because it shows the extent to which it has become embedded into cultures of education. There need not be rules which demand data, nor an inspection framework which requires them, but the desire for data can continue to be significant in teachers' lives. By removing what appeared to be the underlying cause, we see the strength of the process which has already been undergone; it is as if we remove the slippery slope, but the momentum of datafication keeps us sliding in the same direction anyway.

An alternative reading would be to conceive of these teachers' continued devotion to data as post-panoptic, that is whereby subjects have become disciplined through panopticism so that they no longer need to be watched (Charteris, 2022; Courtney, 2016). In this conceptualisation (related to inspection, not datafication), the post-panoptic state is only possible because panopticism has »achieved the compliance of its objects« (Courtney, 2016, p. 638). Certainly, the comments relating to senior leaders suggest there is still surveillance through data in primary schools, or dataveillance (van Dijck, 2014). However, the teachers' responses do not suggest that they are producing the data *just in case someone wants to see it* (though this may be the case in other contexts). Rather, *they are producing the data for themselves*, in order to recognise and make tangible the change they have produced within the child, through their teaching. They ask ›how will I know?‹ without the data. Creating a record of each child through their ›wow moments‹, for example, fits with a wider tendency for people to ›curate‹ a narrative of their life, through social media. We might speculate that this continued devotion to data is symptomatic of digital cul-

tures where something does not exist if it is not recorded; the desire to present a positive view of oneself becomes as important in shaping behaviour as systems of dataveillance. The case of England's early years provides an interesting example of an education sector which has gone through datafication and is emerging out the other side, changed forever in the process.

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Appendix 1

Semi-structured Interview Schedule

1. *First of all, can you tell me a bit about your school?*
2. *Why did you decide to become an early adopter of the new EYFS Framework?*
3. *How have you found the process so far? (training, information, adaptation)*
4. *What has changing in terms of your teaching in maths? (planning, focused teaching, free play, resources)*
5. *What has changing in terms of your assessment in maths? (methods, data, regularity)*
6. *What are your views on the new framework? Has it improved your teaching of maths? Could it be improved?*
7. *Are there any groups of children who, you think, are finding the new framework particularly helpful? Any that are finding it challenging?*
8. *Is there anything else you think we need to know about how the new framework is working in practice?*