'Pedagogic oppression': the need for emancipation through contradiction in teacher professional development

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Whilst teacher professional development exists in an arena of competing discourses it is commonly underpinned by a dualistic philosophical perspective. Some argue that professional development could be improved within the dualist perspective whilst others suggest a monistic alternative championing unity and connection. In this paper we argue that there are consequences to professional development experienced in a dualistic system which we term 'pedagogic oppression'. We suggest that this pedagogic oppression takes place when Hegelian contradiction (the inability of anything to be identical with itself) is obscured in professional development. We claim that this pedagogic oppression reveals confusion around the purpose of professional development, reveals shortcomings in its scope, and reveals a deep dissatisfaction in teachers' selfperceptions. This paper utilises reflexive thematic analysis generated from interviews with five experienced teachers of mathematics. We identify how a Hegelian understanding of opposition, experience and expertise can reveal pedagogic oppression and explore the consequences. Not only do we suggest that there is a need for a wider perspective of our understanding of professional development, but we also argue that professional development should be founded on principles which enable the revelation of contradiction - revelations that bring about pedagogic emancipation.

Keywords: teacher professional development, emancipation, contradiction, dualism, monism

Introduction

Teacher professional development has long been a feature of policy promises in the English education system. Indeed, recent initiatives such as Teaching for Mastery (Boylan *et al.* 2019) have had a significant focus upon, and commitment toward, professional development. Nonetheless, simply 'throwing money' at professional development does not guarantee that vital learnings will be embedded into teachers' practice (Clapham and Vickers 2018). In the context of this paper, we explore the

professional development experiences of a group of mathematics teachers from the East Midlands of England. For example, Adam - a teacher with twenty-six years of experience - reflected on his classroom style and stated, "my teaching is so Transmissionist and I hate myself for it". Whist there is some hyperbole here, it is none the less a stark and thought-provoking statement. That a successful teacher can have taught for so long and yet feel such discomfort in their pedagogical practice implies the existence of an issue. Whilst there are a variety of possible interpretations of this statement, in this paper we will explore our view that an ontological position founded in a dualistic perspective may lead to teachers becoming fatigued by teacher development initiatives, confused by false promises, and uncomfortable with the teacher that they have become. We argue that there is a need for a wider perspective of our understanding of professional development, and that professional development should be founded on the revelation of contradiction. The paper concludes with a discussion of how teacher experiences of their professional development have led to our alternative conception of teacher development. This conception is founded on a dialectic ontology that seeks to reveal contradiction and bring about pedagogic emancipation to the teacher.

Challenging dualism

Professional development initiatives in education are underpinned by a dualistic perspective (Strom and Viesca 2021). Dualistic thinking is commonly associated with Descartes' (1968) notion that there is a separation between the material and the mental. Many, including Dewey (2012), have challenged the influence of this dualistic perspective in education by arguing that it creates a focus on opposites rather than on recognising connections. Similarly, Pring (2015) criticises dualism in that the selection of a single viewpoint fails to capture the reality of experience. Others argue that an adjusted dualist perspective remains helpful, for example Pouwels and Biesta (2017)

suggest that rather than reject dualism, it is more useful to recognise its potential for prompting growth. They argue that better decisions can be made through the conflict of understanding and weighing arguments from both sides. A more radical position is offered by Strom and Viesca (2021) in their outright rejection of dualism. Instead, they suggest a rethinking of professional development based on a monistic perspective (Braidotti 2013) that emphasises the unity of all matter. Strom and Viesca (2021, p. 210) call for a shift toward a monistic view of professional development that is a 'more complex, connected, [and] relational' and can therefore help disrupt educational inequality.

In this paper, we propose that neither dualism nor monism provide an adequate conceptual basis for professional development. Instead, we suggest that professional development is better conceived from a standpoint of Hegelian dialectics in the tradition of Žižek (2012) and McGowan (2019). Whilst Žižek (2012, p. 396) formulates the dialectic process as an advancement of thought that results in an 'aware[ness] of inconsistencies', McGowan (2019) describes it as a process which leads to reconciliation with contradiction as the defining feature of reality. For McGowan (2019, p. 16) the word contradiction is used to describe the 'inability of anything to be identical with itself'.

McGowan's (2019) formulation of the dialectic process stresses that the goal is not to be aware of particular inconsistencies, but to grasp the universal nature of inconsistency and contradiction. It is this realisation that McGowan (2019, p. 14) suggests brings freedom and is 'the driving force of all movement in being'. He contends that thought does not advance by solving contradiction as Pouwels and Biesta (2017) argue but through accepting it cannot be resolved and engaging in an uncomfortable process of 'negation, destruction and conflict' (McGowan 2019, p. 29).

In the context of this paper, we argue that professional development conceived in a dualistic perspective hides the importance of contradiction and leads to oppressive experiences. In contrast, taken from a dialectic perspective, we argue that the acceptance of ontological contradiction can be emancipatory and bring freedom from these negative consequences.

Theoretical constructs shaped by contradiction

Defining contradiction as the essential feature of reality allows McGowan (2019) to view everything from this perspective. In particular, he re-interprets the concepts of opposition, experience and expertise in terms of how they potentially obscure contradiction. These theoretical constructs are used in this paper to inform the literature review around teacher professional development and to provide a starting point for the analysis of data.

Firstly, with respect to opposition, McGowan (2019) warns that it can obfuscate contradiction. He argues that opposition is the product of ideology which creates an enemy 'on which to direct the aggression stemming from our own failure' (McGowan 2019, p. 12). Whilst Pouwels and Biesta (2017) argue that an opponent is necessary to bring about unity and an improved position, McGowan (2019) argues that the creation of an opponent serves to obscure the need to engage with internal contradiction. Rightly viewed, the creation of opposition should be seen as a signifier that there is internal contradiction to be faced. Indeed, ultimately freedom from opposition is possible once an individual realises the emancipatory effects of recognising opposition as an indicator of internal contradiction.

Secondly, and in a similar way, McGowan (2019) notes that Hegel had a mistrust for experience because it can create the illusion that it is possible to move to a new (noncontradictory) position. In particular, he argues that space and time disguise

contradiction so that it can be interpreted merely as difference and the potential of the dialectic advance is lost. Strom and Viesca (2021) illustrate this when they speak of a Science teacher who adopts different practices for two different classes. In this instance space has disguised contradiction as difference when the teacher justifies having a different pedagogical approach rather than explore the internal contradiction that it raises. Conceivably, the passage of time could play a similar role and might also enable the teacher to adopt different pedagogical principles because they are the latest popular beliefs. Instead, McGowan (2019, p. 122) encourages the viewpoint that 'there are not two different noncontradictory experiences but one experience of contradiction'. This perspective means that the experience itself is not the issue, but the potential it offers for ignoring contradiction and the vitality that it could produce.

Finally, McGowan (2019) reinterprets the concept of expertise in the context of contradiction. He encourages the need to gain freedom from experts, where experts are those that try to present identities and messages that claim to be without contradiction. For example, through professional development activities an expert may champion a particular pedagogic approach. In championing this approach their certainty creates the illusion that they are without contradiction. In such a situation, responsibility for thinking could be imputed on to the expert and the confrontation of potential contradiction avoided. In the example of the Science teacher who adopted differing practices for two of his classes Strom and Viesca (2021, p. 220) comment that a second class was taught in a style that was 'the antithesis of his pre-professional learning' The implication here could be that this Science teacher had adopted the experts' methods for the first class without ever having to confront the contradictions to his fundamental beliefs. In contrast, McGowan (2019) argues that emancipation is possible when an individual refuses to be impressed by the expert through the knowledge that they share

the same feature of contradiction. This is not an argument for the removal of experts, but for a rethinking of the nature of expertise.

Dualism in teacher professional development

We would concur with Strom and Viesca (2021) that a dualistic perspective underpins thinking behind teacher development initiatives in education. This fundamental perspective in teacher development can be seen in the connection of increasing student attainment with teacher changes, school improvement (Desimone 2011, Opfer 2016, Sims et al. 2021) and ultimately to countries increasing their economic competitiveness (Kennedy 2014). Whilst the definition of teacher development, and its related terms, are contested across literature (Sims et al. 2021) the starting point in this paper is Guskey's (2002, p. 381, my italics) description as 'systematic efforts to bring about change in the classroom practices of teachers, in their attitudes and beliefs, and in the learning outcomes of students'. Guskey's (2002) definition will be used to structure our review of professional learning literature by connecting it with the theoretical constructs that obfuscate contradiction as identified by McGowan (2019). For example, in our review of literature we link Guskey's (2002) notion of change with the creation of opposition as described by McGowan (2019). Similarly, we link Guskey's (2002) terms of bring about and systematic effort with McGowan's (2019) ideas of the creation of experts and the valuing of *experience* respectively.

Change and opposition

Guskey's (2002) definition highlights the widespread view that teacher development seeks to change teacher beliefs and practices so that there may be a change in student outcomes. Such a formulation helps to explain why professional development is often conceived of as a linear model (Boylan *et al.* 2018, Garner and Kaplan 2021, Strom and

Viesca 2021) where the input of the professional development acts upon teachers and leads to an output seen in student outcomes. As Strom and Viesca (2021) identify, this linear thinking is based on dualistic logic and implies that there is a better way to teach. Whilst different models present alternatives around whether teacher beliefs should be affected before teacher practices (Opfer and Pedder 2011) most are essentially linear in nature (McChesney and Aldridge 2021) and therefore place a focus on the constituent activities. This dualistic perspective promulgates the belief that the last link in the sequence (student outcomes) is the underpinning purpose (Sims and Fletcher-Wood 2021). Despite Guskey (2002) recognising the importance of changes to teachers, student attainment is used as the de facto measure of success. Indeed, in England the Department for Education (2016) clearly identifies that the focus of teacher development should be to improve specific pupil outcomes.

This focus on bringing about change to teachers and to student outcomes leads to the implicit and explicit creation of opposition. Ernest (2004, p. 82) describes mathematics education as 'a covert battleground in which the discourses of different practitioner and professional groups compete for dominance'. The language of *battleground* and *dominance* provide implicit acknowledgement of the formation of opponents in the education arena. More specifically, at a national level, Craske (2021, p. 294) identifies that the Conservative education agenda (2010 to 2014) relied on the construction of a 'common enemy' around curriculum and pedagogic policies. He identifies that a popular educational reform tactic is to present on the side of the majority and against 'an all-powerful enemy that needs conquering' (Craske 2021, p. 288). However, the creation of opposition is not limited to one ideological group. For example, Dreher (2021) notes that the National Council of Teachers of Mathematics (NCTM) have scapegoated parents, teachers who do not carry out their NCTM

directives and teachers that disagree with the NCTM constructivist view. (2021)The creation of opposition happens at a national level but can also be seen at a local level. For example, Dickinson *et al.* (2020, p. 342) present the Realistic Mathematics Education (RME) programme as taking place in 'Transmissionist classroom cultures' in England. Whilst the identification of culture may be intended to provide context it also indicates what Ernest (2004) referred to as the battleground. This is not intended as a comment on the validity of the RME pedagogical values, nor to single the programme out, but to illustrate that a focus on change brings a concomitant creation of contradiction-obscuring opposition.

Systematic efforts and experience

Guskey's (2002) use of the word *systematic* from the earlier definition connotes the image of formal teacher professional development (Dabbagh and Kitsantas 2012). Dabbagh and Kitsantas (2012) view formal teacher professional development as activities that are institutionally directed, are highly structured and often take place on courses. This is a common perception of professional development with Sellen (2016) identifying that 75% of teachers in England had experienced professional development in the form of courses in the preceding year of his study. However, what can be considered a course is unclear and some researchers such as Sims *et al.* (2021, p. 7) try to narrow the definition of professional development to exclude programmes with 'a token training element'. The purpose of narrowing this definition appears to be to enable judgements on whether certain types of professional development programmes should be included in quantitative studies that measure student outcomes. There is some consensus over the essential elements of professional development in that it should be subject specific, practice-based collaboration that is sustained over time and draws on external expertise (Cordingley *et al.* 2015, Dunst, Bruder and Hamby 2015). This

consensus reveals the view that creating possibility through experience is fundamental to an understanding of systematic efforts. For example, Cordingley *et al.* (2015, p. 9) claim that an important element of teacher development is the creation of a vision that helps teachers to believe in an 'alternate reality'. Teachers are asked to believe that anything is possible. Furthermore, they recommend giving teachers time and utilising comparisons with other settings as two ways to enhance teacher development. Again, this links to McGowan's (2019) concerns around the role of space and time in experience and how they can disguise contradiction as difference.

In addition, there are potential issues with a focus on short term teacher development experiences. Firstly, the focus on short term student outcomes from the experience means that long term effects on teacher beliefs can be neglected (Schoenfeld 2020). Gregoire (2003) and Schoenfeld (2020) identify that many teachers return to a previous well-established style of teaching following a professional development experience. Time and space create the illusion that the changes from the experience continue to be enacted. A second consequence of a focus on experience is that there is little consideration in literature of the cumulative effect of playing with teachers' beliefs and practices over time. Fullan (2019) recognises the existence of initiative fatigue on teachers but this is done to advise caution in introducing reforms from a management perspective. Zhao (2017) asks more pertinently that consideration is made around the side-effects of education initiatives. There is little clear research around how initiative fatigue manifests in teachers as a result of chasing the latest education experiences and recommendations.

Bringing about and expertise

Returning to Guskey's (2002) definition of professional development we now explore the link between the initiators of experiences and the creation of experts. Imants and

Van der Wal (2020) view agency as when teachers make pro-active decisions that affect their work and professional identity rather than those decisions being made by managers. Indeed, Kennedy (2014) uses levels of teacher agency to classify professional development from transmissive training models to transformative collaborative professional enquiry models. As Pring (2015, p. 71) argues, the transmissive training models are often initiated by managers 'aloof from the education process [that] seek general solutions to generalised conceptions of the problem' and result in telling teachers what to do. This risks the consequence of disempowering and disenfranchising the participating teachers (Pring 2015). Indeed, the RECME project in mathematics (Joubert et al. 2009, p. 2) notes that some teachers find difficulty in changing and so should be given 'permission' to try new ways of teaching. Similarly, Cordingley et al. (2015, p. 6) recognise that external experts are needed to introduce new knowledge and to act as 'coaches and/or mentors'. It is common that power imbalances are created in both coaching practices (Lofthouse 2019) and mentoring practices (Wilson and Huynh 2019) as experts are reified. Furthermore, collaborative professional enquiry models such as lesson study continue to grow in popularity and are the subject of much research (Seleznyov 2018). However, Pring (2015) again identifies a fundamental concern around teacher-centred collaborative models in that the direction is still determined by someone. It may no longer be the aloof manager, but those in power and those with the 'skills of negotiation' (Pring 2015, p. 72) tend to dominate the direction of enquiry. In collaborative professional enquiry models the expert becomes the one who is most skilled (or who has the most power) to make their voice heard. Viewed from this perspective, discussion around the value of teacher agency becomes secondary to the recognition that experts, in some form, are directing development.

In addition, the identification and existence of informal professional development (Dabbagh and Kitsantas 2012) also highlights that there is potential for a wider pool of (expert) influences than just managers and teachers. For Dabbagh and Kitsantas (2012) informal professional development rests in the hands of the learner, includes discussion with others, trial and error and reflection. Building on the idea of informal professional development it is possible to identify additional influences on teachers that are not necessarily 'in the hands of the learner' (Dabbagh and Kitsantas 2012, p. 4). Day and Gu (2010) state that one feature of professionalism in teachers is that they have autonomy to control classroom practice. However, teachers face competing messages from expert others which include organisations, parents, and political agents (Pesek and Kirshner 2000, Swan 2006). If teacher professional development is considered as anything which influences teacher actions in the classroom then even a government sponsored research review or performance management feedback could be included as presenting expert messages. In short, pedagogic experts are created in the dualistic system irrespective of whether the change is identified by a school's senior leadership, a collective of teachers or a publication espousing particular pedagogic principles.

Method

In this study we chose to address the broad question: what is the nature of teachers' experience of professional development? The study participants consisted of n=5 teachers of mathematics from three secondary schools in England. These teachers took part in semi-structured interviews using the interview schedule shown in Figure 1.

- Introduce self
- Ask for permission to record
- The intention behind this research is to find out your views and experiences of professional development over several years.
- 1. Could you tell me a little bit about yourself? How long have you been teaching? Are you a mathematics specialist? Where have you taught?
- 2. Could you describe your philosophy of teaching to me, or what kind of teacher you see yourself as?
- 3. How have you changed over the years as a teacher? And how do you feel about those changes?
- 4. Can you tell me about any professional development that you've experienced?
- 5. Can you describe a positive professional development experience where someone has made a difference to what you do in a classroom?
- 6. What do you think is the purpose of professional development?

Figure 1: Interview schedule

Each participant was interviewed once, with each interview lasting between 30 and 45 minutes. The interviews with the first two teachers took place after they had provided feedback on the design of a new teacher professional development package entitled Rethinking Approaches in Mathematics (RAM). Following their feedback adjustments were made to the materials and arrangements were made to trial the RAM professional development package with a mathematics department. The interviews with the remaining three teachers (all from the same school) took place just prior to their participation in the aforementioned RAM professional development trial. As we wanted to consider cumulative perceptions of professional development over a number of years the participants were selected according to their 'professional life phase category' (Day and Gu 2010, p. 47). Such a categorisation places an emphasis on the number of years taught, acting as a proxy for experience of professional development, rather than simply the age of the participants. Table 1 summarises information about the participants and includes a sub-group description taken from Day and Gu (2010) which has been

selected by the first author as the most appropriate descriptor. This summary is intended as a help to the reader in interpreting the teachers' views rather than as a reductive classification.

Name	School	Professional	Sub-group description	Additional
		life phase		information
		(in years)		
Adam	1	24-30	Sustained a strong sense of	Mathematics lead
			motivation and	across a multi-
			commitment through	academy trust and
			challenges.	classroom teacher.
Yvonne	2	16-23	Increased motivation and	Mathematics lead
			commitment from career	across a multi-
			advancement and good	academy trust and
			pupil results.	classroom teacher.
Jonathan	3	4-7	Sustaining a strong sense	Head of mathematics
			of identity, self-efficacy	and classroom
			and effectiveness.	teacher.
Dave	3	8-15	Increased motivation and	Member of school
			commitment from career	senior leadership
			advancement and good	team and classroom
			pupil results.	teacher.
Nick	3	16-23	Career stagnation has led	Classroom teacher.
			to decreased motivation.	

Table 1. Summary of participants.

This research was undertaken in line with BERA (2018) guidelines. Ethics permission was obtained from the authors' university and transparency was established through the provision of clear research information. Teachers were then able to provide informed consent in signing their agreement to participate. Interviews with participants were conducted by the first author at a mutually agreed time. The interview with Yvonne took place in person, whilst all other interviews took place online via Microsoft Teams. All interview data was transcribed in full starting from the base of the Microsoft Teams automated transcription, and pseudonyms have been used throughout the transcriptions to protect individuals and organisations.

Analysis

Our analysis was informed by an epistemological standpoint based on McGowan's (2019) interpretation of Hegelian dialectics. As such, we value the words spoken by interviewees as a revelation of reason and adopt a critical constructionist perspective which seeks to examine their version of events. The transcribed data derived from our interviews was analysed using deductive reflexive thematic analysis (Braun and Clarke 2021). The flexibility of reflective thematic analysis allowed us to look for both latent and semantic understanding whilst the deductive element was informed by the theoretical constructs suggested by McGowan (2019) of opposition, experience, and expertise. These constructs provided an initial lens by which we familiarised and understood the data as part of the first phase of the six-phase guidance suggested by Braun and Clarke (2021). After initial coding at the surface level, repeated reviewing led to the following themes of:

- opposition reveals confusion around the purpose of professional development,
- expertise implies a wider scope for professional development,

• experience of professional development contributes to self-image.

Opposition reveals confusion around the purpose of professional development

A variety of codes stemmed from the theoretical construct of opposition to create this theme. This includes codes such as 'forced', 'learning something new' and 'student focus'. This formed an initial theme entitled the 'purpose of professional development' before it was shaped into the current title. For example, Nick refers to a whole school initiative that had recently created a school-wide lesson structure. As one who feels like the recipient of teacher development he states:

Nick: What is the fucking point of this? [...] it was something that had been fed down from above.

As Nick demonstrates, experienced teachers are acutely aware of when a change is oppressively imposed upon them and the imposer (the school leadership team) is reframed as an opponent. In addition, his words also reveal that whilst he has changed, the creation of an opponent allows him to direct his aggression onto others rather than face his own contradictions:

Nick: They've managed to change my practice here, but only through policy and mandating things ... It's one of those things that now, now I've got used to it, I just sort of do it as a matter of course. You know, just get it done.

Nick has created an opponent to blame, the internal contradictions within his own teaching need not be faced, and the purpose of the professional development is obscured to "just get it done".

Nick provides an example of how opposition manifests in a recipient of professional development, but a similar perspective can also be seen in one who leads professional development. With respect to a trial of resources she refers to as 'retrieval

starters' that had been implemented across a number of schools Yvonne states that:

Yvonne: There was a trial done with one group last year and we saw that group had better results across key stage three, so we think this is a good thing to do, this is why we're going to do it.

We interpret the "we" in Yvonne's statement as the leadership team of the multi academy trust seeking to impose a change on classroom teachers. The classroom teachers are effectively classified as opponents whose practice must be changed in the name of improving results. Such actions and language closely resemble the covert battleground of Ernest (2004). In addition, we note that in this case there does appear to be clarity around the purpose of the change from Yvonne's perspective. The retrieval starters are viewed as "a good thing" that lead to better academic outcomes for students. However, we would also suggest that the assumption that better academic outcomes should be the driver for professional development (Sims and Fletcher-Wood 2021) is not universally accepted. When asked to suggest the purpose of teacher development other participants placed the focus on their own personal development and progress rather than on students. For example, as an experienced practitioner, Nick expressed a desire that teacher development needs to affect his classroom practice:

Nick: I'm looking for that one thing that will change what I do, that's what I'm looking for.

Dave placed a similar emphasis on himself as the focus of teacher development, but instead of looking for something to add, saw it as something that should help him fulfil his potential:

Dave: So I can be the best version of me at that time in that place [...] I always view it as a re-centralising. So when I start to go away from where I'm meant to be it brings me back.

Both of these examples illustrate that from a teacher's perspective they want professional development to be about them. Furthermore, these two teachers express a desire for their development to stem from internal growth rather than through confrontation with opposition. Nick expressed a desire to *add* and Dave spoke of *recentralising*. This is very different language to that of Ernest's (2004) ideas of battleground and dominance.

As McGowan (2019) argues, the creation of opponents within the arena of professional development leads to the obfuscation of contradiction. Irrespective of whether it is the recipient of professional development, or the instigator of professional development, opponents are created so that it becomes easier to direct anger at them rather than face internal contradiction. Furthermore, we argue that this creation of opponents also reveals a lack of clarity around the purpose of professional development. Whilst one perspective is that the purpose should be improving student outcomes the opposing perspective is that it should be about the teacher. From a linear, dualistic perspective, one of these perspectives must be subservient to the other. Within a dualistic system, the creation of opponents obscures contradiction and reveals an irreconcilable confusion in purpose.

Expertise implies a wider scope for professional development

The theoretical construct of experts led to codes such as 'courses', 'Ofsted', 'popular literature' and 'performance management process' which became grouped as 'influencers of teachers' before eventually being interpreted as this theme. The traditional view of teacher development as an external course or a school programme (Dabbagh and Kitsantas 2012) was expressed by several participants including Nick, who notes that he never gets to go on courses anymore, and Yvonne who referred to the

many school initiatives that take place:

Yvonne: There's this whole school initiative, and this whole school initiative, and this whole school initiative [...] it felt like there was a new idea every two weeks or so.

However, participants also suggest other activities that they saw as influencing and developing their practice. Whether the suggestions are accurate or not plays second place to their perception of them as true. For example, two participants referenced Ofsted as a government organisation, providing messages around how to teach:

Yvonne: This has come out of the Ofsted research review [...] about low stakes assessments.

Jonathan: It is an Ofsted requirement to do knowledge retrieval.

These two examples illustrate that professional development need not be restricted to a consideration of formal programmes. The messages that teachers hear are interpreted and this interpretation affects classroom practices. Similarly, teachers in the study showed an awareness of fashionable and current advice which affected teacher practice at either the school level or within mathematics departments:

Yvonne: They [teachers in the department] also get their message around mastery through the NCETM [a national mathematics organisation].

Yvonne: The Teach Like a Champion, I think, is the stuff that's come in, coming down I think, cold calling.

Formal courses, an Ofsted research review, a national subject organisation publication, populist books around (mathematics) education or the messages from subject associations all create a perception that an expert (claiming to be without contradiction) knows a better way. In each of these examples the teacher defers responsibility for change on to an expert other. Once again, there is little need to

examine any internal contradiction that the changes reveal because an expert has presented the change as correct.

McGowan (2019) encourages the emasculation of the expert through the realisation that they share the same feature of contradiction that is common to all.

Indeed, one teacher revealed that expert opinions do not necessarily lead to blind acceptance. Adam, as an experienced and well-read teacher, reveals that expert opinions can lead to a consideration of contradiction when he states:

Adam: I'm the product of lots of different influences aren't I? I read Sweller and I just think, wow, it makes so much sense. Cognitive science is amazing. And then I read an ATM thing and I think it's more nuanced than that.

This quote from Adam provides a sense that he weighs competing messages, reduces the power of the expert by identifying their lack of nuance, and uses their ideas to consider his own internal contradictions.

It could be argued that the anecdote to the creation of experts is to increase the level of teacher agency. However, in our interviews we see that even under the guise of teacher agency, as Pring (2015) notes, certain individuals have the power to influence and initiate teacher development. Jonathan, as the head of a mathematics department, described agency as either teacher self-direction or just following what he wanted:

Jonathan: This change has got to come from you, or at the very least you've got to do it the Brian Clough way, where you sort of talk about it and everybody agrees that I'm right, okay. That's giving agency to people.

Similarly, Yvonne recognised the power of discussion within a group but that her views were of most importance when stating:

Yvonne: We talk maths, and I take that, we have a discussion about it, and then I can steer them.

Therefore, we contend that the solution to the creation of expert messages is not to be found in teacher agency since those with the strongest voices still create direction.

Analysing the creation of expert messages in out interview data reveals that there are many competing voices telling teachers what to do. We suggest that a wider and more inclusive understanding of the nature of professional development is required. Indeed, we would claim that anything which directly influences classroom practice should be considered as teacher professional development. This may not feel neat, and it may make inclusion criteria difficult for meta-analysis, but the reality of experience suggests it is more realistic. In addition, we note that the suggestion of teacher agency as an anecdote to experts within professional development is not without difficulty. It is still the case that those with power can present their ideas as being without contradiction. Importantly, in this section we have also noted that the unthinking acceptance of expert messages can be overcome. Whilst suggesting a wider scope for our understanding of what entails professional development this also hints at a better understanding of professional development. That is, it should be about stripping experts of their power so that their messages help to reveal contradiction.

Experience of professional development contributes to self-image

The codes within this theme derived from the construct of experience and highlighted the emotions that teachers felt – these included guilt, confusion, disappointment, and anger. These codes were initially grouped as 'effects on teachers' before being shaped into the current theme. Whilst often not in direct reference to a particular professional development initiative this theme provided an insight into the results of the many messages that teachers have experienced over the course of their careers.

McGowan (2019) suggests that one danger of experience is that it obscures

contradiction and leads to the acceptance of difference through creating a belief that anything is possible. However, from our analysis, teachers did not speak of how professional development has led to the belief that anything is possible but instead revealed its impact on their self-image. Firstly, Yvonne referred to teachers as experiencing 'initiative fatigue' which connotes a sense of passive disengagement, and no longer hearing or responding to suggested messages. However, teachers also revealed negative emotions that are stronger than passive disengagement. For example, two teachers (and we stress once again that they are experienced teachers) revealed signs of insecurity around being themselves in the classroom. Dave reflected on feedback from a recent lesson observation that he viewed as professional development and stated:

Dave: I started to doubt myself.

In a similar way, Nick felt he couldn't be himself in the classroom and instead has had to create a character to play that enables him to cope with demands. Referring to himself in the third person by his surname he states:

Nick: I'll switch Mr Stroller on and he doesn't care. But it's a coping mechanism, it's a defence mechanism, it's so many things, Mr. Stroller, you know, you've got to love him really.

Furthermore, at times this doubt was seen to manifest as disappointment around who he is in the classroom:

Nick: After saying that, I find myself a constant sort of disappointment with myself, because I, you know, I'm not, [...], I'm not anything.

For Nick the cumulative effect of professional development has not been the belief that anything is possible, but the creation of a negative self-image characterised

by doubt and disappointment. This negative self-image has subsequently led to an acceptance that he must be a different person in the classroom. Difference has still obscured contradiction and allowed Nick to neglect facing the contradiction of his own teaching.

Just as heart-breaking there were also conversations where this disappointment revealed itself as anger, with participants in the study using the word hate to describe some of their teaching practices. As quoted at the start of this paper, regarding his level 3 post-16 teaching, Adam stated:

Adam: My teaching is so Transmissionist and I hate myself for it, and I still do it year on year.

Similarly, Jonathan recognised that he sometimes employs retrieval style starters and felt anger with himself because, whilst it worked, he felt it went against his belief in mathematics being about problem solving.

Jonathan: I, I hate myself for when it goes well, a lot of the time.

Whilst caution needs to be taken not to interpret the word 'hate' too literally, both examples speak of a deep unease and an intense dissatisfaction with practice.

In contrast to McGowan (2019), this dissatisfaction with self indicates that participants feel that something is *not* possible. When seeking to explain the use of retrieval starters Jonathan reveals the despair he experiences in accepting that his class cannot problem solve:

Jonathan: But I feel like I'm letting them [the students] down because actually what they really need to do is problem solve. Maybe I've conditioned them so it, it has helped, and that's the problem. It helps, but it's, it's not, I don't know. It feels wrong. It feels like actually what the best thing I could do is like, there's a problem, go. But they're not in that mindset.

As with the previous examples, this quotation reveals that a negative self-image leads to a belief that something is not possible, but this belief still leads to the acceptance of difference over contradiction. In accepting that these students are not "in that mindset" Jonathan reveals an acceptance of difference caused by space and time (McGowan 2019) rather than face a contradiction in how he teaches.

Our analysis reveals that whilst experience may lead to the belief that anything is possible, it can also lead to negative self-image. The concern with this negative self-image is that it then also leads to an acceptance of difference over contradiction. Either the teacher accepts that they are a different person in the class, or they accept that the class is not capable of something. Experience obfuscates contradiction, and a cumulative implication of professional development in a dualistic system may be that negative self-images lead to the acceptance of difference.

Conclusion and implications

In the previous section we identified three themes that stemmed from our analysis of five teachers of mathematics who were chosen because of their years of experience of professional development initiatives. These interpretations derived from our exploration of interview data based around the theoretical constructs of opponents, experts and experience respectively. We identified that teachers' experience of professional development has led to confusion around purpose, a need for a wider conception, and implications on self-image. We recognise that our choice of theoretical constructs led to us drawing out these themes and also that we have created a 'reading of the data' (Braun and Clarke 2021, p. 148).

Taken together our themes lead us to describe the cumulative experience of teachers as one of pedagogic oppression. We consider pedagogic oppression to be the obfuscation of contradiction which arises in a dualistic system of professional

development when teachers are told how to teach. This pedagogic oppression is enabled through the justification of creating better student outcomes, is sustained through a wide range of competing expert messages and is revealed in negative self-images for teachers.

We hold the view that merely adjusting our conception of professional development and focusing on teacher beliefs and agency is insufficient if it remains within any form of dualistic conception. We concur with Strom and Viesca (2021) in their rejection of dualistic thinking that leads to professional development being dominated by a desire for sameness and implementation with high fidelity. We agree with their argument that 'it is simply not possible to 'train' teachers to implement pedagogies or produce student learning in ways that will be consistently the same across settings' (Strom and Viesca 2021, p. 221). However, we do not agree with their conclusion that there is a need to conceptualise teacher learning-practice through a monistic perspective with a defining characteristic of difference.

We view the monistic perspective of Strom and Viesca (2021) as allowing difference to be experienced and accepted rather than as encouraging contradiction to be faced. We claim the adoption of a perspective based on difference can encourage an environment of inertia because contradiction is obscured. Taking a Hegelian dialectic perspective (McGowan 2019) reveals that the true purpose of difference should be to reveal and confront our inherent self-contradiction. Therefore, in contrast to Strom and Viesca (2021) we would argue that the defining characteristic of teacher professional development should be the revelation of *contradiction*.

The dualistic mindset in education has costs - we see teachers that have become fatigued by endless teacher development initiatives, confused by the mixed messages and uncomfortable with the teacher that they have become. We argue that our aim in

teacher professional development should be to enable pedagogic emancipation rather than oppression. We view pedagogic emancipation as that which brings freedom to teachers from anything which obscures contradiction – including expertise, opposition, and experience. Indeed, the aforementioned RAM professional development has been designed based upon the desire to bring about pedagogic emancipation. At its heart is an attempt to design materials based on a clearer understanding of the effects of expertise, opposition and experience. We suggest that pedagogic emancipation can be sought through design principles that seek to reveal experience as a single revelation of contradiction; that avoids the creation of opponents through placing a focus on individual teachers; and that strips the professional development material of the power of being presented as without contradiction. In such a conception of professional development we argue that teachers could avoid the inertia of difference and gain the vitality of movement through contradiction without the negative dualistic consequences of disappointment, confusion, and anger.

Disclosure statement

The authors report that there are no competing interests to declare.

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