Practitioners' Knowledge and Understanding of Schemas and Well-being in the Foundation Phase Curriculum

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ABSTRACT

Professional learning and development within early childhood education and care (ECEC) is being prioritised internationally. This priority is important particularly when practitioners in Wales are expected to implement ambitious curriculum changes. This paper examines the findings from two PhD studies, one that explored practitioners' knowledge and understanding of schemas and another that explored well-being. It found three commonalities: first, a limited understanding of schemas and well-being among some practitioners working with young children; second, a limited understanding of how to recognise and support schemas and promote well-being in classroom practice; and third, a lack of clarity in Welsh Government curriculum policy about schemas and well-being. This article discusses the implications of these commonalities for children and practice, curriculum implementation and research. Moreover, it suggests that if practitioners had a secure understanding of schemas and well-being this could help them rethink and transform their practice. This paper argues for the importance of collaborative professional development and critical reflection for practitioners, policy-makers and researchers in light of curriculum change.

Key words: schemas, well-being, Foundation Phase curriculum, Wales, professional learning and development.

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Introduction

The early years curriculum in Wales, called the Foundation Phase (FP), was introduced in 2008, and incorporated the Early Years Desirable Outcomes curriculum and Key Stage 1 of the national curriculum into one learning continuum for 3- to 7-year-olds (Lewis, 2016). It is described as:

> marking a radical departure from the more formal, competency-based approach associated with the previous Key Stage One National Curriculum, and designed to provide a developmental, experiential, play-based approach to teaching and learning. (Taylor et al., 2015: 1)

The FP consists of seven areas of learning and the policy states 'Personal and Social development, Well-being and Cultural diversity is at the heart of the FP and should be developed across the curriculum' (Welsh Assembly Government (hereafter WAG), 2008a: 14). Aasen and Waters (2006: 128) suggested that in order to implement the FP there was a requirement for 'a way of thinking, acting and being within the early years classroom that is substantially different from the requirements of previous statutory curricula'. Aasen and Waters (2006) further stated that the FP was a positive shift towards adopting a socio-cultural understanding of the child, which places more emphasis on social interaction, child-centred practice, children's rights and understanding children as meaning-makers, all of which closely relate to schemas and well-being.

However, between 2012 and 2018, two PhD studies revealed limited practitioner knowledge and understanding of schemas and well-being (Lewis, 2016; Thomas, 2018). Exploring the findings of these two studies is important for two reasons. The first reason relates to the fact that 'children's early learning and well-being have a direct and enduring impact on their later educational attainment, socio-economic status, health, well-being and civic engagement' (Organisation for Economic Co-operation and Development, 2020: 19). The second reason relates to the fact that Wales is embarking on a new curriculum, which is currently being piloted in schools and is expected to be implemented in 2022, and advocates keeping the ethos of the FP but with more autonomy for practitioners to be able to 'design their own curriculum' (Welsh Government (hereafter WG), 2020: 1). Therefore, there is an opportunity for practitioners to develop and deliver a curriculum that supports children's well-being underpinned with the knowledge of how schemas can facilitate this.

What are schemas and why are they important?

Piaget was the first theorist to identify and discuss schemas as a means of constructing knowledge (1953, 1959, 1970). He suggested that children organise their knowledge and understanding of the world into cognitive structures called schemas. Through repeated actions (schemas) on objects and materials within their environment, children construct their knowledge and understanding. If new experiences are fitted into the existing schema (assimilation) equilibrium is maintained, but if the experience is new or different then the child alters (adapts) their schema to accommodate this new experience. In this way, new thinking and knowledge is constructed and cognitive gains are made.

However, Piaget viewed the child as a lone meaning-maker, which does not fit in with the socio-cultural ethos of the FP and is not the view taken of the child in the new curriculum for Wales. Instead, the child is viewed as an active meaning-maker, constructing their knowledge and understanding with attuned adults who scaffold their development and learning (WG, 2015).

Athey (who was the first person to build upon Piaget's work on schemas) resolved this tension between Piaget's view of the lone child constructing their own knowledge and understanding, by recognising the importance of social interactions in supporting and developing schemas (1990, 2007). Athey positioned herself as a constructivist and in a constructivist pedagogy the practitioner considers what the child brings to the learning situation as well as what they want the children to learn (2007).

Piaget (1962) postulated that schemas function at four levels or stages, and Athey (1990, 2007) exemplified these stages in her research. In addition to Athey, Piaget's original work on schemas has been taken forward by a number of other researchers. These include Meade and Cubey (2008); Arnold and the Pen Green Team (2010); Nutbrown (2011a); and Atherton and Nutbrown (2016). These researchers have observed children using their schemas in their active explorations to construct their knowledge and understanding within early years curricula. As Atherton and Nutbrown (2013) assert, the real significance of schemas is for practice, with a knowledge of schemas allowing practitioners to understand *how* children learn. Therefore, as Wales moves towards a new curriculum it can be argued that practitioners and policy-makers need an awareness of schemas in order to be able to become true co-constructors with children along their learning continuum.

What is well-being and why is it important?

Child well-being is often understood as being complex and multi-dimensional in nature (Amerijckx and Humblet, 2014). Many different explanations of well-being exist, which are rooted in philosophy, psychology and economics, and broadly relate to feelings, functioning and factors that contribute to someone's well-being (Lewis, 2019). However, there is a paucity of research into understanding and operationalising well-being in the curriculum, despite a fast-growing interest in policy (Mashford-Scott, Church and Tayler, 2012; Amerijckx and Humblet, 2014; Raghavan and Alexandrova, 2015). Moreover, very limited research reports well-being from the perspective of the early years practitioner (Morrow and Mayall, 2009; Spratt, 2016).

Mashford-Scott, Church and Tayler (2012) suggest that practitioners working with young children in education adopt two different perspectives of well-being, namely the child's 'subjective experience view' and the more dominant perspective called 'developmental-oriented view'. The subjective experience view is understood as listening to a child's thoughts and views in multi-modal ways, valuing them as social actors and agents of change and giving them opportunities to make a contribution, whereas the developmental-oriented view is described as a 'child's achievement or demonstration of particular skills, abilities and behaviours' (Mashford-Scott, Church and Tayler, 2012: 236). The latter view is an indicator of well-being, relying on objective data and is perceived to be more dominant 'because it serves to quantify wellbeing; making it more measurable' (Mashford-Scott, Church and Tayler, 2012: 239).

Understanding well-being in early childhood contexts is important because, despite being under-researched, there has been a rise in interest within policy about child well-being (Bailey, 2009; Coleman, 2009) and there are broadly two reasons as to why well-being matters from a policy perspective. First, well-being is understood as a pre-requisite to an individual's ability to be an effective learner, improves concentration and engagement, and improves behaviour and school attendance (WAG, 2008a; WAG, 2008b; WAG, 2010). Secondly, well-being matters in policy because it is believed to be associated with an individual's quality of life as an adult and tends to focus more on the future, and factors that contribute towards greater success. This understanding is evident in the work of O'Donnell et al. (2014) when they claim that an adult's well-being (life satisfaction) is closely associated with the emotional health of a child. In

other words, well-being is considered a by-product/outcome. In relation to the FP, well-being is communicated by the WG as a by-product/outcome of meeting children's basic needs of feeling safe and secure, having food and shelter, and experiencing warmth and affection from others (WAG, 2008d). Both policy interpretations of well-being link to life chances and future success and are reflected in the four purposes of the new curriculum for Wales (WG, 2020). Arguably, a subjective view of well-being dovetails with the four purposes, which require schools to support learners in becoming ambitious, confident and capable, and ready to live a fulfilling life as well-rounded citizens of society (WG, 2020).

Methods

Both studies adopted a case-study design and were exploratory in nature. Even though there are advantages to using case studies they have been criticised for their lack of generalisability (Edwards, 2001). Punch (2009: 44) argues that 'the transfer of observed research to other situations may be a problem'. However, Bell (2010) contests that a case-study approach is useful for investigating an issue in more detail. Greig et al. (2013) highlight that case studies can be utilised to inform practice and provide invaluable information to professionals (Mukherji and Albon, 2018). Ethical approval was granted for both studies from the awarding universities and British Education Research Association (2011) guidelines were followed.

The schema study

The research into schemas took place in one FP setting with 3- to 5-year-olds and involved three members of staff who expressed an interest in working alongside the researcher in exploring schemas in the setting. Children were observed over two school terms and provision was adapted to support their schemas.

The study sought to answer the research question: what are FP stakeholders' knowledge and understanding of schemas? Therefore, questionnaires were sent out to ninety-eight potential participants and eighty-seven responses were returned. Participants were from a range of settings across south-east Wales and included FP advisory teachers, nursery managers, teachers and additional practitioners. The questionnaire contained a mixture of both open-ended and closed questions and addressed the research question indicated above.

Creswell and Plano Clark (2011) state that open questions allow the participants less restriction in responding, but can be time-consuming. Closed questions provide shorter answers so require less time to analyse but do not usually contain opinions. Therefore having a mixture of both question types allowed both in-depth and succinct answers.

The well-being study

This study was carried out in two FP settings in south Wales with teachers and teaching assistants. Methods included eight focus groups, twenty-one practitioner interviews, 342 hours of observations in two primary schools and documentation analysis. The study addressed the following research questions: what do practitioners know and understand about young children's well-being and how is well-being operationalised in practice? Thematic analysis was adopted and the six-phase recursive process helped the researcher move systematically between the data corpus (all data collected) to generate themes (Braun and Clarke, 2006). In addition, content analysis was applied to various policy documents.

Findings

Data analysis from both studies identified a gap in knowledge and understanding about schemas and well-being among FP practitioners and within policy. This gap consisted of the following three commonalities discussed below.

Commonality one: limited knowledge and understanding of schemas and well-being among practitioners working with young children

The questionnaires asked practitioners to define their understanding of schemas. From the eighty-seven questionnaire responses completed and returned, the majority of the practitioners stated that they did not know what schemas were. A few practitioners felt that they had some knowledge of schemas and a range of responses were given: 'Schemas link to brain development and children need to play in certain ways to make sense of the world.' Another stated 'a vital part of a child's development but frequently missed and not recorded'. Other practitioners said: 'It is about understanding how children learn and explore.' Some practitioners were

confused about how children show schemas in practice when they said 'I thought it was a thought process rather than a physical action' and 'Schemas are learning styles.'

From these responses it can be seen that even practitioners who felt that they had some knowledge of schemas had different ways of defining their understanding and how they can be evidenced.

This indicates that if stakeholders did not know about schemas then they would not feel confident in using them in their practice. The effect of this could be that supporting some children's ways of learning could be missed and knowledge development constrained. Athey (1990) argues that through schemas teachers learn about how children make sense of the world and get to understand the individual. If stakeholders were able to recognise and support children's schemas then they could understand what children were doing and why they were doing it (Nutbrown, 2011a). This supports a child-centred, holistic approach to pedagogy, which are principles underpinning the current FP (WAG, 2008c) and the new curriculum for Wales (Donaldson, 2015).

Arnold and the Pen Green Team (2010: 11) have made links in their research between supporting schemas and children's well-being. The research drew links between 'schemas explored and emotions experienced'. Here children seem used to their schemas to represent emotions that they were feeling. However, as Arnold and the Pen Green Team (2010) state, the findings were tentative, but for some children supporting and encouraging their schemas seemed to give them comfort and enabled them to make sense of different situations. Therefore, practitioners being knowledgeable about schemas could support children's well-being too.

Practitioners from the well-being study were also unsure of what well-being meant to them and had different ways of defining it. Some responded by saying 'what about praise, would that come under that?' A year one teaching assistant said: 'I would go with child's health. Do you think that's to do with well-being?' A reception teacher explained: 'it's really hard, really, really hard ... I think it is a bit open-ended and sort of, you're not quite sure what it means'.

Despite an uncertainty, when practitioners talk about well-being they mainly adopt a developmental-oriented view which means that they rely upon skills, achievements, developmental milestones, observable characteristics and cognitive ability, to name but a few, to make a judgement about a child's well-being. For example, one practitioner said 'they would be too scared to try things, won't attempt things, think they are not very

good at things, that sort of thing, not a lot of confidence'. Another practitioner said 'well-being is about general appearance to others. You can usually pick a lot of things up about the way they look.' Other practitioners said 'being knowledgeable', 'well-spoken' and 'follows and copes with routines'. These responses relate to observable characteristics as well as cognitive ability and achievements rather than a subjective view from the child. Arguably, not recognising a child's subjective view limits what a practitioner knows and understands about a young child. As previously mentioned, schemas provide opportunities for practitioners to understand an individual (Athey, 1990) and the same argument applies to understanding children's subjective well-being. This means that when adults listen carefully to young children's thoughts and views they can better understand them as individuals and help them reach their potential.

When practitioners talked about well-being they referred to three domains (types), such as physical well-being and social well-being but talked more frequently about the 'emotional/psychological' domain. However, Thorburn (2014: 212) warns that 'a bias towards emotional definitions of well-being could manifest itself in curriculum attempts to diagnose, train and regulate feelings, and to manage some pupils' behavioural excesses better'.

Commonality two: limited understanding of how to support schemas and promote well-being in classroom practice

Practitioners in the schema study were asked how they supported schemas in their practice. Many were unsure and responses included: 'Schemas weren't something I had ever considered but it is something we should consider in planning and when staff are observing children too.' Another said 'Don't think schemas are catered for as the FP is becoming more skills based, so less opportunity to practise their schema.' Whilst another stated 'No I don't as I don't see how it (schemas) fits in with the new curriculum documentation and testing.'

These responses have raised the need for professional development opportunities in supporting schemas for some practitioners. With appropriate professional development, these concerns over how schemas could be included alongside the FP and new curriculum requirements could be alleviated. Professional development would provide an understanding of how schemas may complement the current FP and be embedded as part of the new curriculum for Wales. Both the FP and the new curriculum for

Wales have an integrated approach to learning, which enables 'learners to build connections across their learning and combine different experiences, knowledge and skills' (WG, 2020: 1). So a knowledgeable practitioner could provide activities that support children's schema, develop their skills and drive their learning forward. This in turn can foster a sense of well-being for the child as they are in a learning environment that supports their unique ways of coming to know. In this context, well-being is considered a by-product/outcome of supporting children's schemas. Conversely, well-being can also be considered a pre-requisite for children using schemas to construct knowledge.

Similarly, practitioners from the well-being study were generally uncertain about how to support and promote well-being. One practitioner said, 'it's just a case of I don't know, I do anything in particular really, I just go on gut instinct which is probably the wrong thing to do but it seems to work for the children'. Another said, 'I don't feel we do it correctly and I don't think we approach it in a structured way. It's kind of getting where it all fits, it was never explained.' The way in which well-being has been presented in curriculum policy provides an explanation for these responses. For example, the Desirable Outcomes (a curriculum in place before the FP) presented well-being as a way of being with children, whereas the FP presents well-being as a skill in one of seven areas of learning, which requires assessing and a cross-curricular approach. Arguably, there has been a shift in how practitioners should approach well-being in practice. However, practitioners face yet another change in the new curriculum for Wales which presents 'Health and Well-being' as an area of learning and experience and presents literacy, numeracy and digital competence as cross-curricular skills (WG, 2020).

Practitioner uncertainty about promoting and supporting well-being is associated with the complex nature of well-being. Many practitioners communicated a broad-brush view to the following question: how do you promote and support children's well-being? They said that well-being is something that they do (enact) on a daily basis and is not something they teach discretely. For example, one practitioner said: 'it's an area that you do as a matter of your job, it's part of your job. It's innate to the teaching profession … that just goes right the way across the curriculum.' Another practitioner explained: 'it's everything you do, that's common sense isn't it … you've constantly got to be aware of children's well-being'. Their responses suggest that practitioners conceptualise well-being as an irreducible holistic totality construct (Ereaut and Whiting, 2008). This might also

explain their uncertainty in commonality one. Bailey (2009) suggests that placing well-being in the curriculum should be considered with caution: it is often misunderstood, taken-for-granted and thus problematic.

Commonality three: lack of clarity in Welsh Government curriculum guidance about schemas and well-being

Policy analysis reveals that schemas do not feature significantly in the policy document *Learning and Teaching Pedagogy* (WAG, 2008b). In this policy document, schemas are mentioned under the heading, 'The Child as a Learner'. Here it states that 'By repeating a learning experience they develop schema or patterns of thoughts that are strengthened until they are able to make connections' (WAG, 2008b: 9). Then under the heading 'Observation' it states, 'Observation may draw attention to particular schema or patterns of thinking that predominate a child's play' (WAG, 2008b: 22).

So whilst there are generic statements on what schemas are, there is no specific guidance on how to support schemas in classroom practice. This lack of guidance reflects the previous responses from practitioners on their lack of knowledge of schemas and the lack of professional learning that they had received. Nutbrown (2011a) maintains that there needs to be ongoing professional development for practitioners to ensure that all the ways in which children come to know are recognised and supported.

In terms of policy analysis for the well-being study, a similar finding emerged where a lack of clarity and guidance is offered to practitioners about how to go about implementing well-being. For example, policy direction for implementing well-being in the FP states: 'they [areas of learning] must complement each other and work together to provide a cross-curricular approach to form a practical relevant curriculum. They should not be approached in isolation' (WAG, 2008a: 14).

However, the direction is different in the *Learning and Teaching Pedagogy* non-statutory document (WAG, 2008b), which aims to support successful implementation of the FP. The non-statutory document suggests that practitioners can choose to integrate the areas or discretely deliver them. It states in relation to well-being: '[it] should be an integral part of planning across all Areas of Learning regardless of whether a practitioner's planning is holistic, discrete or involves a combination of approaches' (WAG, 2008b: 15).

In addition to different messages about the policy direction of implementing the FP, the well-being study found that particular well-being

domains (types) are privileged in various policy documents relating to young children and the curriculum. For example, content analysis revealed that 'emotional well-being', 'physical well-being' and 'health and well-being' appear slightly more frequently than others, whereas social well-being is omitted from various policy documents. This omission is noteworthy because the nature of social well-being incorporates a range of social skills, but specifically pro-social behaviour (Fauth and Thompson, 2009), which is an important aspect of positive development (Eisenberg, 2003). If social well-being is not explicitly communicated in policy documents like other well-being domains, this supports an argument put forward by Haworth and Hart (2007) that a widespread negative view towards young children may still exist, particularly within policy.

Whitbread (2012: 28) suggests that there are 'powerful links in the human mind between emotion and cognition'. Moreover, Craft, Cremin and Burnard (2008: 127) claim that 'positive emotional states are necessary for most transferable learning, playfulness, discovery and invention'. These may explain why emotional well-being appears more frequently in Welsh policy and strengthens the argument for practitioners to have a secure understanding of well-being and schemas.

Even though the two studies explored different concepts, this article reveals three commonalities between the two. This raises the following question – what are the implications of these commonalities for children and practice, curriculum implementation and research? The following discussion addresses this question.

Discussion

Implications for children and practice

For some children, schemas are *their* unique ways of coming to know and therefore when practitioners have a limited understanding of schemas this could lead to missed learning opportunities for those children. Previous studies into schemas have found that supporting children's schemas leads to better developmental and educational outcomes. Research carried out by Athey (1990, 2007), Meade and Cubey (2008) and Nutbrown (2011a) has shown how children used their schemas during play, to focus concentration, solve problems and gain information about the world around them.

Athey's research found that through the process of assimilation and accommodation, schemas begin to coordinate, leading to 'more powerful

schemas and understanding (Athey, 2007: 50). Meade and Cubey (2008) carried out two studies exploring children's schemas in New Zealand and reported that children attending settings promoting learning through schemas had more positive dispositions to learning, whilst Nutbrown (2011a) found that supporting children's schemas facilitated their literacy, numeracy and science development.

All of the above studies involved adults who recognised the importance of supporting children's schemas and were attuned to their ways of learning. In contrast, Atherton (2014) cautions that if an adult's knowledge and understanding of schemas is limited, they will not become attuned to children's needs and ways of learning. Olsen, Donaldson and Hudson (2010) assert that professional learning and development of practitioners can have a significant impact on children's cognitive and emotional development. However, they highlight how practitioners often face barriers in accessing professional learning, such as funding. Wales has an early years workforce plan, which sets out its proposals to develop a highly skilled workforce, but warns that it is operating within a challenging economic climate (WG, 2017). Nevertheless, this is a positive step in recognising that high quality staff is associated with long-term benefits and improved life chances for children (WG, 2017).

Holiday, Harrison and McLoed (2009) argue that children should be given boundless opportunities to share and express their thoughts, also known as their subjective well-being. Therefore, all practitioners working with children need to have an understanding of schemas and recognise that, for some children, schemas are the window into their thinking. As Atherton and Nutbrown (2013: 139) argue, 'the correlations, associations and relationships in children's thinking, revealed in their play, cannot be understood unless those observing have a conceptual awareness of what is seen'. This reinforces the importance of practitioners having a secure knowledge and understanding of schemas and using this as another lens to view children. This can inform the provision provided for children, because as Bruce (2011: 97) contends 'knowing [about] schema informs the adult's curriculum plans and helps the adult to plan with appropriate selection and flexibility'.

Without knowledge of schemas, children's actions can be dismissed as a series of unconnected events and the threads of thinking underpinning the actions missed (Nutbrown, 2011a). Instead, when viewed schematically there are emerging 'patterns of cognition' (Athey, 2007: 28). As Vygotsky (1978) postulated, good learning occurs in advance of development but

requires the sensitive intervention of the guiding adult. Therefore, practitioners in the current FP and the new curriculum for Wales should be aware of all the different ways children construct their knowledge and understanding, including for some children, their use of schemas.

In terms of the well-being study there was also a limited understanding of well-being by practitioners where they understood well-being as a by-product/outcome of other aspects and adopted a dominant developmental-oriented view (Mashford-Scott, Church and Tayler, 2012; Soutter, O'Steen and Gilmore, 2012). This particular view is associated with various skills, achievements, developmental milestones, observable characteristics and cognitive ability to name but a few. Alternatively, there is the subjective view that Hicks et al. (2011) regard very highly and claim that the views of children and young people are important. Children have a right to contribute what they think and feel rather than be viewed as passive recipients. Arguably, there are elements of subjective well-being, such as life satisfaction and personal feelings, that children might find difficult to understand (New Economics Foundation, 2009; Wigelsworth et al. 2010), and this could explain why practitioners did not refer to the child's subjective view when discussing well-being.

However, learning and knowing about young children's well-being from the perspective of the child could enlighten and inform adults about how to improve services and target initiatives that suit the needs of all children, as well as learning about their schema preference. Therefore, arguing from an early childhood rights perspective, there could be more effort from practitioners and policy-makers in recognising the subjective well-being of young children. Research findings consistently report that children's views are not taken seriously and are not encouraged to become actively involved in making decisions, particularly in education (Venninen et al., 2014). According to Ben-Arieh and Frones (2011: 470) children are generally perceived as passive objects and 'are acted on by the structures of the adult world'. Similarly, Haworth and Hart (2007) argue that society still adopts a deficit view of children and suggest that a more positive approach is needed that focuses on children's strengths, capabilities and talents. Pollard and Lee (2003: 59) claim that 'only by examining children's strengths and abilities will we discover the core elements of wellbeing that enable children to flourish and thrive'. If practitioners have a secure and in-depth understanding of well-being, which includes the subjective view, this would be beneficial for three reasons. First, it would provide a clearer picture of a child's well-being and second, it would contribute to meeting

the four purposes of the new curriculum for Wales. Third, it would help to promote children as subjects of their own experience. Similarly, a secure understanding of schemas leads to understanding children as subjects rather than passive objects. Arguably, schemas and well-being are closely related and complement one another.

Implications for curriculum implementation

There is limited knowledge and understanding of schemas and well-being by FP practitioners in some settings. Practitioners need consistent messages in policy with a particular focus on the clarification of well-being domains. Moreover, policy guidance on schemas should move away from generic statements to concrete examples of how to recognise and support schemas in practice. A lack of clarity in FP policy about schemas and well-being could be an indication that people who write and develop policy may not always have a 'secure' understanding of the nature of young children and their capabilities. This presents opportunities for policy-makers, researchers and practitioners to work more collaboratively.

Evidence from the three-year evaluation of the FP funded by the WG between 2011 and 2014 identified a range of concepts that practitioners were uncertain about (Taylor et al., 2015). Both PhDs discussed in this article show that schemas and well-being are other concepts that practitioners are uncertain about. Arguably, this raises concerns for all involved in the education of young children, particularly when countries such as Wales are embarking on curriculum change. Practitioners who are uncertain about a range of concepts cannot be expected to make sound decisions within their practice (Molla and Nolan, 2019).

Since 2015, Wales has been developing a new curriculum for 3- to 16-year-olds (WG, 2015) which has four purposes that underpin teaching and learning. However, if practitioners are uncertain about a range of concepts, as previously discussed, this raises a concern as to the extent to which they can develop children to be '(1) ambitious capable learners, (2) enterprising, creative contributors, (3) ethical informed citizens of Wales and the world and (4) healthy confident individuals' (WG, 2015: 5). Therefore, policy-makers need to acknowledge and address this concern and work more collaboratively with researchers and practitioners because many studies show that collaborative professional development is an effective way of implementing curriculum change (Colmer, Waniganayake and Field, 2015).

The new curriculum in Wales advocates more freedom and more autonomy for schools in delivering the new curriculum and presents an opportunity for practitioners to rethink their practice. Wales is promoting an evidence-based approach to professional learning which will be applied using a four-part model consisting of collaboration; reflective practice; use of data and research evidence and coaching and mentoring (WG, 2019). Whilst this is a positive move forward, McLeod (2015) argues that a shift is needed towards 'critical' reflective practice rather than reflective practice. Through critical reflection, practitioners are able to develop self-awareness and become open and ready to embrace curriculum change.

Callanan et al. (2017) identified a number of challenges to delivering professional learning and development, including the availability, financial pressures within settings and lack of time to undertake professional learning. WG are proposing a blended approach to professional learning and state that 'learning is most effective when teachers, leaders and schools work together across clusters and networks to identify and address their needs' (WG, 2019: 1). However, professional learning and development practices that are considered to be effective and supportive for professionals have received very little investigation (Lazzari, Picchio and Musatti, 2013). According to Nutbrown (2011b) practitioners should be given the opportunities to discuss practice and learn from each other. Collaborative activities could include 'work-based learning and support, visits to other settings, experiences which challenge thinking, attending conferences, and provision of mentoring from outstanding leaders and peers' (53). However, this raises challenges around cost, time and whether practitioners have equal access to professional learning. Even though professional learning and development is being prioritised internationally and is closely linked with quality provision, limited research exists that examines the views of early childhood professionals and their preferences for professional learning and development (Barber, Cohrssen and Church, 2014). Practitioner action research and mentoring and networking were valued the most by Australian practitioners in Hadley, Waniganayake and Shepherd's (2015) study.

Implications for research

Findings from the two PhDs indicate that future research could focus on understanding how supporting schemas can inform practitioners about young children's subjective well-being. The new curriculum in Wales

advocates to some extent a child's voice in the assessment process. Therefore, there is an opportunity for practitioners to engage in action research in order to listen, observe and come to know the different ways children construct knowledge and communicate their understanding and views.

Conclusion

To summarise, this article has discussed three commonalities from the key findings of two PhD studies that explored schemas and well-being. These commonalities highlight a limited understanding of schemas and well-being, which is evident in policy and some classroom practice. The paper further discusses the implications of these commonalities for children and practice, curriculum implementation and research.

As in the current FP for 3- to 7-year-olds, the new curriculum for 3- to 16-year-olds in Wales continues to advocate learners as active meaning-makers, constructing their knowledge in a supportive learning environment. Therefore, having a secure understanding of schemas and well-being will allow practitioners to facilitate children's knowledge construction and reflect upon how they perceive learners. This in turn provides opportunities for practitioners to rethink and transform their practice with young children. A country can develop a new curriculum but this does not change the way children learn (Nutbrown, 2011b); however, it can change how we understand how they learn and develop.

The findings from this article contribute to improving professional learning and development, particularly for those who work with young children. Practitioners should not be expected to implement ambitious change within a new curriculum in the short-term, particularly when evidence from two PhD studies supported by evidence from the three-year evaluation of the FP show that some practitioners are uncertain about many concepts relating to their practice. Ways forward would be to make effective use of research findings and adopt a collaborative approach to professional learning and development, particularly during curriculum change.

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