

# Edinburgh Research Explorer

### **Practitioner inquiry**

Citation for published version:

McNair, LJ, Bateson, S, Kustatscher, M & Ravenscroft, J 2023, 'Practitioner inquiry: Troubling certainty' European Early Childhood Education Research Journal. https://doi.org/10.1080/1350293X.2023.2247591

### **Digital Object Identifier (DOI):**

10.1080/1350293X.2023.2247591

### Link:

Link to publication record in Edinburgh Research Explorer

### **Document Version:**

Publisher's PDF, also known as Version of record

### Published In:

European Early Childhood Education Research Journal

### **General rights**

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy
The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.





## **European Early Childhood Education Research Journal**



ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/recr20

# Practitioner inquiry: troubling certainty

Lynn J. McNair, Simon Bateson, Marlies Kustatscher & John Ravenscroft

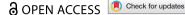
**To cite this article:** Lynn J. McNair, Simon Bateson, Marlies Kustatscher & John Ravenscroft (2023): Practitioner inquiry: troubling certainty, European Early Childhood Education Research Journal, DOI: <u>10.1080/1350293X.2023.2247591</u>

To link to this article: <a href="https://doi.org/10.1080/1350293X.2023.2247591">https://doi.org/10.1080/1350293X.2023.2247591</a>

9	© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group	
	Published online: 23 Aug 2023.	
	Submit your article to this journal 🗗	
<u>lılıl</u>	Article views: 77	
a`	View related articles 🗗	
CrossMark	View Crossmark data ☑	









## Practitioner inquiry: troubling certainty\*

Lynn J. McNair <sup>©</sup> <sup>a</sup>, Simon Bateson <sup>b</sup>, Marlies Kustatscher <sup>©</sup> <sup>a</sup> and John Ravenscroft <sup>©</sup> <sup>c</sup>

<sup>a</sup>Childhood and Youth Studies Research Group, Moray House School of Education and Sport, University of Edinburgh, Edinburgh, UK; <sup>b</sup>Froebelian Futures, Moray House School of Education and Sport, University of Edinburgh, Edinburgh, UK; <sup>c</sup>Moray House School of Education and Sport, University of Edinburgh, Edinburah, UK

### **ABSTRACT**

In this paper, we present an argument for Practitioner Inquiry (PI). We briefly introduce PI, and we indicate how PI recasts the professional and political role of the Early Years Practitioner (practitioner). At the core of this article is the work of the early childhood pioneer, Friedrich Froebel (1782–1852). Froebel provided principles to support the continued professional development of practitioners. We draw on data from our Froebelian Futures project, which could be described as a call to action, where practitioners are viewed as research active, and competing values exist. Several strong, committed practitioners gave their time, energy and intellectual resources to further enhance their knowledge of Froebel and develop their skills as researchers. This led us to ask questions about the role that ethics plays in PI research and the boundaries that exist between university ethics committees and more practitioner led research.

#### **KEYWORDS**

Friedrich froebel: early childhood; practitioner inquiry; evidence-based practice: collective research: shared insights

### Introduction

For decades the resurgence of a Froebelian community in Scotland has been seeking to resituate children as competent constructors of their own learning environments and experiences rather than passive recipients of prescribed curricula and adult imperatives (Baker et al. 2019; Moss 2022; Moss and Roberts-Holmes 2022). New training, accessed by practitioners across the country, has focussed on core Froebelian principles (Bruce 2021) including respect for children's autonomy, to respect childhood as a period in its own right; for the centrality of play and the rich symbolic (inner) life of the child in ecological relationship with self, other, society and the natural world (Tovey 2013).

Since 2020, Froebelian principles have been embedded in (conflicted) national guidelines for Early Childhood Education and Care (ECEC) (Education Scotland 2020). Yet Froebelian practitioners continue to operate within myriad policy-making systems

**CONTACT** Lynn J. McNair lynn.mcnair@ed.ac.uk Childhood and Youth Studies Research Group, Moray House School of Education and Sport, University of Edinburgh, Edinburgh, UK

<sup>\*</sup>This paper was presented at 30th EECERA Annual Conference, 'Cultures of play: Actors, Affordances and Arenas' Glasgow, Scotland 23rd-26th August 2022.

<sup>© 2023</sup> The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (http://creativecommons.org/licenses/by-nc-nd/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

which limit their propensity to transform practice (Robert-Holmes and Moss 2021; Wrigley 2017).

In 2021, supported by six Local Authorities, The University of Edinburgh and an Under 5s Froebelian practice hub partnered to develop new training in PI<sup>1</sup>. The programme's vision, the demonstrable mechanisms and outcomes of which this article and our own research will unpack and assess, was for:

a world where children's integrity, interdependence and creativity are recognised and cultivated as an indispensable life force in all human societies. Specifically, we want to see children – supported by skilful childhood practitioners – widely and confidently sharing their co-created knowledge, ideas and practices – to inspire and enhance social justice, in harmony with the natural world. (University of Edinburgh 2021, npn).

The emphasis here, and our own research into its efficacy, matters, because it signifies a critical extension of practice, advocating that children should routinely determine not just their own play but also (in partnership with adults) their whole learning environment. It positions children and practitioners not as the facilitators and recipients of minimalist rights-based consultative approaches, such as that offered by Article 12 of the United Nations Convention of the Rights of the Child (Alanen and Mayall 2001), but as principal co-architects of the educational and social fabric, to which external policies and curricula may or may not accord.

PI, as envisioned here, invites those who work with young children to create space, time, networks and tools for rolling cycles of inquiry into any (and every) aspect of their shared and unique community life. By teaching rigorous (and emergent) evidence-based approaches, the intention is to return authority (and eventually power) to those who live day-in, day-out alongside the children in their care; and ultimately to children themselves.

Our article centres on original research into practitioners' and Local Authorities' perceptions. In part one of this article, we situate this against the literature and history of PI within ECEC contexts, including that developed by Froebel himself. Part two gives a brief overview of *Froebelian Futures*: the broader programme of work within which this training has been developed and introduces our own research into the efficacy of Froebelian PI up to now – specifically our methodology. Part three considers some of the issues and tensions surrounding practitioner research methodologies themselves as well as the productive, unsettling role of ethics in this arena. Part four conveys our findings and analyses the strengths and limitations of what has thus far been achieved.

# Part one: practitioner inquiry – co-mingling the professional, the personal and the political in early learning and childcare

Practitioners are transformative intellectuals (Education Scotland 2020; Froebel 1886; Giroux and McLaren 1986; Woodrow and Newman 2015). Practitioners intimately know the children and families that occupy the ECEC spaces, and they have knowledge and understanding of what is required in order to enhance children's lived lives and lifeways (Bruce 2021; Elfer, Goldshmied, and Selleck 2011; Froebel 1886). PI offers

<sup>&</sup>lt;sup>1</sup>Practitioner inquiry training and leadership training.

practitioners the opportunity to capture the often 'untapped' lived experiences of children in ECEC settings (Cole 2008, 2). Furthermore, PI opens the possibility for practitioners to turn the 'everydayness' of children's experiences into insightful learning opportunities (Chaney 2002, 10). Central to the development of PI is that practitioners could have the power to enhance the social, political and intellectual life of the ECEC setting.

However, despite what proponents of different positions might argue, i.e. that practitioners have agency, in reality they work within a separate top-down policy-driven practice and tightly controlled accountable measures, where policies and procedures created by those outside ELC contexts govern what is happening within them (Castle 2012; Keirl 2022; Mockler and Casey 2015; Robert-Holmes and Moss 2021; Sacha 2000, 2017). This can result in the subordination of practitioners rather than self-direction and egalitarianism in professional development and practice (Johansson, Sandberg, and Vuorinen 2007). A critic of top-down educational policies and procedures, McLaren, acknowledges: 'Education is not neutral, but that does not mean it is merely a form of indoctrination' (McLaren and Kincheloe 2007, 2). We argue that PI offers a 'radical root' for legitimate research, it provides practitioners with the opportunity to become critical agents who push-back against constrictions, such as policies and mandated practices, and encourages active questioning of external governance (Johansson, Sandberg, and Vuorinen 2007).

In the space available here it is impossible to do justice to the complex definitions of PI, we have initially drawn inspiration from MacDonald and Weller (2017):

Several scholars define practitioner inquiry as the systematic study of one's own practice through collaborative discussions and individual reflections around specific data pieces collected throughout the planning, implementation, and analysis phases of the [early years practitioner] research study (Campbell 2013; Cochran-Smith and Lytle 1993, 2009; Dana and Yendol-Hoppey 2008, 2009) ... Knowledge of practice ... dominates practitioner inquiry and it is in this type of learning in which the practitioner generates knowledge about one's own practice; knowledge that can be used to improve not only one's practice but the practice of other [early years practitioners] both locally and in broader contexts (MacDonald and Weller 2017, 137).

The above focuses on the underlying commonality amongst PI authors (e.g. Solvason 2013; Woodrow and Newman 2015). Various authors connect PI to knowledge, practice and change (Marilyn and Lytleb 2004). As Leggett and Newman put forward (2019):

A strong [practitioner] action research movement evolved in the 1950s across the United States of America, with the ideas of [practitioners] as researchers more strongly emerging in the 1960s and 1970s in Britain ... Action research, originally emerging from the work of Kurt Lewin, involves research by educators, administrators and others about the effects of social actions in an effort to improve their own practice .... In 1975, seminal work by Stenhouse presented core ideas for 'extended professionalism'. This involved a commitment to systematic questioning of one's own [practice] as a basis for development, the commitment and the skills to study one's own [practice] ... (Stenhouse 1975; 144 in Leggett and Newman 2019).

Extending this debate Newman and Leggett (2019) argue that PI 'proves a powerful and useful way for [early years practitioners] to drive improvements to their own practice' through evidence-based PI (Newman and Leggett 2019, 120). In a related context, PI 'shifts inquiry from an individual to a collective endeavour, intentionally aimed at transformational personal, organisational and structural change' (Brydon-Miller and Macquire 2008, 79). According to Pascal and Bertram (2012) PI has proven to aid the critical consciousness of practitioners, encouraging them to move beyond the simple acquisition of knowledge and skills (see also Chaney 2002; Cole 2008; Horton and Kraftl 2006); and become agentic and empowered to create sustainable change in their practice (Saunders and Somekh 2009). From this PI can be understood to be a political action, '... in the sense of naming and unsettling relationships of power' (Brydon-Miller and Macquire 2008, 79). Our point here is, PI prompts practitioners to look deeply at practices, to think critically, to question taken-for-granted assumptions, and as a result, Practitioner Inquiry can disrupt and challenge taken-for-granted experiences (Fiorentini and Crecci 2015; Mockler and Casey 2015; McLaren and Kincheloe 2007). Consequently, PI can embolden practitioners to alter the notion of the 'compliant [early years] professional' to a confident professional who is a policy-making advocate (McNair and Powell 2021, 1179; see also Sacha 2000). Such vibrantly polar concepts indicate that PI is of critical importance to the transformation of the early years professional and practice.

There are various critiques of PI, especially in relation to concerns of epistemology, methodology, ethics and politics (Stevens, Brydon-Miller, and Raider-Roth 2016). Leggett and Newman contend: '... practitioner [inquiry] is not based on scientific evidence and that the personal nature of the work can have ethical implications when the practitioner is also the researcher' (Leggett and Newman 2019, 138). However, we reject this critique, believing in the rigorous, but also powerfully reflexive nature of how PI is carried out (Vescio, Ross, and Adams 2008; Woodrow and Newman 2015). PI has strong roots in reflexivity and encourages the practitioner to take a reflective/reflexive stance, to examine assumptions and interpretations (Newman, Woodrow, and Arthur 2016; Ravitch and Riggan 2017).

Froebelians throughout history have found their values positions contested, debated, advocated and defended (Froebel 1886). Froebelians have, therefore, learned to develop the skills to articulate their beliefs. Piqued by the contradictions between the compliant professional and the confident professional, McNair and Powell stress the Froebelian practitioner today co-mingles the personal, professional and political through a kind of bilingualism: 'the reform-minded, bi-lingual' Froebelian finds innovative ways to decode the obstacles and impediments in their path, contesting positions of creative compliance and overcoming inertia. With a certain measure of principled aplomb ....' (McNair and Powell 2021, 1179). It is in this spirit that we dedicate ourselves to the socio-political and epistemological beliefs of PI. At the same time, we are also dedicated to the principles of criticality (Gallacher and Gallagher 2008). Therefore, when carrying out PI, the practitioner, through a critical lens, becomes increasingly aware of the diversity of experiences and epistemologies within the ECEC setting. 'Criticality demands a kind of courage from Froebelian travellers ... embracing a ... critical perspective engenders a challenge and opportunity for creative progressive pedagogical approaches ... ' (McNair and Powell 2021, 1185).

Here we report some early findings from the Froebelian Futures project. The practitioners focused on the systematic development of one of Froebel's principles. The aim of the development was intended to be simultaneously intellectually rigorous and



accessible to other practitioners. Here, the practitioners share their perceptions of the benefits and challenges of PI in relation to their professional growth as well as transformational change.

### Part two: research background and methodology

We initiated PI training at The University of Edinburgh in 2021 as part of a wider programme, 'Froebelian Futures', funded until 2024 by The Froebel Trust. The project aims to embed Froebelian pedagogical debates and practices in Scotland's ECEC communities, translating a surface knowledge of Froebelian principles into routine, critically engaged practice. This programme builds on several years prior partnership work between the University and more than 10 Local Authorities in Scotland, who have jointly delivered an introductory, certificated training in 'Froebel and Childhood Practice'. More than 15,000 practitioners, regulators and policymakers have so far undergone this training and completion of it was a prerequisite for participating in the PI course. Froebelian Futures sets out to cement and extend this rapid and wide reach through a broader programme of training, public events, original research and partnered advocacy for stronger children's rights approaches in Scottish ECEC. However, PI training is the stated 'backbone' of the programme, deliberately signalling that 'practitioners are the beating heart of potentiality in early learning and childcare' (McNair 2023, npn).

Like the introductory certificate programme, the first PI training was developed in close collaboration with six Local Authorities. Due to the ongoing impact of Covid-19 the training was delivered exclusively online, over 10 fortnightly sessions. The specific structure and content of the programme were tailored to this group, extending discussion

**Table 1.** Froebelian practitioner inquiry training programme (part of the Froebelian Futures project at the University of Edinburgh).

Session	Topic	Content
1	Course introduction	Team building, introducing course outline and vision, positioning PI as an action- oriented endeavour aimed at improving children's lives and social justice
2	Children's perspectives	How children's perspectives are centred in Froebelian and other critical child- centred pedagogies. Considering underlying assumptions about children and children's 'voices' in policies and practices, including research.
3	Gifts and occupations 1	Refreshing participants' knowledge on core Froebelian principles: observation, the whole child and the concept of unity.
4	Gifts and occupations 2	Engaging with nature, finger plays, mother songs and movement games; play, imagination, creativity and the symbolic life of the child.
5	Choosing your research topic	Developing research questions and introducing the research proposal template.  Considering broader research paradigms (e.g. quantitative and qualitative research, action research)
6	Research methods and ethics	Introducing methods: Quantitative (baseline/structured observations) and qualitative (participant observation, interviews, focus groups, participatory and creative methods, qualitative questionnaires); considering ethical issues and reflexivity.
7	Impact and exchange	Challenging dominant models of impact and dissemination by considering short-, medium- and long-term engagement of research within values, practices, relationships, policies, communities.
8	Detailed project planning	Supporting participants to develop their detailed research proposals, including methods, sampling strategies, ethics and plans for engagement.
9	Strength-testing initial findings	Considering and supporting on practical challenges as participants are in the process of carrying out their PI projects.
10	Closing session	Reflection and looking ahead, ensuring participants feel supported in bringing their projects to completion meaningfully.

of the Froebelian principles outlined in the introductory certificate, then bringing these into dialogue with social research practices and methods from an academic but also a Froebelian standpoint. The latter part of the training asked participants to set a question for their own research and submit detailed research and ethics proposals (see Table 1). Their participation concluded with the submission of their final, written research projects, optionally published online, two months after the conclusion of the training.

Alongside this, our own research set out to examine the impact the training had on practitioners everyday beliefs and practices – and more particularly their experience of conducting research in their own settings. We used two primary methods of data collection, approved by the Ethics Committee at Moray House, University of Edinburgh.

Firstly, we invited all practitioners to complete an individual Learning Journal to benchmark and track their (not necessarily linear) development and gave them the option to submit these to the research team. 34 practitioners undertook to do so, using structured questions, which they were asked to revisit and update at the end of the programme to enable comparison. Example questions included:

- 'How would I describe my role, in a nutshell?'
- 'When and how is my practice most child-centred?'
- 'How do children participate in shaping the environment, structures, rhythms and policies of my setting or my own day-to-day role?'

Secondly, we invited all practitioners *and* Local Authority managers to complete three online questionnaires: midway through the programme, after the final session and finally after the submission of their own research. In total, 51 questionnaires were completed, providing a broad range of responses to questions like:

- Has the programme supported dialogue between you and your colleagues?
- Has the programme changed your relationships with/views of children and/or families?
- What do you see as the main current barriers to Froebelian pedagogy within your setting either internally to your setting or externally?

Responses to these surveys were anonymous but will have reflected the overall demographic skew of trainees towards white women of primarily lower-middle class backgrounds, aged 25 to 55. Our analyses of the responses took a thematic and narrative approach, looking both at how meaning appeared to be structured by respondents as well as what they directly reported (Braun and Clarke 2006; Rubin and Rubin 1995).

# Part three: considerations and tensions within and around our framing Framing practitioner inquiry for participants

Our approach to the research element of the training programme was informed by principles and practices from practitioner research (Cochran-Smith and Lytle 2015) and particularly practitioner *action* research (MacNaughton and Hughes 2009; Somekh and Noffke 2009). Thus, we conceptualised PI as systematic inquiry carried out by practitioners about their own practice, which involves aspects of self-study and reflexivity

as well as co-production of research data and informs localised knowledges and practice. Rather than a purely 'academic' exercise, we presented PI as aimed at challenging the current arrangements and outcomes of educational contexts (Cochran-Smith and Lytle 2015). To this end, we built opportunities into the programme to bring together practitioner researchers from across Scotland into a broader social and intellectual movement of challenging the national status quo of early childhood policies and practices from a Froebelian perspective. In addition, we drew on research ontologies and epistemologies which centre children's own involvement in research and knowledge production (Farrell, Kagan, and Tisdall 2015 Tisdall, Davis, and Gallagher 2008).

While there is an established literature on PI carried out by teachers, less has been written on PI carried out by Early Years Practitioners (Woodrow and Newman 2015; Hammersley 1993). In Scotland (as in many places globally), the early childhood workforce is characterised by being mainly female, low paid and – apart from service managers and lead practitioners – not being educated to degree level. This relatively marginalised status of the profession does not chime with the significant attention given to early childhood education and care in contemporary global social and educational policy and corresponding investments into 'early intervention' or, in the Scottish context, dominant discourses around closing the poverty-related 'attainment gap' (Scottish Government 2022). Froebelian approaches challenge such neoliberal discourses (McNair and Powell 2021) which tend to govern early childhood provision through highly reductionist and regulatory practices, for example with regards to assessing and documenting children's learning (McNair et al. 2021; Moss 2007).

To help counteract such discourses, we positioned our programme cohort as activist practitioner researchers and emphasised their significant strengths based on extensive experience of working in the sector and intimate knowledge of the children, families and communities they work with (Newman and Leggett 2019). Training sessions were designed to be interactive and building on the practitioners' own skills and questions, and we decided against formal assessments in favour of feed-forward, supportive as well as peer-led feedback mechanisms. Thus, we aimed to subvert ideas around 'expertise' (both research and practice related) by recognising practitioners' knowledges, skills, and critical insights on early childhood education and care in Scotland, to eventually reempower them to shape practice through leadership and professional autonomy (see Skattebol and Arthur 2014).

# On methodologies and methods: what does Froebelian practitioner inquiry look like?

The training participants were encouraged to select a focus for their PI projects based on issues they had identified in their settings, such as an aspect of practice needing improvement or change, or something they were curious or wanted to learn more about. Most practitioners seemed to have no problem identifying such aspects in their practice. Research topics chosen included, for example, the use of block play as symbolic representation (Hemphill 2022), the benefits of introducing community gardening in a setting (Petrie 2022) or developing a sense of unity and connectedness in the face of the COVID-19 pandemic (Spence 2022) (for more details on projects see Froebelian Futures 2022).

Despite a growing literature on Froebelian pedagogical approaches in ECEC, this has to date not translated into any systematic exploration on what the implications for

carrying out Froebelian-informed research are. There are certainly parallels between Froebelian philosophy and pedagogical principles, on the one hand, and research ontologies and epistemologies which challenge accepted premises of knowledge production and operationalisation, on the other hand - such as child-centred, feminist or new materialist research approaches (e.g. Diaz-Diaz and Semenec 2020; Brehony 2001; Reinharz 1992 Tisdall, Davis, and Gallagher 2008). Both are united by placing children at the centre - of knowledge production, thought and action - and by democratic ideals of rejecting simplistic and power-infused 'expert notions.' Both stress the importance of embedded, situated and 'lived' experiences for a nuanced and holistic understanding of children's circumstances, and place importance on relational aspects of meaningmaking. And both Froebelian pedagogy as well as emancipatory research approaches stress the goal of achieving social change whilst adhering to an ethic of care, respect and reflexivity (Berger 2013).

In addition to these epistemological and ethical principles, in practice, there is also some overlap between the actual 'tools' of Froebelian pedagogy and those of emancipatory and child-centred research. For example, observation is a key method of both: Froebel is often cited as one of the first educators to argue for the importance of observations in order to facilitate the practitioner's understanding of the individuality of each child and enabling sensitive interactions and meaningful learning (Flewitt and Cowan 2019). Within childhood studies, ethnographic and observational methods have long been hailed as particularly well-suited for the study of childhoods (Prout and James 1997). By drawing on practitioners' extensive experience of carrying out practice observations and bringing it into dialogue with observational research methods, our training programme sought to extend the rigorous, systematic and reflexive nature of how data was constructed - for example, by focusing practitioners' attention on the various roles of an observer or the implications of different note-taking practices.

Other methodologies employed by the practitioner researchers involved participatory methods and creative methodologies, particularly involving children. While not practiced by Froebel himself, these align well with Froebelian principles of making children's views heard through opening different forms and channels of communication, listening and participation (Clark 2017). Other practitioners chose to carefully implement a small change in their setting, based on conversations with children and colleagues, and to evaluate that change and its opportunities and challenges (Kincheloe, McLaren, and Steinberg 2011; MacNaughton and Hughes 2009; Giroux 1990) through social research methods such as interviews, focus groups and (mainly qualitative) questionnaires.

We found that most practitioners tended towards using observational research methods, building on their extensive experience of observations as a contextualised and sensitive tool to reflect on and improve practice. Combining these with more systematic research practices - such as setting research aims and questions, considering sampling strategies and pathways to impact - helped to improve the rigour of their inquiry projects and practitioners highlighted the impact it had on their practice and reflexivity:

### Ethics in practice

There are several issues in which PI may differ from university-based research, such as scope and funding, authorship and dissemination practices, and broader linkages into

academic discourses and bodies of literature. Another aspect of potential difference is around ethics – both in terms of ethical practices as well as institutional review. Research ethics are an important element of research quality and rigour and thus key to consider in any PI projects that want to be taken seriously in the wider landscape of evaluating and improving early childhood education and care (Groundwater-Smith and Mockler 2007).

The complexities of research ethics – with children and within educational settings – have been widely discussed in the relevant literature (Kustatscher 2014). Ethical concerns span questions around informed consent, anonymity and confidentiality, data management, safeguarding mechanisms, research benefit and protection from harm. There are overlaps with ethical issues in ECEC, from data protection legislation to child protection procedures. On other issues, such as how informed consent is handled with children and parents/guardians, there may be differing practices. For example, some settings may have 'blanket' consents in place for involving children in evaluation practices, whilst university research ethics would require tailored informed consent for every research project. This is linked to a further distinction between practitioner research, which could be seen as an ongoing stance of inquiry and change (Cochran-Smith and Lytle 2007, 2004) as opposed to the generally time- and scope-bounded nature of university-based research projects. Additionally, in university-based research the groups of researchers and participants tend to be separate and clearly delineated, whereas PI lends itself to blurring these boundaries through self-study and fluid collaboration with the stakeholders of a setting. There are also no definite practices when it comes to dealing with institutional review for PI. In our case, the University's ethics review board approved the wider PI training and evaluation programme, but review of individual PI projects was delegated to the local authorities within which they took place, with additional input from the research team to monitor this process. This further highlights the blurred boundaries between procedural research ethics and ethics in practice (Guillemin and Gillam 2004).

Thus, while some research and ethics practices may differ between PI and university-based research, these differences point to broader debates around the purpose and processes of research: who carries out research, who it is for, and what should its ultimate outcomes be? PI presents a challenge to some of the accepted premises in university-based research, but one that should be welcomed and debated and eventually can lead to advancing thinking in both spheres.

### Part four: discussion

Our project set out to build capacity in Froebelian knowledge and research abilities of practitioners; and subsequently, transform ECEC. As a starting point, Froebel believed in the uniqueness of both children and adults, thus the participants in this study were considered as having: 'unique, individual features, [and] personal integrity' (Mills 2003, 21). One hundred and four practitioners from six Scottish local authorities were involved in this research over an eight-month period. Reflections and ruminations of the data have led to two themes: Froebelian knowledge deepened throughout the process; and a realisation that through PI practitioners can become more educated and politically astute. That is, by carrying out PI, practitioners discovered they could frame future agendas for ECEC settings in order to enhance the experiences for young children. Initial analysis of the data revealed that some practitioners extended their

previous knowledge of Froebelian principles. '... the dialogue throughout the trainings has re-enforced certain Froebelian thoughts and it has been interesting to see how others use the principles in both their practice and their research' (practitioner, March 2022). The PI course was set up to enable the political and professional conditions to facilitate development. As highlighted, analyses of the participants responses provided insight into the value of discussing Froebelian principles in community knowledge spaces. The participants openly shared their understandings of Froebel, the limitations alongside their successes. The interactive nature allowed for an ever-deepening understanding of knowledge building and advancement. According to Brydon-Miller and Macquire (2008, 79) PI 'shifts inquiry from an individual to a collective endeavour, intentionally aimed at transformational personal, organisational and structural change'. This 'collective endeavour' was noted by some of the practitioners who acknowledged the enhanced collegiality than can emerge from undertaking PI in the ECEC setting: ' ... the strength there is in collegiate working i.e. the connection and unity of working closely with a colleague, and the sharing of other professionals on the same path' (practitioner, March 2022). These practitioners reclaim the agenda of what counts and considers PI as a socially useful production of knowledge and exchange, as the practitioners learned from the experiences and collective wisdom of each other. Through facilitated research, the practitioners shared how PI fostered understanding, improved practice and supported learning of the epistemological basis of their practice (Sacha 2000):

The purpose of practitioner inquiry is to look at an area of practice that can be developed for the benefit of the practitioner, setting, work colleagues and those who use it - children and families. The value of this is to develop practice, enhance your knowledge and share this with colleagues, children, families and others. It deepens your understanding of your practice and ways to enhance experiences and opportunities (EYP, August 2022).

Shared inquiry offers practitioners the opportunity to break from conventional wisdom about the nature of practice, and enables then to see anew (Sacha 2000; Laloux 2014). According to Soltis (1994, 255) 'Changing the culture and structure of the [early learning childcare setting] may look like a very difficult task, but it is not totally impossible'.

For Froebel the continued professional development of practitioners was essential (Bruce 2021). According to McNair and Powell (2021), '... his radical ideas and principled approach have inspired generations of educators to hold true to creative pedagogies ... teacher activism and mobilising the profession' (McNair and Powell 2021, 1175). Many participants reflexively referred to a 'continual internal dialogue and self-evaluation' of the PI process; referring to their positionality, and the ways in which they constantly deliberated and considered their practitioner role and ECEC practice.

... this course has really made me take a closer look at my own practice and reflect on some aspects of my practice. It has also opened discussions in my establishment about the "child's voice" how we value, listen and respond to it and about seeing things from the child's perspective (practitioner, March 2022).

The practitioners were invited to consider the value of PI. An analysis of the responses revealed that carrying out PI was experienced as a 'powerful and useful way for [practitioners] to drive improvements to their own practice' through evidence-based inquiry' (Newman and Leggett 2019, 120). Additionally, the practitioners acknowledged



the continuous aspect of research and researcher engagement, e.g. that it 'should be ongoing, rather than a single discrete event' (Oulton et al. 2016, 590; see also Ormerod and Ivanic 2000):

The purpose in my opinion is for practitioners to look inwards, outwards and forwards in terms of providing quality experiences and opportunities for the children. It is invaluable as researching, reflecting etc opens up ideas and provides evidence to be able to continually improve your provision (practitioner. August 2022).

Dewis and Kay (2019, 197) remind us that when carrying out research there is 'no single or ideal way'. One of the discoveries for many of the (very busy) practitioners was that their project did not need to big, or time consuming, PI can enable practitioners to focus on a small project, which can reap results (Marshall and Rosman 2016). Through PI the practitioners began to question the aspects of practice that can become overlooked; and to celebrate the everydayness, as Horton and Kraftl (2006, 71): 'the everyday is at first glance everything. It is that which occupies our minds, that we care about, that which matters, that which is done and that which happens every day'. This 'everdayness' was important, as the practitioners were at the beginning of their research journey, the project needed to be small and manageable, yet meaningful. 'To take a deep look at practice and make a small change that will make a difference to the staff, parents and/children' (practitioner, August 2022). As we have indicated throughout PI has many benefits, but we do appreciate that carrying out PI requires practitioners to question and challenge. Sachs argues for a reorientation of policy from managerial to a democratic and radical reconceptualisation of EYP programmes, as did Froebel (McNair and Powell 2021) Sachs suggests: 'The future challenge is to create the political and professional conditions where new cultures can emerge and be sustained in [ELC settings], education bureaucracies and faculties of education in which [practitioner] research is rewarded and respected' (Sacha 2000, 93). We leave you with the words of one practitioner, who looks to the future: The value of [practitioner inquiry] will hopefully be seen in the next few years as changes happen; and better practice is seen in many establishments' (practitioner, August 2022).

### Part five: conclusion

The data showed that PI can drive change in ECEC. The hope is that this may, with the right support, become a virtuous circle: of self-reflexive practice and, importantly, selfbelief among a marginalised workforce; of transformational learning and relationshipbuilding within each community; of children's rights and freedoms rendered large through and alongside self-directed learning. The main implication of the study is the impact that co-created knowledge has on ECEC. This was seen through the passion and commitment of the practitioners, who gave their time, energy and intellectuality to this project. PI encourages practitioners to critically question assumptions, about the 'everydayness' (Chaney 2002), and the 'unremarkable' experiences of ECEC (Horton and Kraftl 2006). This being the case, PI becomes an important aspect for policy makers. The outcomes of this project enables us to reflect on the influence of Froebel and using his theoretical framework as a lens to guide PI in ECEC, consequently influencing the wider political landscape of ECEC.



### **Acknowledgements**

We wish to acknowledge the early learning and childcare practitioners, the children and the families who participated in the Froebelian Futures project.

### Disclosure statement

No potential conflict of interest was reported by the author(s).

### **Funding**

This research was funded by the Froebel Trust. For further information on the Froebelian Futures project, including team members, activities and outputs, please visit https://www.froebel.ed.ac.uk.

### **ORCID**

Lynn J. McNair http://orcid.org/0000-0002-5730-0704 Marlies Kustatscher http://orcid.org/0000-0002-6469-8175 John Ravenscroft http://orcid.org/0000-0003-3386-4211

### References

Alanen, L., and B. Mayall, eds. 2001. Conceptualising Child-Adult Relations. 1st ed. London: Routledge. https://doi.org/10.4324/9780203467220

Baker, M., S. Brown, T. Bruce, C. Gill, C. McCormick, L. McNair and J. Whinnett. 2019. "Communities of Froebelian Practice: Strawberry Runners and the Edinburgh Froebel Network." In The Routledge International Handbook of Froebel and Early Childhood Practice. 1st ed. [Online], 231-244. London: Routledge.

Berger, R. 2013. "Now I See It, Now I Don't: Researcher's Position and Reflexivity in Qualitative Research." Qualitative Research 15 (2): 219-234. https://doi.org/10.1177/1468794112468475

Braun, V., and V. Clarke. 2006. "Using Thematic Analysis in Psychology." Qualitative Research in Psychology 3 (2): 77–101. https://doi.org/10.1191/1478088706qp063oa

Brehony, K. 2001. Frederick the Great: The Origins of Nursery Education: The Froebelian Experiment. London: Routledge.

Bruce, T. 2021. Friedrich Froebel: A Critical Introduction to Key Themes and Debates. London: Bloomsbury.

Brydon-Miller, M., and P. Macquire. 2008. "Participatory Action Research: Contributions to the Development of Practitioner Inquiry in Education." Educational Action Research: Connecting Research and Practice for Professionals and Communities 17 (1): 79-93.

Campbell, K. 2013. "A Call to Action: Why We Need More Practitioner Research." Democracy Education 21 (2): 1–8.

Castle, K. 2012. "Professional Development Through Early Childhood Teacher Research." Voices of Practitioners 7 (2): 1-8.

Chaney, D. 2002. "Cosmopolitan Art and Cultural Citizenship." Theory, Culture & Society 19 (1-2): 157–174. https://doi.org/10.1177/026327640201900108

Clark, A. 2017. Listening to Young Children, Expanded Third Edition: A Guide to Understanding and Using the Mosaic Approach. London: Jessica Kingsley.

Cochran-Smith, M., and S. L. Lytle. 1993, eds. Inside/Outside: Teacher Research and Knowledge. New York & London: Teachers College Press.

Cochran-Smith, M., and S. L. Lytle. 2004. "Practitioner Inquiry, Knowledge and University Culture." In International Handbook of Self-Study of Teaching and Teacher Education



- Practices, 12, edited by J. J. Loughran, M. L. Hamilton, V. K. LaBoskey, and T. Russell, 601-649. Dordrecht: Springer International Handbooks of Education.
- Cochran-Smith, M., and S. L. Lytle. 2007. "Everything's Ethics: Practitioner Inquiry and University Culture." In An Ethical Approach to Practitioner Research, edited by A. Campbell, and S. Groundwater-Smith, 40-57, London: Routledge.
- Cochran-Smith, M., and S. L. Lytle. 2009. Inquiry as a Stance: Practitioner Research for the Next Generation. New York, NY: Teachers College Press.
- Cochran-Smith, M., and S. L. Lytle. 2015. Inquiry as Stance: Practitioner Research for the Next Generation. New York and London: Teachers College Press.
- Cole, L. 2008. "Children's Lived Experiences with Reading: A Phenomenological Study." PhD doctoral thesis.
- Dana, N. F., and D. Yendol-Hoppey. 2008. The Reflective Educator's Guide to Classroom Research: Learning to Teach and Teaching to Learn Through Practitioner Inquiry. 1st ed. Thousand Oaks, CA: Corwin Press.
- Dana, N. F., and D. Yendol-Hoppey. 2009. The Reflective Educator's Guide to Classroom Research: Learning to Teach Through Practitioner Inquiry. 2nd ed. Thousand Oaks, CA: Corwin Press.
- Dewis, P., and J. Kay. 2019. Data Analysis. In. C. Carter. Successful Dissertations: The Complete Guide for Education, Childhood and Early Childhood Studies Students. London: Bloomsbury.
- Diaz-Diaz, C., and P. Semenec. 2020. Posthumanist and New Materialist Methodologies: Research After the Child. Singapore: Springer Nature.
- Education Scotland. 2020. Realising the Ambition: Being Me. Accessed 26 December 2022. https:// www.google.com/search?q = realising+the+ambition+being+me&oq = realising+the&aqs = chrome.0.35i39j69i57j35i39j0i512l7.4637j1j7&sourceid = chrome&ie = UTF-8.
- Elfer, P., E. Goldshmied, and D. Selleck. 2011. Key Persons in the Early Years: Building Relationships for Quality Provision in Early Years Settings and Primary Schools. 2nd ed. London: Routledge.
- Farrell, A., S. L. Kagan, and E. K. M. Tisdall, eds. 2015. The SAGE Handbook of Early Childhood Research. London: Sage.
- Fiorentini, D., and V. M. Crecci. 2015. "Dialogues with Marilyn Cochran-Smith." The Clearing House. A Journal of Educational Strategies, Issues and Ideas 88 (1): 9-14. https://doi.org/10. 1080/00098655.2014.977841
- Flewitt, R., and K. Cowan. 2019. Valuing Young Children's Signs of Learning: Observation and Digital Documentation of Play in Early Years Classrooms. London: The Froebel Trust.
- Froebel, F. 1886. Autobiography of Friedrich Froebel, transl by Michaelis and Moore. London: Swan Sonnenschein.
- Froebelian Futures. 2022. The Inspiration Directory. Accessed 12 July 2022. https://www.froebel. ed.ac.uk/resources/the-inspiration-directory/.
- Gallacher, L. A., and M. Gallagher. 2008. "Methodological Immaturity in Childhood Research? Thinking Through 'Participatory Methods." Childhood (Copenhagen, Denmark) 15 (4): 499-515. https://doi.org/10.1177/0907568208091672
- Giroux, H. 1990. "Reading Texts, Literacy and Textual Authority." The Journal of Education 172 (1): 84–103. https://doi.org/10.1177/002205749017200113
- Giroux, H., and P. McLaren. 1986. "Teacher Education and the Politics of Engagement: The Case for Democratic Schooling." Harvard Educational Review 56 (3): 213-239. https://doi.org/10. 17763/haer.56.3.trr1473235232320
- Groundwater-Smith, S., and N. Mockler. 2007. "Ethics in Practitioner Research: An Issue of Quality." Research Papers in Education 22 (2): 199-211. https://doi.org/10.1080/ 02671520701296171
- Guillemin, M., and L. Gillam. 2004. "Ethics, Reflexivity, and "Ethically Important Moments" in Research." Qualitative Inquiry 10 (2): 261–280. https://doi.org/10.1177/1077800403262360.
- Hammersley, M. 1993. "On the Teacher as Researcher." Educational Action Research 1 (3): 425-445. https://doi.org/10.1080/0965079930010308



- Hemphill, P. 2022. The Use of Block Play as Symbolic Representation. Froebelian Futures Practitioner Inquiry Project, Accessed 12 July 2022. https://www.froebel.ed.ac.uk/project/theuse-of-block-play-as-symbolic-representation/.
- Horton, J., and P. Kraftl. 2006. "Not Just Growing up, but Going on: Materials, Spacings, Bodies, Situations." Children's Geographies 4 (3): 259-276. https://doi.org/10.1080/14733280601005518
- Johansson, I., A. Sandberg, and T. Vuorinen. 2007. "Practitioner-Oriented Research as a Tool for Professional Development." European Early Childhood Education Research Journal 15 (2): 151-166. https://doi.org/10.1080/13502930701321782.
- Keirl, S. 2022. The Politics of Technology Curriculum. Accessed 2 January 2023. https:// dandtfordandt.files.wordpress.com/2016/09/the-politics-of-technology-curriculum.pdf.
- Kincheloe, J., P. McLaren, and S. R. Steinberg. 2011. "Critical Pedagogy and Qualitative Research: Moving to the Bricolage." In The Sage Handbook of Qualitative Research, edited by N. K. Denzin, and Y. S. Lincoln, 163–178. London: Sage.
- Kustatscher, M. 2014. "Informed Consent in School-Based Ethnography Using Visual Magnets to Explore Participation, Power and Research Relationships." International Journal of Child, Youth and Family Studies 5 (4.1): 686-701. https://doi.org/10.18357/ijcyfs.kustatscherm. 5412014
- Laloux, F. 2014. Reinventing Organizations: A Guide to Creating Organizations Inspired by the Next Stage in Human Consciousness. Paris: Diateino.
- Leggett, N., and L. Newman. 2019. "Owning it: Educators' Engagement in Researching Their Own Practice." European Early Childhood Research Journal 27 (1): 138-150. https://doi.org/10.1080/ 1350293X.2018.1556539
- MacDonald, M., and K. Weller. 2017. "Redefining our Roles as Teachers, Learners, and Leaders Through Continuous Cycles of Practitioner Inquiry." The New Educator 13 (2): 137-147. https://doi.org/10.1080/1547688X.2016.1144121
- MacNaughton, G., and P. Hughes. 2009. Doing Action Research In Early Childhood Studies: A Step-By-Step Guide: A Step-by-Step Guide. Maidenhead: Open University Press.
- Marilyn, C., and S. L. Lytleb. 2004. "Practitioner Inquiry, Knowledge and University Culture." *Practitioner Inquiry*. https://doi.org/10.1007/978-1-4020-6545-3\_16
- Marshall, C., and G. B. Rosman. 2016. Designing Qualitative Research. 6th ed. London / Thousand Oaks: Sage.
- McLaren, P., and J. L. Kincheloe, eds. 2007. Critical Pedagogy: Where Are We Now? New York: Library of Congress Cataloguing-in-Publication Data.
- McNair, L. J. 2023. "Practitioner Inquiry: Gifts for Our Future. Edinburgh Froebel Network Conference 2023." John McIntyre Conference. Edinburgh: University of Edinburgh.
- McNair, L. J., C. Blaisdell, J. M. Davis, and L. J. Addison. 2021. "Acts of Pedagogical Resistance: Marking out an Ethical Boundary Against Human Technologies." Policy Futures in Education 19 (4): 478–492. https://doi.org/10.1177/1478210320976978
- McNair, L., and S. Powell. 2021. "Friedrich Froebel: A Path Least Trodden." Early Child Development and Care 191 (7-8): 1175-1185. https://doi.org/10.1080/03004430.2020.1803299.
- Mills, R. 2003. "Perspectives of Childhood." In Childhood Studies: A Reader in Perspectives of Childhood, edited by J. Mills, and R. Mills, 7–38. London: Routledge.
- Mockler, N., and A. Casey. 2015. "(In)Sights from 40 Years of Practitioner Action Research in Education: Perspectives from the US, UK and Australia." In Practitioner Research in Early Childhood. International Issues and Perspectives, edited by L. Newman, and C. Woodrow, 122-135. London: Sage.
- Moss, P. 2007. "Meetings Across the Paradigmatic Divide." Educational Philosophy and Theory 39 (3): 229–245. https://doi.org/10.1111/j.1469-5812.2007.00325.x
- Moss, P. 2022. The Image of the Child [Webinar]. [Online]. Froebelian Futures/University of Edinburgh. Accessed 7 November 2022. https://www.froebel.ed.ac.uk/audio-video/our-imageof-the-child-with-peter-moss/.
- Moss, P., and G. Roberts-Holmes. 2022. "Now is the Time! Confronting Neo-Liberalism in Early Childhood." Contemporary Issues in Early Childhood 23 (1): 96-99. https://doi.org/10.1177/ 1463949121995917.



- Newman, L., and N. Leggett. 2019. "Practitioner Research: with Intent." European Early Childhood Education Research Journal 27 (1): 120-137. https://doi.org/10.1080/1350293X.2018.1556538.
- Newman, L., C. Woodrow, and L. Arthur. 2016. "Valuing and Celebrating Practitioner Research." In Practitioner Research in Early Childhood International Issues and Perspectives, 1-6. London: Sage.
- Ormerod, F., and R. Ivanic. 2000. "Texts in Practices: Interpreting the Physical Characteristics of Texts." In Situated Literacies: Reading and Writing in Context, edited by D. Barton, M. Hamilton, and R. Ivanic, 91-107. London: Routledge.
- Oulton, K., F. Gibson, D. Sell, A. Williams, L. Pratt, and J. Wray. 2016. "Assent for Children's Participation in Research: Why it Matters and Making it Meaningful." Child: Care, Health and Development 42 (4): 588-597. https://doi.org/10.1111/cch.12344
- Pascal, C., and T. Bertram. 2012. "Praxis, Ethics and Power: Developing Praxeology as a Participatory Paradigm for Early Childhood Research." European Early Childhood Education Research Journal 20 (4): 477-492. https://doi.org/10.1080/1350293X.2012.737236.
- Petrie, K. 2022. The Benefits of Introducing Community Gardening to Our Setting. Froebelian Futures Practitioner Inquiry Project. Accessed 12 July 2022. https://www.froebel.ed.ac.uk/ project/the-benefits-of-introducing-community-gardening-to-our-setting/.
- Prout, A., and A. James. 1997. "A New Paradigm for The Sociology of Childhood? Provenance, Promise and Problems." In Constructing and Reconstructing Childhood. Contemporary Issues in The Sociological Study of Childhood. 2nd Edition, edited by A. James, and A. Prout, 7-32. London/ Philadelphia: Routledge/ Falmer.
- Ravitch, S., and M. Riggan. 2017. Reason & Rigor: How Conceptual Frameworks Guide Research. 2nd ed. London: Sage.
- Reinharz, S. 1992. Feminist Methods in Social Research. New York: Oxford University Press.
- Robert-Holmes, G., and P. Moss. 2021. Neoliberalism and Early Childhood. London: Routledge. Rubin, H. J., and I. S. Rubin. 1995. Qualitative Interviewing: The Art of Hearing Data. Thousand Oaks: Sage.
- Sacha, J. 2000. "The Activist Professional." Journal of Educational Change 1 (1): 77-95. https://doi. org/10.1023/A:1010092014264
- Saunders, L., and B. Somekh. 2009. "Action Research and Educational Change: Teachers as Innovators." In The Sage Handbook of Educational Action Research, edited by S. Noffke, and B. Somekh, 190–201. Los Angeles: SAGE.
- Scottish Government. 2022. Scottish Attainment Challenge 2022 to 2023-2025 to 2026: Fairer Scotland Duty Assessment. Edinburgh: Scottish Government. Accessed 11 July 2022. https:// www.gov.scot/publications/fairer-scotland-duty-assessment-scottish-attainment-challenge-2022-2023-2025-2026/documents/
- Skattebol, J., and L. Arthur. 2014. "Collaborative Practitioner Research: Opening a Third Space for Local Knowledge Production." Asia Pacific Journal of Education 34 (3): 351-365. https://doi. org/10.1080/02188791.2013.871690
- Soltis, J. 1994. "The new Teacher." In Teacher Research and Educational Reform, edited by S. Hollingsworth, and H. Sockett, 245-260. Chicago: University of Chicago Press.
- Solvason, C. 2013. "Research and the Early Years Practitioner Researcher." Early Years 33 (1): 90-97. https://doi.org/10.1080/09575146.2012.665360
- Somekh, B., and S. E. Noffke. 2009. The SAGE Handbook of Educational Action Research. The SAGE Handbook of Educational Action Research. London: Sage.
- Spence, D. 2022. Unity and Connectedness in the Face of a Pandemic. Froebelian Futures Practitioner Inquiry Project. Accessed 12 July 2022. https://www.froebel.ed.ac.uk/project/ unity-and-connectedness-in-the-face-of-a-pandemic/.
- Stenhouse, L. 1975. An Introduction to Curriculum Research and Development. London: Heinemann.
- Stevens, D. M., M. Brydon-Miller, and M. Raider-Roth. 2016. "Structured Ethical Reflection in Practitioner Inquiry: Theory, Pedagogy, and Practice." The Educational Forum 80 (4): 430-443. https://doi.org/10.1080/00131725.2016.1206160



- Tisdall, K., J. M. Davis, and M. Gallagher. 2008. Researching with Children and Young People: Research Design, Methods and Analysis. London: SAGE.
- Toyey, H. 2013. Bringing the Froebel Approach to Your Early Years Practice. London: Routledge. University of Edinburgh. 2021. Froebelian Futures [Website]. Accessed 7 November 2022. https:// www.froebel.ed.ac.uk/frobelian-futures/.
- Vescio, V., D. Ross, and A. Adams. 2008. "A Review of Research on the Impact of Professional Learning Communities on Teaching Practice and Student Learning." Teaching and Teacher Education 24 (1): 80-91. https://doi.org/10.1016/j.tate.2007.01.004
- Woodrow, C., and L. Newman. 2015. "Recognising, Valuing and Celebrating Practitioner Research." In Practitioner Research in Early Childhood: International Issues and Perspectives, edited by L. Newman, and C. Woodrow, 1-16. London: SAGE.
- Wrigley, T. 2017. "Synthetic Phonics and the Phonics Check: The Hidden Politics of Early Literacy." In Reading the Evidence: Synthetic Phonics and Literacy Learning, edited by M. Clarke. Chapter 10, Kindle Edition https://www.spelfabet.com.au/2017/11/alternative-factsabout-phonics/.