pedocs
Open Access Erziehungswissenschaften

DIPF

Schmid, Andrea C. [Hrsg.]; Wasmuth, Helge [Hrsg.]

Froebelian pasts, present and futures. Anthology of the 11th Froebel biennial conference

Bad Heilbrunn : Verlag Julius Klinkhardt 2026, 185 S.

Quellenangabe/ Reference:
Schmid, Andrea C. [Hrsg.]; Wasmuth, Helge [Hrsg.]: Froebelian pasts, present and futures. Anthology of the 11th Froebel biennial conference. Bad Heilbrunn : Verlag Julius Klinkhardt 2026, 185 S. - URN: urn:nbn:de:0111-pedocs-368475 - DOI: 10.25656/01:36847

https://nbn-resolving.org/urn:nbn:de:0111-pedocs-368475
https://doi.org/10.25656/01:36847

in Kooperation mit / in cooperation with:

k linkhardt

http://www.klinkhardt.de

Nutzungsbedingungen

Dieses Dokument steht unter folgender Creative Commons-Lizenz: http://creativecommons.org/licenses/by-nd/4.0/deed.de - Sie dürfen das Werk bzw. den Inhalt vervielfältigen, verbreiten und öffentlich zugänglich machen, solange Sie den Namen des Autors/Rechteinhabers in der von ihm festgelegten Weise nennen und das Werk bzw. diesen Inhalt nicht bearbeiten, abwandeln oder in anderer Weise verändern.
Mit der Verwendung dieses Dokuments erkennen Sie die Nutzungsbedingungen an.

Terms of use

This document is published under following Creative Commons-License: http://creativecommons.org/licenses/by-nd/4.0/deed.en - You may copy, distribute and transmit, adapt or exhibit the work in the public as long as you attribute the work in the manner specified by the author or licensor. You are not allowed to alter or transform this work or its contents at all.

By using this particular document, you accept the above-stated conditions of use.

Kontakt / Contact:

peDOCS
DIPF | Leibniz-Institut für Bildungsforschung und Bildungsinformation
Informationszentrum (IZ) Bildung
E-Mail: pedocs@dipf.de
Internet: www.pedocs.de

Mitglied der Leibniz-Gemeinschaft



Andrea C. Schmid
Helge Wasmuth
(Eds.)

Froebelian Pasts, Present and Futures

Anthology of the 11th Froebel Biennial Conference

klinkhardt

Schmid / Wasmuth

Froebelian Pasts, Present and Futures

Andrea C. Schmid
Helge Wasmuth
(Eds.)

Froebelian Pasts, Present and Futures

Anthology of the 11th Froebel Biennial Conference

Verlag Julius Klinkhardt
Bad Heilbrunn • 2026

Impressum

Dieser Titel wurde in das Programm des Verlages mittels eines Peer-Review-Verfahrens aufgenommen. Für weitere Informationen siehe www.klinkhardt.de.

Bibliografische Information der Deutschen Nationalbibliothek. Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet abrufbar über http://dnb.d-nb.de.

2026. Verlag Julius Klinkhardt.
Julius Klinkhardt GmbH & Co. KG, Ramsauer Weg 5, 83670 Bad Heilbrunn, vertrieb@klinkhardt.de.
Coverabbildung: © Fröbelgaben Kugel, Walze, Würfel sowie Denkmalentwurf,
erstellt von Dr. Matthias Brodbeck unter Zuhilfenahme von AI.

Das Werk einschließlich aller seiner Teile ist urheberrechtlich geschützt.
Die Publikation (mit Ausnahme aller Fotos, Grafiken und Abbildungen) ist veröffentlicht unter der Creative Commons-Lizenz: CC BY-ND 4.0 International.
https://creativecommons.org/licenses/by-nd/4.0/

ISBN 978-3-7815-6265-3 digital doi.org/10.35468/6265

Content

Andrea C. Schmid and Helge Wasmuth
Preface 7

Welcome speeches – Grußworte

Bernd U. Althaus 9
Bodo Ramelow 15
Agnes Pfrang 17
Grace Choi 21
Andrea C. Schmid 25

Tina Bruce and United Kingdom Froebelian group, International Froebel Society
A tribute to Robert Nauer 27

Articles

Jens Beljan
Childhood as a sphere of resonance and expressivity – In dialogue with Friedrich Fröbel 29

Ines Freitag-Amtmann
Froebel today: Explorer Dialogues with children 43

Stephanie Harding
Froebel now: Singing with babies, children, and their carers in a community-based setting 55

Naoko Matsumura
Numbers, shapes, words, and communication through Origami: A case study of Froebelian practice in japanese teacher education 62

Lynn J. McNair, Caroline Walsh, Selvaraja Selvarani, Suzanne Hermiston and Mairi Ferris
Our Wee Garden at the Royal Botanic Garden Edinburgh: Inspiring children to learn, whilst learning to inspire others through their actions 78

Mie Nojiri
Creative storytelling and Froebelian pedagogy:
The early reception of block play in Britain and Japan 100

Sabine Plamper and Titia Sprey
Learning through your hands in our digital era 110

Stella Louis
How do open-ended resources support representation
through the forms of life, beauty and knowledge? 118

Ulf Sauerbrey
The reception of Fröbel's ideas on children's play in the work
of childhood researcher Martha Muchow 121

Marcella Towler
Fuzzy Play? An exploration of how play is portrayed on
early childhood education websites 130

Andrea C. Schmid and Nikolas A. Rathert
Froebel pedagogy – The authentic Froebel gifts as nexus
between then and now 141

Andrea C. Schmid and Nikolas A. Rathert
Thoughts on Froebel pedagogy: Pasts, present, futures 154

Helge Wasmuth
Friedrich Fröbel: The past, the present, and the future 163

Authors 183

Andrea C. Schmid and Helge Wasmuth

Preface

"Froebelian Pasts, Present & Futures" – the theme of the International Froebel Society's 11th Biennial Conference offered a remarkably wide landscape for practitioners and scholars interested in Fröbel's pedagogy. With a topic so broad, historical inquiry, philosophical reflection, pedagogical reconsideration, and imaginative engagement with what Fröbel's pedagogy might become were invited. Thus, the conference theme emphasized from the beginning that Fröbel is not only a figure of historical significance. Instead, it encouraged asking about his relevance today and in the future. Practitioners and scholars were invited to consider not only how Fröbel has been remembered, interpreted, translated, institutionalized, and sometimes misunderstood, but also how his ideas continue to circulate in contemporary educational debates and how they might speak to futures that are still unfolding. To engage with Fröbel today, so the conference made clear, is therefore not simply to look backward. Rather than asking only what Fröbel thought, what he founded, or how his ideas were received, the conference invited us to ask why Fröbel continues to matter. Why is there renewed interest in Fröbel today, in a world marked by rapid social, technological, ecological, and educational change? And, how might Froebelian pedagogy help us think critically about contemporary early childhood education?

The contributions gathered in this anthology take up these questions in varied and compelling ways. Together, they demonstrate that Froebelian practice and scholarship are not confined to preserving a legacy. Instead, they show how Fröbel can provoke debate and challenge us to think anew about the purposes and possibilities of education.

The topic of the past is covered by Mie Nojiri in *Creative storytelling and Froebelian pedagogy: The early reception of block play in Britain and Japan*. In her article, Nojiri examines the reception and development of Froebelian block play in early Britain and modern Japan, showing how differently Fröbel was adapted in each context. Ulf Sauerbrey also refers to the past. In *The reception of Fröbel's ideas on children's play in the work of childhood researcher Martha Muchow*, he examines the ideas of Martha Muchow, an almost forgotten pioneer of childhood research. Muchow, who was heavily influenced by Fröbel, developed insights into play and development, which anticipated modern child psychology.

The present is the focus of five articles. Ines Freitag-Amtmann shows in *Froebel today: Explorer Dialogues with children* how early childhood education inspired by Fröbel can look like today. Building on Froebelian principles such as "Freedom with Guidance", the article discusses so-called "Explorer Dialogues," which support children in developing an in-depth understanding of natural phenomena. Naoko Matsumura, in *Numbers, shapes, words, and communication through Origami: A case*

study of Froebelian practice in japanese teacher education, discusses the importance of origami-based workshops in teacher education. These workshops, which draw on Fröbel's "gifts and occupations," prepare students to become early childhood and elementary school educators. *Our Wee Garden at the Royal Botanic Garden Edinburgh: Inspiring children to learn, whilst learning to inspire others through their actions,* written by McNair et al., describes a 6-month outdoor nursery pilot at the Royal Botanic Garden in Edinburgh. The project enabled children to experience nature, thereby identifying the benefit of outdoor learning for young children. Stephanie Harding, in *Singing with babies, children, and their carers in a community-based setting,* discusses the role that Froebelian principles and the Mother's Songs play in her drop-in music group for children under 5 years old. Lastly, Stella Louis emphasizes in *How do open-ended resources support representation through the forms of life, beauty and knowledge?* the importance of playing with the gifts.

How Fröbel continues to be relevant in the future is discussed by Sabine Plamper and Titia Sprey in *Learning through your hands in our digital era.* They argue that hands-on experiences will continue to be important for young children and their development. While the digital world offers many opportunities, it continues to be essential to work with real materials as it supports multisensory learning, the development of abstract concepts, and enriches artistic processes. Questions of the digital world are also taken up by Andrea C. Schmid & Nikolas A. Rathert in *Froebel pedagogy – The authentic Fröbel gifts as nexus between then and now*. While the authors argue for engaging with authentic Fröbel materials, at the same time, they discuss modern approaches based on technology by outlining an idea for an app designed to generate construction templates for Froebel gifts. Finally, Jens Beljan thinks about what Fröbel's pedagogy can mean today. In *Childhood as a sphere of resonance and expressivity – In dialogue with Friedrich Fröbel*, Beljan re-reads Friedrich Fröbel through the twin lenses of resonance and expressivity, arguing that the task of education is not to establish rigid unity. Instead, education needs to be understood as a process in which children can respond to the world in their own voices and thereby be transformed by what they engage.

Finally, three articles, in quite different ways, reflect on all three themes of the conference. In *Fuzzy Play? An exploration of how play is portrayed on early childhood education websites*, Marcella Towler discusses elements of her Froebelian journey, past and present, focusing on the importance of play, which today, unfortunately, is so often forgotten. Andrea C. Schmid & Nikolas A. Rathert reflect in *Thoughts on Froebel pedagogy: Pasts, present, futures* on the conference, as well as participants' responses in a conference workshop, to think about what Fröbel's educational legacy means today and for the future. And Helge Wasmuth discusses in *Friedrich Fröbel: The past, the present, and the future* the challenge of accessing, interpreting, and translating Fröbel's writings, why Fröbel is so meaningful for many practitioners today, and finally asks how we can think about pressing questions of the future.

Together, the articles show why Froebelian pasts, present, and futures are worthwhile to think about.

Welcome Speeches

Bernd U. Althaus

Welcome message

Dear Ladies and Gentlemen, dear colleagues, distinguished guests from Germany and abroad,

It is a great pleasure – and an honor – to welcome you here today in our state capital, Erfurt, on behalf of the Thuringian State Government.
We are proud to host the 11th Meeting of the International Froebel Society – Germany – in cooperation with the Chair of Inclusive Education Research and the Froebel Research Center at the University of Erfurt. This is more than an organizational task. It is a commitment – a commitment to the scientific and educational legacy of Friedrich Froebel, whose ideas are more relevant today than ever before.
Friedrich Wilhelm August Froebel, born in 1782 in Oberweißbach, Thuringia, was not only the founder of the kindergarten. He was a thinker of truly global significance. His ideas on education, upbringing, and child development remain vivid and influential to this day.
At the heart of his philosophy was a simple but powerful idea: children learn best when they are given a prepared environment in which they can explore freely – through play, through imitation, through creativity. This vision laid the foundation for many modern educational concepts across the world.
The past, present, and future of Froebel's pedagogy are deeply connected. And it is precisely this connection that makes this year's meeting so special. We honor the roots of Froebel's philosophy, which recognized the child as an active, self-determined being. And we look at the vibrant diversity of research, teaching, and practice around Froebel that continues worldwide today.
We also celebrate the close and productive collaboration with the Froebel Trust in London, the International Froebel Society, and many other partners around the globe. And we are proud that Froebel's kindergarten idea was recognized as intangible cultural heritage of Thuringia in 2022 – and of Germany in 2023. This recognition underscores the enduring value of his work.
The University of Erfurt has taken it as its mission not only to preserve this precious pedagogical heritage, but also to develop it further – through research, international networks, and the training of future educators.

But let me take a moment to recall the core of Froebel's thinking.
He did not see the child as an "empty vessel" to be filled. He saw the child as an active, holistic being – naturally curious, creative, and eager to learn. For Froebel, learning meant self-activity. The child learns by doing, by playing, by discovering. Today we call this child-centered education.
And play – for Froebel, play was the highest form of learning. It was not just a pastime. It was the free activity of the inner world, the way children develop their senses, their language, their social skills. At that time, this was a revolutionary thought.
Froebel also emphasized the unity of nature, humanity, and the divine. He saw education as a process of unfolding in harmony with nature and the idea of creation. His goal was always "self-realization in freedom and connectedness."
He was a pioneer of early childhood education. With his famous play materials – the sphere, the cube, the stick – he gave children a way to explore geometry, mathematics, language, and creativity long before systematic early education existed elsewhere. He created the kindergarten as a distinct educational space – a place where children could "grow" like plants in a garden, with care, nurturing, and time.
And he knew: the role of the educator is crucial. Froebel advocated for professional training. Educators should observe, guide, and inspire children – but never dominate them. Education, he said, is relationship.
Ladies and Gentlemen,
Froebel's pedagogy is holistic. It is relational. It is connected to nature. It fosters creativity. It laid the groundwork for modern early childhood education. And today – in times of globalization, digitalization, and educational inequality – it is more relevant than ever.
We must remember: early childhood is not merely a "prelude" to school. It is its own vital stage of education – the foundation for a successful life. A truly democratic society needs an education culture that enables self-determination and participation from the very beginning.
This requires investment – in people, in high-quality training, and in conditions that meet Froebel's high standards. And it requires something else: recognition. Early childhood education is not just childcare. It is a cultural achievement. Perhaps one day we may even see Froebel's pedagogy recognized as UNESCO World Heritage.

Dear friends,
Froebel's ideas are not a nostalgic look back. They are a powerful guide for a humane, inclusive, and future-oriented education policy. And now is the time to bring them to life in practice.
I am convinced that the exchange over the coming days will open new perspectives and provide valuable impulses – both for scientific discussion and for the daily work in educational settings around the world.
I would like to thank the International Froebel Society – Germany, all our partner institutions, and especially the organizing team here at the University of Erfurt and the Froebel Research Center for their outstanding work in preparing this event.
Let us continue together – in the spirit of Froebel – to create an education that empowers children, builds strong relationships, and places the unfolding of humanity at its heart.
I wish all of us an inspiring, insightful, and truly connecting conference.

Dr. Bernd Uwe Althaus, State Secretary for Education at the Thuringian Ministry of Education, Science and Culture

Grußwort

Sehr geehrte Frau Präsidentin, liebe Frau Choi, sehr geehrte Damen und Herren, liebe Kolleginnen und Kollegen, sehr geehrte Gäste aus dem In- und Ausland,

es ist mir eine große Freude und Ehre, Sie im Namen der Thüringer Landesregierung ganz herzlich zum 11. Treffen der International Froebel Society – Deutschland – hier in unserer Landeshauptstadt Erfurt begrüßen zu dürfen.
Die Ausrichtung dieser Konferenz in Kooperation mit der Professur für Inklusive Unterrichtsforschung mit dem Schwerpunkt Lernen sowie der Fröbel-Forschungsstelle an der Universität Erfurt ist für uns mehr als nur eine organisatorische Aufgabe.
Sie ist Ausdruck unseres tiefen wissenschaftlichen und pädagogischen Engagements für das Werk Friedrich Fröbels, das heute aktueller ist denn je.
Friedrich Wilhelm August Fröbel, 1782 im thüringischen Oberweißbach geboren, war nicht nur der Begründer des Kindergartens, sondern auch ein Denker von weltweiter Bedeutung, dessen Impulse für Bildung, Erziehung und Entwicklung von Kindern bis heute spürbar und lebendig sind.
Seine Grundidee, dass Kinder in einer vorbereiteten Umgebung durch Spiel, Nachahmung und kreative Tätigkeit selbstständig lernen, bildet ein Fundament für moderne Bildungskonzepte weltweit.
Vergangenheit, Gegenwart und Zukunft der Fröbelpädagogik sind eng miteinander verwoben – und genau diese Verbindung macht unser diesjähriges Treffen so besonders.
Wir blicken auf die Wurzeln der Fröbelschen Philosophie zurück, auf eine Pädagogik, die das Kind als „Subjekt" ernst nimmt – wenn dieses Wort hier überhaupt passt – und auf individuelle Entwicklung vertraut. Solche Ansätze fanden erst viel später breite Anerkennung in der Bildungswissenschaft.
Gleichzeitig würdigen wir die heutige Vielfalt an Forschung, Lehre und Praxis, die sich weltweit mit Fröbel auseinandersetzen.
Dies zeigt sich unter anderem in der engen und produktiven Zusammenarbeit mit dem Froebel Trust in London, der International Froebel Society und vielen weiteren internationalen Partnern.
Die Anerkennung der Kindergartenidee nach Fröbel als immaterielles Kulturerbe Thüringens im Jahr 2022 und Deutschlands im Jahr 2023 ist ein großer Erfolg und unterstreicht die Relevanz seines Erbes.
Die Universität Erfurt sieht es als ihren Auftrag, dieses wertvolle pädagogische Erbe nicht nur zu bewahren, sondern es durch Forschung, internationale Vernetzung und die Ausbildung zukünftiger Pädagoginnen und Pädagogen aktiv weiterzutragen.
Bei aller Kenntnis der hier Anwesenden, lassen Sie mich dennoch kurz darauf eingehen, worauf sich unsere Arbeit konzentriert.
Fröbel sah das Kind als aktives, ganzheitliches Wesen.

Er betrachtete es nicht als „leeres Gefäß", das gefüllt werden muss, sondern als von Natur aus aktives, lernendes und schöpferisches Wesen.
Lernen bedeutet für ihn Selbsttätigkeit: Das Kind lernt durch eigenes Tun, durch Spiel und Entdeckung. Heute nennt man das kindzentrierte Pädagogik. Schule vom Schüler aus zu denken, wie es sich die neue Landesregierung als zentrale Leitlinie gegeben hat, ist da nur die konsequente Fortsetzung.
Das Spiel bildet bei Fröbel die zentrale Lernform. Er stellte das Spiel in den Mittelpunkt der frühen Bildung. Für ihn ist das Spiel die höchste Ausdrucksform kindlicher Entwicklung – es ist „freie Betätigung der inneren Welt". Über das Spiel entwickelt das Kind sich selbst, seine Sinne, seine Sprache und seine sozialen Fähigkeiten.
Dies war revolutionär, denn bis dahin galt Spielen als „Zeitvertreib" und nicht als Bildungsprozess.
Wichtig ist Fröbel die Einheit von Natur, Mensch und Gott. Fröbel war stark von romantisch-naturphilosophischen Ideen geprägt. Er verstand Bildung als einen Entfaltungsprozess im Einklang mit der Natur und dem göttlichen Schöpfungsgedanken.
Das Ziel war die „Selbstverwirklichung in Freiheit und Verbundenheit". In Fröbels Begriff von „Bildung" steckt also immer auch eine ethische und spirituelle Dimension.
Ein zentraler Gedanke Fröbels war auch die frühe systematische Förderung. Mit seinen Spielgaben (z. B. Kugel, Würfel, Stab) entwickelte er konkrete, didaktisch durchdachte Materialien, mit denen Kinder geometrische, mathematische, sprachliche und kreative Grunderfahrungen machen konnten – lange bevor es systematische Frühförderung in anderen Kontexten gab.
Fröbel war damit ein Pionier der frühkindlichen Didaktik. Den Kindergarten sah er als eigenen Bildungsort.
Fröbel gründete 1840 den ersten „Kindergarten" als eigenständige Institution zwischen Familie und Schule. Der Begriff steht nicht zufällig für einen Ort, an dem Kinder „wachsen dürfen" wie Pflanzen im Garten – mit Fürsorge, Pflege und Zeit. Der Kindergarten als Bildungsinstitution war eine echte Innovation mit weltweiter Wirkung.
Entscheidend war und ist für Fröbel die Rolle der Erzieherin/des Erziehers. Fröbel sprach sich klar für eine professionelle Ausbildung von Erzieherinnen aus. Sie sollten die Kinder beobachten, begleiten und anregen, aber nicht bevormunden.
Bildung ist Beziehung – das war eine seiner Kernüberzeugungen.
Der professionelle, reflektierte Pädagoge als „Mitgestalter kindlicher Entwicklung" ist bis heute ein gültiges Ideal.
Fröbels Pädagogik ist ganzheitlich, beziehungsorientiert, naturverbunden und kreativitätsfördernd. Sie legte das Fundament für die moderne Frühpädagogik – und angesichts von Globalisierung, Digitalisierung und Bildungsungleichheit ist ihre Relevanz heute aktueller denn je. Fröbels Pädagogik ist anspruchsvoll, menschenfreundlich und visionär, passt aber nicht gut in eine ausschließlich kurzfristig oder monetär betrachtete Bildungspolitik.
Minister Tischner und ich sind uns einig, dass der frühkindlichen Bildung eine stärkere Stimme in gesellschaftlichen Debatten gegeben werden muss. In diesen Debat-

ten muss die Anerkennung reifen, dass die frühe Kindheit kein „Vorlauf" zur Schule ist, sondern die Basis für ein gelingendes Leben.
Gute Bildungspolitik braucht einen langen Atem und Bildungspolitiker mit Haltung. Investitionen in die frühe Kindheit und in Bildung allgemein zahlen sich nachhaltig aus.
Frühkindliche Bildung darf keine „Schule vor der Schule" sein, sondern muss als eigenständiger Bildungsraum anerkannt werden.
Wer beispielsweise von unserem „Startchancen-Programm" spricht, muss den Kindergarten als Bildungsinstitution ernst nehmen und angemessen fördern. Unsere Bundesregierung hat sich dazu bekannt. Nun gilt es, die passenden Strukturen dafür herauszubilden.
Eine demokratische Gesellschaft braucht eine bildungspolitische Kultur, die Selbstbestimmung und Mitgestaltung von klein auf ermöglicht. Frühkindliche Bildung muss politisch als eigenständige, hochwertige Bildungsphase anerkannt werden – und nicht als „Betreuung". Dafür müssen wir in Personal, Ausbildung und Rahmenbedingungen investieren, die dem fröbelschen Anspruch gerecht werden.
Da wir oft dazu neigen, die wirklich wichtigen Dinge zu „verkopfen", benötigen wir verständliche Übersetzungen pädagogischer Konzepte in politische Entscheidungsprozesse, beispielsweise über Forschungsstellen, Netzwerke und Gesellschaften wie die des IFS-D.
Sie alle kennen die Bedeutung von Lob und Anerkennung in der Bildung. Die frühkindliche Bildung muss eine gesellschaftliche Aufwertung als Kulturleistung erfahren. Ein Beispiel hierfür wäre die Anerkennung der Fröbelpädagogik als UNESCO-Weltkulturerbe.

Sehr geehrte Damen und Herren,
Fröbels Pädagogik ist kein nostalgischer Rückblick, sondern eine hochaktuelle Orientierung für eine humane, inklusive und zukunftsfähige Bildungspolitik. Genau jetzt ist die Zeit, sie politisch wirksam zu machen.
Ich bin überzeugt, dass der Austausch in den kommenden Tagen neue Perspektiven aufzeigen und wertvolle Impulse für die wissenschaftliche Diskussion ebenso wie für die praktische Arbeit in Bildungseinrichtungen weltweit geben wird.
Ich danke der IFS-D, allen Partnerinstitutionen und besonders dem Organisationsteam der Professur und der Fröbelforschungsstelle für die engagierte Vorbereitung dieser Veranstaltung.
Lassen Sie uns gemeinsam an einer Pädagogik arbeiten, die – im Geiste Fröbels – Kinder stärkt, Bildung als Beziehung versteht und die Entfaltung des Menschlichen in den Mittelpunkt stellt.
Ich wünsche uns allen eine inspirierende, erkenntnisreiche und verbindende Konferenz und eine schöne Zeit hier in Thüringen, insbesondere an den Orten, die mit Leben und Wirken von Friedrich Fröbel zusammenhängen.

Dr. Bernd Uwe Althaus, Staatssekretär für Bildung des Thüringer Ministeriums für Bildung, Wissenschaft und Kultur

Bodo Ramelow

Welcome address for the "International Froebel Society Conference", Erfurt

Dear Professor Andrea C. Schmid, Dear guests and participants of the conference,

I am delighted to welcome you to this year's Fröbel Conference in Thuringia.
If Thuringia has contributed anything to the world or to the humanistic development of society, I believe it is the concept of the kindergarten, as conceived by Friedrich Fröbel.
By founding the first kindergarten, Fröbel laid the groundwork for what we now recognise as early childhood education. He believed in play as a form of learning, in the dignity of the child and in society's responsibility to give every child the best possible start in life. He was far ahead of his time with this idea, and we must ensure that these fundamental humanistic ideals are not dismantled today simply because they may seem irrelevant in a world where only strength and wealth appear to matter.
In times of societal upheaval, increasing uncertainty and social challenges, it is especially important that children and their families have access to reliable education, support and care. This is why it is both timely and highly relevant to reflect on Fröbel's work today, and I am delighted that this discussion is taking place here in Thuringia!
Please therefore make the most of today's opportunity for meaningful exchange, new ideas, and the development of pedagogical concepts.
Good education policy surely requires new approaches. However, to me, early childhood education — Fröbel's kindergarten — remains at the heart of a just and sustainable society.
To me, Fröbel's legacy means fair educational opportunities for all children and an educational system that unites rather than divides.
I wish the conference stimulating discussions, new perspectives and great motivation for the ongoing development of pedagogy!
In 2018, the Thuringian State Parliament adopted a petition to reinstate the term 'kindergarten' in public language usage. That's why, in closing, I say with deep conviction:
The world speaks Kindergarten! Welcome!

Bodo Ramelow, Member of the German Bundestag (MdB)

Grußwort für die „International Froebel Society Conference“, Erfurt

Sehr geehrte Frau Prof. Andrea C. Schmid, sehr geehrte Gäste und Teilnehmer*innen der Konferenz,

ich freue mich sehr, Sie zur diesjährigen Fröbel-Konferenz in Thüringen begrüßen zu dürfen!
Wenn Thüringen der Welt und ihrer humanistischen Gestaltung etwas gegeben hat, dann war es – glaube ich - die Idee des Kindergartens von Friedrich Fröbel.
Mit der Gründung des ersten Kindergartens legte Fröbel den Grundstein für das, was wir heute als frühkindliche Bildung verstehen. Er glaubte an das Spiel als Form des Lernens, an die Würde des Kindes und an die Verantwortung der Gesellschaft, jedem Kind einen guten Start ins Leben zu ermöglichen. Mit dieser Idee war er seiner Zeit weit voraus, und wir müssen aufpassen, dass diese grundsätzlichen humanistischen Ideale heute nicht abgewickelt werden, weil sie nicht tauglich scheinen für eine Welt, in der scheinbar nur noch Stärke und Reichtum zählen.
Gerade in Zeiten gesellschaftlicher Umbrüche, wachsender Unsicherheiten und sozialer Herausforderungen brauchen Kinder – und auch ihre Familien – verlässliche Orte der Bildung, Begleitung und Fürsorge. Deshalb und aus den grundlegenden humanistischen Erwägungen ist es sehr aktuell und unbedingt zeitgemäß, heute über Fröbel nachzudenken - und ich finde es sehr gut, dass dieses Nachdenken hier in Thüringen stattfindet!
Nutzen Sie also heute gern den Raum für den inhaltlichen Austausch, für neue Impulse und die Weiterentwicklung pädagogischer Konzepte.
Eine gute Bildungspolitik braucht sicher auch neues Herangehen. Nach wir vor ist für mich aber die frühkindliche Bildung, Fröbels guter alter Kindergarten das Herzstück einer gerechten und zukunftsfähigen Gesellschaft.
Fröbels Erbe bedeutet für mich: Gerechte Bildungschancen für alle Kinder und ein Bildungssystem, das nicht trennt, sondern verbindet.
Ich wünsche der Konferenz anregende Diskussionen, neue Perspektiven und Ihnen allen viel
Motivation für die Weiterentwicklung der Pädagogik!
Der Thüringer Landtag hatte 2018 eine Petition angenommen, um den Begriff Kindergarten wieder stärker im öffentlichen Sprachgebrauch zu verankern. Deshalb sage ich am Schluss und aus tiefer Überzeugung: Die Welt spricht Kindergarten!
Herzlich willkommen!

Bodo Ramelow, Mitglied des deutschen Bundestags (MdB)

Agnes Pfrang

Welcome speech

Ladies and gentlemen, dear colleagues,
It is my great pleasure and honor to welcome you to the conference "Froebelian Pasts, Present & Futures". This event offers us an excellent opportunity to explore the work and influential theories of Friedrich Wilhelm August Froebel from an academic perspective and to discuss their relevance in contemporary educational research.
Friedrich Froebel, who was born in Thuringia in 1782, was one of the most innovative educators of his time. He developed a philosophical-anthropological perspective that is not only rooted in Christian-humanist culture, but also visionarily encompasses the importance of education across all phases of life. His unfinished work "Die Menschenerziehung" (The Education of Man) from 1826 is a beacon for pedagogy, viewing the educational process as a lifelong journey.
In his "Mutter- und Koselieder" (Mother and Nursery Songs) from 1844, Froebel introduced the concept of education into family pedagogy. This work is not only a handbook for parental education, but also a starting point for the development of a multidimensional and interactive educational model that includes games, texts, and music. Such historical concepts offer us as researchers the opportunity to combine and evaluate insights from the past with current educational issues.
The highlight of Froebel's work is undoubtedly the invention of the kindergarten in 1840. As a scientifically based educational institution, the kindergarten is still known worldwide today, and the term itself has entered the languages of many cultures. Froebel's concept of "play care" had a strong influence on early childhood education and challenges us to design the educational space as a place of active development. However, while the term is widely used, we see how Froebel's original intentions have been somewhat reduced over time. His call to "Come, let us let our children live!" is also a call to us scientists to critically question educational approaches and always reflect on them considering their origins.
Froebel's insight into the importance of early childhood interactions – especially between parents and children – demonstrates his visionary approach to education. These interactions have a significant influence on personality development and learning. Froebel's system of play gifts, inspired by his observations of interactions in the home, continues to contribute to the theory of play-based education today and lays the foundation for research into the role of play in the learning process. Froebel recognized that play is a fundamental form of learning, as is evident in his quote: "Play, when properly understood and properly cultivated, opens children's eyes to the world." This insight elevates our studies on the role of play to a new analytical level.

With Froebel's work "Die Menschenerziehung" (The Education of Man) in particular, he laid the foundation for an educational philosophy that understands the child as an active learner and part of a complex system. His ethical and social approach requires us to see the child's education as an integrated process shaped by skills, self-efficacy, and interaction with the environment. This prompts us to question and further develop our educational approaches considering this holistic view.

The IFS-D has set itself the goal of analyzing Froebel's influential ideas, highlighting their potential for education today and tomorrow, and promoting a transdisciplinary dialogue on the subject. It is particularly important not only to leave Froebel's theories in their historical contexts, but also to situate them within the pressing challenges of current educational research and develop them further.

My special thanks go to Andrea Schmid and her team. Their careful planning and commitment have made this conference possible. I look forward to stimulating presentations and discussions that will help us reinterpret Froebel's legacy in a contemporary context and integrate his ideas into modern educational approaches.

I wish you an insightful and productive time at the conference and a pleasant stay in the beautiful city of Erfurt.

Prof. Dr. Agnes Pfrang, Dean of the Faculty of Education, University Erfurt

Grußworte

Sehr geehrte Damen und Herren, liebe Kolleginnen und Kollegen,
es ist mir eine besondere Freude und Ehre, Sie zur Tagung „Froebelian Pasts, Present & Futures" zu begrüßen. Diese Veranstaltung bietet uns die hervorragende Gelegenheit, das Werk und die einflussreichen Theorien von Friedrich Wilhelm August Fröbel aus einer wissenschaftlichen Perspektive zu erkunden und deren Relevanz in der zeitgenössischen Bildungsforschung zu diskutieren.
Friedrich Fröbel, der 1782 in Thüringen geboren wurde, war einer der innovativsten Pädagogen seiner Zeit. Er entwickelte eine philosophisch-anthropologische Sichtweise, die nicht nur in der christlich-humanistischen Kultur verwurzelt ist, sondern auch visionär die Bedeutung der Bildung über sämtliche Lebensphasen hinweg umfasst. Sein unvollendetes Werk „Die Menschenerziehung" von 1826 ist ein Leuchtturm für die Pädagogik, das den Bildungsprozess als lebenslangen Weg betrachtet.
In seinen „Mutter- und Koseliedern" aus dem Jahr 1844 führte Fröbel den Bildungsbegriff in die Familienpädagogik ein. Dieses Werk ist nicht nur ein Handbuch für die elterliche Erziehung, sondern auch ein Ausgangspunkt für die Entwicklung eines multidimensionalen und interaktiven Erziehungsmodells, das Spiele, Texte und Musik umfasst. Solche historischen Konzepte bieten uns als Forschende die Möglichkeit, Erkenntnisse aus der Vergangenheit mit gegenwärtigen pädagogischen Fragestellungen zu verbinden und zu evaluieren.
Den Höhepunkt von Fröbels Schaffen stellt sicherlich die Erfindung des Kindergartens im Jahr 1840 dar. Als wissenschaftlich fundierte Bildungseinrichtung ist der Kindergarten bis heute weltweit bekannt und der Begriff selbst in die Sprachen vieler Kulturen eingegangen. Fröbels Konzept der „Spielpflege" hatte einen starken Einfluss auf die frühe Kindheitspädagogik und fordert uns auf, den Bildungsraum als einen Ort der aktiven Entfaltung zu gestalten. Während der Begriff jedoch weit verbreitet ist, sehen wir, wie im Laufe der Zeit Fröbels ursprüngliche Intentionen teils reduziert wurden. Sein Aufruf „Kommt, lasst uns unsern Kindern leben!" ist ebenso ein Aufruf an uns Wissenschaftler*innen, Bildungsansätze kritisch zu hinterfragen und stets im Lichte ihrer Ursprünge zu reflektieren.
Fröbels Einsicht in die Bedeutung der frühkindlichen Interaktionen – insbesondere zwischen Eltern und Kind – zeigt seinen visionären Blick auf Erziehung. Diese Interaktionen beeinflussen maßgeblich die Persönlichkeitsentwicklung und das Lernen. Fröbels System der Spielgaben, inspiriert durch seine Beobachtungen häuslicher Interaktionen, trägt bis heute zur Theorie der Spielpädagogik bei und legt Grundsteine für Forschungen über die Rolle des Spiels im Lernprozess. Fröbel erkannte, dass das Spiel eine fundamentale Form des Lernens ist, was auch in seinem Zitat deutlich wird: „Das Spiel recht erkannt und recht gepflegt, öffnet den

Kindern den Blick in die Welten." Diese Erkenntnis erhebt uns in unseren Studien zur Rolle des Spiels auf eine analytisch neue Ebene.
Mit Fröbels Werk „Die Menschenerziehung" im Besonderen hat er den Grundstein für eine erziehungswissenschaftliche Philosophie gelegt, die das Kind als aktiven Lerner und als Teil eines komplexen Systems begreift. Sein ethischer und sozialer Ansatz fordert von uns, die Bildung des Kindes als integrierten Prozess zu sehen, der durch Fähigkeiten, Selbstwirksamkeit und Interaktion mit der Umwelt geprägt ist. Dies veranlasst uns, unsere Bildungsansätze im Licht dieser holistischen Betrachtung zu hinterfragen und weiterzuentwickeln.
Die IFS-D hat es sich zum Ziel gesetzt, Fröbels einflussreiche Ideen zu analysieren, ihre Potentiale für die Pädagogik von heute und morgen zu beleuchten und einen transdisziplinären Dialog darüber zu fördern. Es ist von besonderer Wichtigkeit, Fröbels Theorien nicht nur in ihren historischen Kontexten zu belassen, sondern sie in den aktuell drängenden Herausforderungen der Bildungsforschung zu verorten und weiterzuentwickeln.
Mein besonderer Dank gilt Andrea C. Schmid und ihrem Team. Ihre sorgfältige Planung und ihr Engagement haben diese Tagung möglich gemacht. Ich freue mich auf anregende Vorträge und Diskussionen, die uns helfen werden, Fröbels Erbe in einem aktuellen Kontext neu zu interpretieren und seine Ideen in moderne Bildungsansätze zu integrieren.
Ich wünsche Ihnen eine erkenntnisreiche und produktive Zeit auf der Konferenz sowie angenehme Stunden in der wunderschönen Stadt Erfurt.

Prof. Dr. Agnes Pfrang, Dekanin der Erziehungswissenschaftlichen Fakultät,
Universität Erfurt

Grace Choi

Welcome speech

Hello, my dear fellow Froebelians!

Welcome to the 11th Biennial International Froebel Society Conference. It is with the deepest honor and a hint of excitement that I welcome each and every one of you to the beautiful and historic town of Erfurt, Germany, nestled in Froebel's native Thuringia.

Since our first gathering in London in 2004, the IFS conference has traveled across continents, bringing together Froebelians from all corners of the world. For over 20 years, we've shared, debated, and dreamed together about the future of Froebelian pedagogy. But I must say, this year feels quite different. Why? Because we're not just here to reflect on Froebel's legacy. We're here to explore the past, the present, and the future of Froebelian thought in a world that's changing faster than ever.

Let me share a moment from my own life that captures this shift. A few months ago, I walked into my daughter's room—she's heading off to college this year, and I saw her typing "Thank you" to ChatGPT. Now, I had just read an article where Sam Altman, CEO of OpenAI, said that people typing "please" and "thank you" to ChatGPT have cost the company tens of millions of dollars in electricity bills. Apparently, even polite phrases require the AI to interpret and generate full responses, increasing the computational load and with it, the energy consumption and cost. I said, "Sweetie, maybe skip the niceties, you're leaving a carbon footprint with every polite keystroke!" She looked at me and said: "Mom, you gotta be nice to these AIs. One day they're gonna take over the world, and they'll remember I was kind. So they won't kill me." Ten years ago, I would've laughed. Now? I'm not so sure we're joking anymore.

We're living in a time of profound transition, where AI, technology, and education intersect in ways we couldn't have imagined. And as educators, thinkers, scholars, practitioners, and Froebelians, we are at the forefront of shaping this future. The very future our children—those we teach, nurture, and inspire—will inherit. So I hope that the discussions and themes we explore over the next few days will serve as a spark that ignites deeper dialogue and bold ideas for Froebelian pedagogy across the globe.

As Froebel himself said: "Play is the highest expression of human development in childhood, for it alone is the free expression of what is in a child's soul." Let us honor that soul. Let us protect it. And let us prepare it for a world that is both uncertain and full of possibility.

And of course, while we're here, don't forget to enjoy the charm of Erfurt. We have a wonderful tour planned to visit Froebel's footsteps right here in Thuringia. A huge thank you to Dr. Schmid and her incredible team at the University of Erfurt for organizing this conference. And yes, we have dinner tomorrow evening at 6:30—so bring your appetite and your best stories.
Let's make these next few days count. Let's listen, share, laugh, and maybe even challenge each other. Because the future of Froebelian education deserves nothing less.

Thank you—and welcome once again!

Grace Choi, President of the International Froebel Society

Grußwort

Hallo, liebe Fröbelianer!

Willkommen zur 11. alle zwei Jahre stattfindenden internationalen Konferenz der Fröbel-Gesellschaft. Es ist mir eine große Ehre und Freude, Sie alle in der schönen und historischen Stadt Erfurt in Thüringen, der Heimat Fröbels, begrüßen zu dürfen. Seit unserem ersten Treffen in London im Jahr 2004 hat die IFS-Konferenz verschiedene Kontinente bereist und Fröbelianer aus allen Teilen der Welt zusammengebracht. Seit über 20 Jahren tauschen wir uns aus, diskutieren und träumen gemeinsam von der Zukunft der Fröbel-Pädagogik.
Aber ich muss sagen, dass sich dieses Jahr ganz anders anfühlt. Warum? Weil wir nicht nur hier sind, um über Fröbels Vermächtnis nachzudenken. Wir sind hier, um die Vergangenheit, die Gegenwart und die Zukunft des Fröbelschen Gedankenguts in einer Welt zu erforschen, die sich schneller denn je verändert.
Lassen Sie mich einen Moment aus meinem eigenen Leben erzählen, der diesen Wandel verdeutlicht. Vor einigen Monaten betrat ich das Zimmer meiner Tochter – sie geht dieses Jahr aufs College – und sah, wie sie „Danke" an ChatGPT tippte. Ich hatte gerade einen Artikel gelesen, in dem Sam Altman, CEO von OpenAI, sagte, dass Menschen, die „Bitte" und „Danke" an ChatGPT tippen, dem Unternehmen Stromkosten in Höhe von mehreren zehn Millionen Dollar verursachen. Anscheinend erfordern selbst höfliche Formulierungen, dass die KI vollständige Antworten interpretiert und generiert, was die Rechenlast und damit auch den Energieverbrauch und die Kosten erhöht. Ich sagte: „Schatz, lass die Höflichkeitsfloskeln vielleicht weg, denn mit jedem höflichen Tastenanschlag hinterlässt du einen CO2-Fußabdruck!" Sie sah mich an und sagte: „Mama, du musst nett zu diesen KIs sein. Eines Tages werden sie die Welt übernehmen, und sie werden sich daran erinnern, dass ich freundlich zu ihnen war. Dann werden sie mich nicht töten."
Vor zehn Jahren hätte ich darüber gelacht. Heute? Ich bin mir nicht mehr so sicher, ob das noch ein Scherz ist. Wir leben in einer Zeit tiefgreifender Veränderungen, in der KI, Technologie und Bildung auf eine Weise miteinander verschmelzen, die wir uns nie hätten vorstellen können. Und als Pädagog*innen, Denker*innen, Wissenschaftler*innen, Praktiker*innen und Fröbelianer*innen stehen wir an vorderster Front, wenn es darum geht, diese Zukunft zu gestalten. Die Zukunft, die unsere Kinder – diejenigen, die wir unterrichten, fördern und inspirieren – einmal erben werden. Ich hoffe daher, dass die Diskussionen und Themen, mit denen wir uns in den nächsten Tagen beschäftigen werden, als Funke dienen, der einen tieferen Dialog und mutige Ideen für die Froebelsche Pädagogik auf der ganzen Welt entfacht.

Wie Froebel selbst sagte: „Das Spiel ist der höchste Ausdruck der menschlichen Entwicklung in der Kindheit, denn nur es allein ist der freie Ausdruck dessen, was in der Seele eines Kindes ist." Lasst uns diese Seele ehren. Lasst uns sie schützen. Und lasst uns sie auf eine Welt vorbereiten, die sowohl ungewiss als auch voller Möglichkeiten ist.
Und natürlich sollten wir während unseres Aufenthalts hier nicht vergessen, den Charme Erfurts zu genießen. Wir haben eine wunderbare Tour geplant, um Fröbels Spuren hier in Thüringen zu folgen.
Ein großes Dankeschön an Dr. Schmid und ihr unglaubliches Team an der Universität Erfurt für die Organisation dieser Konferenz. Und ja, wir essen morgen Abend um 18:30 Uhr zu Abend – bringen Sie also Ihren Appetit und Ihre besten Geschichten mit.
Lassen Sie uns die nächsten Tage sinnvoll nutzen. Lasst uns zuhören, uns austauschen, lachen und uns vielleicht sogar gegenseitig herausfordern. Denn die Zukunft der Fröbel'schen Erziehung verdient nichts weniger.

Vielen Dank – und nochmals herzlich willkommen!

Grace Choi, Präsidentin der International Froebel Society

Andrea C. Schmid

Welcome speech

Dear all who are interested in Froebel, dear International Froebel Society (IFS) members,

In my capacity as President of the IFS Germany, Vice President of the IFS and Head of the Froebel Research Centre at the University of Erfurt/Thuringia, I would like to welcome you to the 11th Biennial IFS Conference!
Fröbel's human education and sphere-philosophy cannot be honoured enough and considered a valuable contribution to today's (early) pedagogy and didactics. The following five selected examples are intended to illustrate this appreciation:
By embedding Fröbel's pedagogy in a comprehensive view of the human being and an overarching philosophy of the sphere, it still stands on solid foundations in theory and practice today.
The invention of a variety of games, songs, activity materials and 'gifts' continues to make an extraordinary contribution to the professionalisation of educators to this day.
In his engagement with educationally disadvantaged children and young people affected by poverty and disability – e.g. with Pestalozzi in Switzerland – he is already regarded as a pioneer of inclusion and a school for all.
Through his constructive criticism of the prevailing conditions of the time, Fröbel advocated the most sustainable and active education possible in the spirit of reform pedagogy, e.g. by introducing school gardens even at pre-school level.
Magnificently, Fröbel's pedagogy still has an international appeal and his ideas have an impact on society worldwide.

That in mind, I wish you all a profitable conference participation, inspiring discussions and contributions as well as international professional exchange.
I look forward to getting in touch with you personally and wish you have an inspiring and fruitful conference!

Prof. Dr. Andrea C. Schmid, Vice President of the International Froebel Society

Grußworte

Liebe Fröbel-Interessierte, liebe International-Froebel-Society (IFS)-Mitglieder,

in meiner Funktion als Präsidentin der IFS-Deutschland, Vizepräsidentin der IFS und Leiterin der Fröbelforschungsstelle der Universität Erfurt/Thüringen begrüße ich Sie herzlichst auf der 11. Biennial IFS-Konferenz!
Fröbels Menschenerziehung und sphärephilosophisches Konzept kann nicht genug gewürdigt und als wertvoller Beitrag zur heutigen (frühen) Pädagogik und Didaktik eingeschätzt werden. Anhand der folgenden fünf ausgewählten Beispiele soll diese Wertschätzung beispielhaft verdeutlicht werden:
Durch die Einbettung der Fröbel-Pädagogik in ein umfassendes Menschenbild und eine übergeordnete Sphärephilosophie steht sie heute immer noch in Theorie und Praxis auf tragenden Fundamenten.
Die Erfindung von vielfältigen Spielen, Liedern, Beschäftigungsmaterialien und „Gaben" leistet Fröbel bis heute in der Professionalisierung von Pädagog*innen einen außerordentlichen Beitrag.
In der Auseinandersetzung mit bildungsbenachteiligten, von Armut und auch Behinderung betroffenen Kindern und Jugendlichen – z.B. mit Pestalozzi in der Schweiz – gilt er schon als ein Wegbereiter von Inklusion und einer Schule für alle.
Durch seine konstruktiven Kritik an den herrschenden Verhältnissen der damaligen Zeit setzt sich Fröbel im Sinne der Reformpädagogik für eine möglichst nachhaltige und tätige Bildung ein, z.B. durch die Einführung von Schulgärten auch schon im vorschulischen Bereich.
Großartigerweise besitzt Fröbels Pädagogik immer noch eine internationale Strahlkraft und wirkt mit seinen Ideen auf eine weltweite Gesellschaft hinein.

In diesem Sinne wünsche ich Ihnen alle eine gewinnbringende Konferenzteilnahme, inspirierende Gespräche und Beiträge sowie den internationalen fachlichen Austausch.
Ich freue mich darauf, auch persönlich mit Ihnen in Kontakt zu treten, und wünsche eine inspirierende und gewinnbringende Konferenzteilnahme!

Prof. Dr. Andrea C. Schmid, Vizepräsidentin der International Froebel Society

Tina Bruce and United Kingdom Froebelian group, International Froebel Society

A tribute to Robert Nauer

Those of us who have met Robert Nauer and spent some time with him are, of course, feeling very sad. He was a true Froebelian, and unfailingly generous in welcoming visitors to Keilhau and engaging with us so that we came away having learnt so much more about being and becoming a Froebelian than we did before meeting him. Somehow the fact that we did not have the possibility of using words for discussions did not matter. Being with him in the woodwork classroom/workshop, or visiting the Froebel Archive in the tiny building in Keihau made things come clear. He would suddenly point at some wood, or show an illustration in a book. We could see that he lived for Keilhau and the development of the children was close to his heart. This is not a sentimental comment about his work as a teacher. His aim was to reach each child and to support them in being the best they could, with woodwork, with understanding and engaging with nature in the vegetable garden, taking groups of children on cycling trips beyond the garden into the wider landscape, just as Froebel did.

He was clearly a much valued and loved teacher in the Keilhau school. Else Arnold, who worked closely with him in the school, and so sensitively translated into English his words noted that the students quietly went to the garden and worked there after the sad news came. His influence and Froebelian way of educating could be felt in that time. His wife, Frau Kathrin Benkenstein puts into words what we feel having known him.

'He can still be felt everywhere.' And that is something very positive that we can take forward. We shall remember and take with us his deeply Froebelian way of being and surely, determinedly, we will strive to make Froebelian education real for the children and families we spend time with. Robert Nauer has left us an important Froebelian legacy.

Tina Bruce and United Kingdom Froebelian group, International Froebel Society

Eine Hommage an Robert Nauer

Diejenigen von uns, die Robert Nauer kennengelernt und einige Zeit mit ihm verbracht haben, sind natürlich sehr traurig. Er war ein echter Fröbelianer und unermüdlich großzügig, wenn es darum ging, Besucher in Keilhau willkommen zu heißen und mit uns ins Gespräch zu kommen, so dass wir am Ende so viel mehr darüber gelernt haben, wie man ein Fröbelianer ist und wird, als wir es vor unserer Begegnung mit ihm getan haben. Irgendwie spielte die Tatsache, dass wir keine Möglichkeit hatten, Worte für Diskussionen zu benutzen, keine Rolle. Wenn wir mit ihm in der Holzwerkstatt waren oder das Fröbel-Archiv in dem winzigen Gebäude in Keilhau besuchten, wurden uns die Dinge klar. Plötzlich deutete er auf ein Holz oder zeigte eine Abbildung in einem Buch. Wir konnten sehen, dass er für Keilhau lebte und ihm die Entwicklung der Kinder am Herzen lag. Dies ist keine sentimentale Bemerkung über seine Arbeit als Lehrer. Sein Ziel war es, jedes Kind zu erreichen und es dabei zu unterstützen, das Beste aus sich herauszuholen, mit Holzarbeiten, mit dem Verständnis und der Auseinandersetzung mit der Natur im Gemüsegarten, mit Gruppen von Kindern auf Fahrradtouren über den Garten hinaus in die weite Landschaft, so wie Froebel es tat.
Er war eindeutig ein sehr geschätzter und beliebter Lehrer in der Keilhau-Schule. Else Arnold, die eng mit ihm in der Schule zusammenarbeitete und seine Worte so einfühlsam ins Englische übersetzte, bemerkte, dass die Schüler nach der traurigen Nachricht ruhig in den Garten gingen und dort arbeiteten. Sein Einfluss und seine Fröbel'sche Erziehungsmethode waren in dieser Zeit spürbar. Seine Frau, Frau Kathrin Benkenstein, fasst in Worte, was wir fühlen, die wir ihn gekannt haben.
Er ist noch überall zu spüren. Und das ist etwas sehr Positives, das wir mitnehmen können. Wir werden uns an seine zutiefst Fröbel'sche Art erinnern und sie mitnehmen, und wir werden uns sicher und entschlossen bemühen, die Fröbel'sche Erziehung für die Kinder und Familien, mit denen wir Zeit verbringen, zu verwirklichen. Robert Nauer hat uns ein wichtiges froebelianisches Vermächtnis hinterlassen.

Tina Bruce und die Britische Froebel-Gruppe, Internationale Froebel-Gesellschaft

Articles

Jens Beljan

Childhood as a sphere of resonance and expressivity – In dialogue with Friedrich Fröbel

Abstract

Fröbel is widely regarded as the inventor of the kindergarten, yet behind his pedagogical inventions stands a complex philosophical project. This paper explores that project and shows, in dialogue with Fröbel, how his ideas can be taken up and carried forward today. Fröbel's theory of connectedness is read in light of resonance theory: in place of his ideal of a final unity, a processual, transformative understanding of relatedness emerges. His reflections on play are carried forward through the theory of expressive Bildung, which shows how such relations come into being. Expression in play thus appears as a foundation of human dignity. Finally, some implications for pedagogical practice are outlined.

Keywords: Resonance, expression, play, Froebel, educational philosophy

Zusammenfassung

Fröbel gilt als Erfinder des Kindergartens, doch hinter seinen pädagogischen Erfindungen steht ein komplexes philosophisches Projekt. Der Beitrag erkundet dieses Projekt und zeigt im Dialog mit Fröbel, wie sich seine Gedanken heute aufgreifen und weiterführen lassen. Fröbels Theorie der Verbundenheit wird im Licht der Resonanztheorie gelesen: An die Stelle seines Ideals einer vollendeten Einheit tritt ein prozesshaftes, transformatives Verständnis von Bezogenheit. Seine Überlegungen zum Spiel werden mit der Theorie der expressiven Bildung weitergeführt, die zeigt, wie solche Beziehungen entstehen. Ausdruck im Spiel erscheint so als Grundlage menschlicher Würde. Abschließend werden einige Implikationen für die pädagogische Praxis aufgezeigt.

Schlüsselwörter: Resonanz, Ausdruck, Spiel, Fröbel, Bildungsphilosophie

1 Introduction

In public discourse—and often even in academic debate—Friedrich Fröbel is chiefly recognized as the inventor of the kindergarten and as the designer of the gifts (*Spielgaben*). Behind these practical achievements, however, stands a complex philosophical project. It is not a closed system free of contradictions, but it does articulate the conceptual grounds of Fröbel's account of how children learn by opening up to the world. By doing this, it also lays the foundation for a life and a society that adults can experience as meaningful, joyful, and fulfilling. An adequate understanding of Fröbel's pedagogy must therefore include this theoretical background. Indeed, Fröbel's practical proposals address a fundamental challenge of modern society: the danger of social fragmentation and a culture that risks losing touch with itself.

Engaging with pedagogical classics, such as Fröbel, helps illuminate this broader societal background and the provenance of ideas that have decisively shaped our educational culture. Their concrete solutions are often historically bound and not fully transferable to the present; yet the patterns of perception and problem-awareness they provide remain instructive even today. Read in this way, classics can be understood as dialogical partners from the past (Großkopf & Winkler, 2025). Engaging with them can sharpen our sense of the present and of our own position within it. Fröbel is no exception: parts of his philosophical language may be dated, but the questions he poses and the structures of thought he offers retain an exemplary force.

This article approaches Fröbel through that conceptual lens while adopting a method suggested by Sauerbrey and Winkler (2018, p. 17) that may not be totally alien to Fröbel himself: we can "play" with his ideas—neither repeating them dogmatically nor dismissing them, but letting them inspire contemporary insight. The present contribution develops that conversation by reading Fröbel's *spherical philosophy* and his theory of "life-unification" *(Lebenseinigung*) in the perspective of the Resonance Theory (Rosa, 2019) and by connecting it to a second principle that Fröbel considered fundamental to all pedagogical practice, namely his reflections on expression and expressivity. While many of Fröbel's core pedagogical ideas are reflected in later works—such as his writings on the *Pedagogics of the Kindergarten* (1895) (*Die Pädagogik des Kindergartens*, 1862) or the *Mother-play and Nursery Songs* (1898) (*Mutter- und Koselieder,* 1844)—I refer here primarily to his main work, *The Education of Man* (2005) (*Die Menschenerziehung*, 1826), as it most clearly articulates the philosophical and anthropological foundations of his educational thinking. Building on the Theory of Resonance and on recent work in expressive learning (Beljan, 2025), the argument is that education—understood in the tradition of *Bildung*[1]*—seeks forms of relating that keep self and world mutually*

1 The term "Bildung" is left untranslated in this article, as it refers to a specifically German tradition of thought that cannot be adequately captured by the English term "education." Bildung encompasses ideas of self-cultivation, ethical formation, and the unfolding of one's inner potential in relation to the world, as found in the works of Herder, Humboldt, and Hegel.

responsive. Prior work has already pointed to links between resonance and Fröbel's pedagogy. Matthias Brodbeck (2017), a member of the Fröbel Research Centre in Erfurt, explored this connection in his contribution for the 200-year anniversary of Keilhau—the place where Fröbel founded the world's first kindergarten. At the same time, recent publications (Wasmuth, 2020, pp. 58–81; Winkler, 2024) reflect a renewed philosophical interest in Fröbel's so-called "spherical philosophy." This contribution seeks to build on both strands: it grounds the resonance perspective more deeply in Fröbel's philosophical thinking and proposes a shift in focus from Fröbel's question of *what* must be unified to *how* we relate to the world and how we express meaning within it.

2 The Modern Problem of Relatedness

One can hardly overestimate Fröbel's influence on modern self-understanding, on pedagogy, and even on the arts—although much of this impact is no longer fully recognized today. As a pedagogical thinker, he shaped education worldwide and continues to inspire both scholarly reflection and practical work (Read, 2019; Brosterman, 1997). Beyond his more visible contributions to teaching concepts, didactics, and the design of learning materials and environments, Fröbel's less obvious but equally profound influence lies in the way his work addresses a distinctly modern predicament. It is a predicament that still concerns us today, both in educational debates and in our everyday conduct of life. It was only against this background that Fröbel's ideas acquired the depth and precision through which they became inscribed into the self-understanding of modern education and pedagogy. To appreciate this, we need to recall the historical and cultural situation in which Fröbel wrote (Wasmuth et al., 2024)—a situation whose specific contents have changed, but whose underlying predicament has remained strikingly similar to our own.

Scholars such as Gerard Delanty have documented that, from the early modern period onward—roughly beginning around 1500 and gaining full momentum by 1800—European self-understanding first shifted gradually and then underwent a fundamental transformation (Delanty, 2019). Whereas earlier people conceived their place in the world as given within a cosmic, natural, or sacred order—an order that prescribed how they should live, what they needed to learn, and what they ought to strive for—modern individuals increasingly began to see themselves as autonomous and self-determining. A person born as a peasant, a noble, or a king no longer appeared to occupy a divinely predetermined place, but to stand within a world open to change and choice—one in which people could participate in shaping the conditions of their own lives and take part in deciding the course of their personal existence.

By the late eighteenth and early nineteenth centuries, this transformation had become socially visible in the aspirations of an educated middle class that strove for economic freedom, general knowledge, and political influence. Fröbel's own educational goal is situated within this horizon. He writes that the main aim of

education is the realization of freedom, self-determination, and self-choice.[2] At the same time, his thought still preserves a pre-modern element. Autonomy, he insists, must be achieved "in accordance with the eternal law" (Froebel, 2005, p. 13). What Fröbel retains from the past is not its entire framework but a guiding principle that roots human striving in a larger context. Grounded in his Christian faith and panentheistic worldview, this principle does not function as a rigid structure but as a dynamic source of orientation: freedom must remain attuned to a deeper law of life. In this way, Fröbel's philosophy reflects the transition of his time—carrying forward an orienting principle from the old world while translating it into a modern vision of freedom.

Fröbel stressed this point precisely because he recognized that the striving for freedom comes at a price. As traditional authorities loosened, new forms of distance emerged: from clergy and church into secular institutions; from the natural world into scientific analysis and exploitation; from local communities into urban anonymity; and, for many, from a lived sense of divine order into a human-centered search for meaning. The Enlightenment welcomed this new distance because it seemed to free human perception from subjective distortions. By stepping back, individuals could gain a more objective view of things and better recognize their functional interconnections. Such knowledge made it possible to control the environment as well as the self, and this very capacity for control was understood as the realization of autonomy and, ultimately, of human dignity. Romanticism, by contrast, protested that precisely this attitude—of distancing, objectifying, and instrumentalizing both the outer world and the inner life—threatened to sever human beings from their vital connections. By placing nature, community, and even the self under the regime of control, people risked losing contact with the very sources of meaning and vitality that make life feel significant.

Like many of his contemporaries, Fröbel struggled with the tension between the gains of autonomy and the risks of alienation—a challenge that shaped much of the intellectual climate of his time, from philosophy to literature and theology (Taylor, 2015, pp. 1–13). The problem had already been sharply outlined in Wilhelm von Humboldt's humanist concept of *Bildung*—not to be equated with education in the narrow institutional sense—which he defined as "the linking of the self to the world to achieve the most general, most animated, and most unrestrained interplay" (Humboldt, 2000, p. 58; cf. Bauer, 2003). Education, in this sense, means more than transmitting knowledge, and it is equally more than adapting to a given, pre-determined order; it is about cultivating a living reciprocity, a dynamic relation in which self and world shape one another. Fröbel, however, approached this problem from a different angle. Instead of developing his ideas primarily in

2 In the German edition of Die Menschenerziehung Fröbel writes: "Das höchste vollendetste Musterleben […] fordert […] dass er, jeder Mensch nach ewigem Gesetze, mit Freyheit, Selbstbestimmung und Selbstwahl aus sich hervorgehe" (Fröbel, 1826, p. 17). The English translation renders this passage as: "The highest eternally perfect life itself […] would have each human being develop from within, self-active and free, in accordance with the eternal law" (Froebel, 2005, p. 13).

abstract philosophical terms, he turned to the concrete reality of childhood. By closely observing children and seeking to understand their play, he recognized in play a privileged form of relatedness: it both expresses and deepens a vital connection that supports learning, freedom, meaning, and joy. To explain what gives play this particular power, Fröbel identified two elementary principles at work within it: the principle of unifying connectedness and the principle of expression.

3 Unifying Connectedness

Fröbel's first principle responds to a modern condition of fragmentation. To become whole, human beings must be able to connect—*with nature, with other people, and with the divine* (Froebel, 2005, p. 5). Play, for Fröbel, both expresses this impulse and strengthens it. In play, the child brings self and world into a living relation—a life-unifying movement that is felt as meaningful. This insight remains timely. It helps us think not only about learning but also about social challenges: the rise of isolation, polarization, and the erosion of shared agency in democracies. Still, Fröbel's ideal of unity faces two challenges that contemporary theory cannot ignore.

The *first* challenge is of a practical nature and concerns Fröbel's educational ideal (*Bildungsideal*). Behind the idea of a fully unified life stands the assumption that the different aspects and facets of the self could be harmoniously integrated with the various domains of social, cultural, and spiritual life. This vision of wholeness was widespread in Fröbel's time. Humboldt's educational ideal, for instance, aimed at the all-round and harmonious unfolding of personality (Humboldt, 1792/2009), while Hegel described the unity of life in the absolute spirit, in which all ruptures, resistances, and contradictions would ultimately be overcome, preserved, and elevated to a higher unity (Hegel, 1807/2003). In the context of late modernity, however—a social formation marked precisely by the consequences of modern differentiation and pluralization (Luhmann, 2012, 2013; Reckwitz, 2020)—such a fully harmonious unity of the person with the world is not attainable. Life is dynamic, diverse, and often incommensurable. Rather than envisioning rounded completeness, contemporary educational theory orients practice toward transformative connections that enable learning across differences and partial perspectives.

The *second* challenge is epistemic. Fröbel sometimes presupposes the existence of a stable "essence" of human life that education should realize (cf. Froebel, 2005, pp. 4–5). Such an essentialism assumes that we can know what this essence consists of—what the true state of existence is, and what the authentic self behind all appearances must look like. Today, however, we live in a world marked by plurality and complexity. From a cultural-theoretical point of view, the idea of a single universal essence can no longer be sustained; from an epistemological perspective, it is equally indefensible. And the implications are pedagogical as well: if education is tied to one ultimate life goal, it risks excluding all those who cannot or do not fit that definition. Essentialism, in this sense, narrows the horizon of education instead of opening it.

To take Fröbel's basic concern seriously and to let his thought inspire contemporary reflection, I suggest that we preserve the structure of connectedness but relocate its goal. "Life-unifying" connectedness should not be understood as the attainment of a final, all-encompassing unity, but rather as an ongoing, processual form of relation. The task is not to merge all aspects of life into a single harmonious whole, but to cultivate transformative connections that allow self and world to remain in a dialogically responsive exchange and to change through that interaction. Unification, in this sense, is not an achieved state but a dynamic movement of becoming related. This is precisely what Fröbel believed he could observe in children's play: a movement in which the tendency toward life-unifying connection becomes concretely visible. For him, play embodied the possibility of a harmonious unity of self and world (cf. Froebel, 2005, p. 55). From a contemporary perspective, however, the same phenomenon can also be read as an instance of processual, transformative relating—less a final state of total unity than an ongoing practice of entering into relation. In this sense, play illustrates both Fröbel's ideal and the way it can be reinterpreted today. Here, resonance theory provides a precise vocabulary for describing and analyzing such relations.

4 Resonance: A Fourfold Model

Resonance is not an immutable vibration or a static state of attunement, but a relational phenomenon (Rosa, 2019; Beljan, 2019; Beljan, Winkler, 2019). It signifies a way of being in touch with the world that takes shape differently depending on who or what enters into relation. Resonance thus designates a specific quality of connectedness—with other people, with nature, with works of art or cultural practices, with ideals, and activities, but also with one's own body, thoughts, and emotions. It is a form of interaction that is experienced as a relation of response. Fröbel, by contrast, speaks of harmony and life-unity—a dynamic totality in which polarity and contrast are not just acknowledged but ultimately integrated. His concept affirms connection through unity; resonance theory, by contrast, affirms connection through difference. While Fröbel's vision points toward divine order as the underlying whole, resonance resists closure and final synthesis, emphasizing relational openness without metaphysical culmination. Resonance describes a tension that arises precisely because two or more poles of interaction retain their distinctiveness and, in that very otherness, touch each other and have something to "say" to each other.

In educational contexts, such resonant relations are particularly important because they can foster learning and growth (Felski, 2020). Resonance is more than interaction: it is a relation that moves and transforms, opening new possibilities for understanding and self-expression. Precisely because resonance is not automatic but conditional, pedagogy plays a decisive role. It requires spaces, tasks, and teaching and learning formats that cultivate attentiveness and openness. Resonance is therefore never guaranteed but must be made possible. From this

perspective, four elements can be distinguished that together constitute resonant relations: affection, self-efficacy, uncontrollability, and transformation.

Affection

Resonance begins with being affected. Something "reaches" us—through a material, an idea, a person, a task, a landscape, and it touches us in a bodily, visceral way. Resonance, however, is not tied to any single mood or feeling. Sadness, for example, can create deep connectedness when it is shared and opens us to one another, yet the same sadness, experienced in isolated despair, can cut us off from the world. Joy, too, can either invite resonance or block it: shared joy can spark connection, while gloating over another's failure turns into repulsion. In classrooms, we can often sense this difference immediately. Whether a question, an object, or a peer's thought has the power to move us depends not on its content alone but on its capacity to touch us in a way that invites response.

While resonance theory thus emphasizes relational responsiveness and conceives resonance as a deeply social phenomenon, Fröbel grounded his thinking in the category of "force" (*Kraft*) (Froebel, 2005, pp. 166–195)—a vital force inherent in every child that drives the unification of self and world, most clearly visible in play. Unlike resonance pedagogy, this is a natural-philosophical concept that underpins his reflections on play and child development. The difference in categories also points to a difference in orientation: for Fröbel, force aims at a life-unifying effect, while in resonance theory, being affected provides an impulse for transformative connectedness that remains open-ended and processual.

Self-efficacy

Resonance requires that we are not only affected but also able to respond. Human beings want not only to be touched but to touch in return—to reach, move, and shape. What matters here is not control in the sense of domination, but the felt experience that one's own voice, gesture, or action makes a difference. In educational settings, this means that students must sense that their questions, ideas, or creative contributions are not absorbed into silence but can resonate with others. A child who notices that their drawing, their question in class, or their playful invention sparks recognition and response gains a formative experience of agency: what I do matters, it reaches others, it changes something.

Fröbel's pedagogy placed this dimension at the center of his principle of self-activity (*Selbsttätigkeit*) (Froebel, 2005, p. 11). For him, play was not only the child's way of being affected by the world but also the privileged mode of actively shaping it. By building, arranging, and experimenting with the gifts, children experience themselves as capable of leaving traces in the world and, at the same time, inscribe themselves into the order and structure of the world. This marks a crucial parallel and an important difference: whereas resonance theory emphasizes mutual, active responsiveness that generates a new quality of interconnectedness, Fröbel understands the child's activity as the unfolding of inner powers through which

the child appropriates the structure of the world and is, in turn, shaped by it. The world, for Fröbel, is not an open field of interaction but a meaningful cosmos whose hidden order becomes accessible through play.

Uncontrollability

Resonance cannot be commanded. We can create conditions that make it more likely—through thoughtful arrangements, materials, and attentiveness—but we can never guarantee that resonance will occur. It is always mutual: not mere projection and not mere echo, but an encounter of distinct "voices." Resonance is not chaos: it requires a clarity of address and response. If too many voices sound at once and blend into mere noise, the possibility of answering dissolves. This uncontrollability is not a defect but the very mark of resonance: it comes as a gift rather than as the product of planning or control.

Here, a contrast with Fröbel becomes visible. His spherical philosophy assumes that human development is guided by a higher law of life (Froebel, 2005, p. 1). The child's play unfolds powers already inscribed in the order of the cosmos and thus follows a predetermined direction toward unity. Resonance theory, by contrast, insists on the openness of the process. Resonant encounters are not guaranteed by a cosmic principle; they emerge performatively in the interplay of self and world, and their outcome remains transformative and contingent. Where Fröbel saw play as realizing a law-governed harmony, resonance pedagogy understands it as cultivating the capacity to remain responsive to what cannot be controlled.

Transformation

Resonance changes both sides and their relation. In German, the term *Anverwandlung* (transformative acquisition) captures this: a process of becoming related to the other in a way that transforms both, while preserving difference. Resonance is not about dissolving boundaries into unity, but about entering into a relation that leaves neither side unchanged. Importantly, resonance does not eliminate indifference or repulsion. Life necessarily contains such moments, and resonance pedagogy does not dream of constant attunement. What it cultivates instead is the capacity to remain in the process: to let even resistance or dissonance become an impulse for renewed connection.

Fröbel, by contrast, articulated this dynamic in terms of a principle of unity. His well-known dictum "diversity in unity and unity in diversity" (Froebel, 2005, p. 169) expresses the idea that difference ultimately finds reconciliation within a higher harmony. Resonance theory departs from this orientation. Transformation here does not culminate in unity, but in an ongoing process of becoming responsive. The aim is not a final synthesis, but the sustained ability to engage difference as a source of growth.

5 Expressivity: Making the Internal External and the External Internal

Recognizing that Fröbel's great achievement was to take the child's connectedness with the world seriously and to place it at the center of his pedagogy, we must add a second principle to grasp the full philosophical framework of his thought. Alongside the principle of unifying relatedness, Fröbel identified expression as fundamental to childhood. He famously insists that education requires "to make the internal external, and the external internal" (Froebel, 2005, p. 41). The world does not simply imprint itself on the child, nor does the child merely externalize a pre-formed interior. Learning happens as a formative exchange in which inner and outer are expressed and articulated together.

Resonance brings into view a complementary question: where do the voices, tones, or impulses come from that can answer one another? How do subjects and the world acquire the capacity to enter such relations? Fröbel's answer is disarmingly direct: they must be expressed. Expression is not an ornament added to cognition, nor a secondary act of display. It is the generative power that allows inner life, material things, and cultural forms to become articulate, to show themselves in ways that can be responded to. Without expression, there can be no resonance (Beljan, 2025, pp. 107–117). Where resonance describes the quality of a good pedagogical relation, expressivity identifies the process through which such relations come into being.

Building on Fröbel's insight, I would like to update the theory of expressive learning. For Fröbel, what comes to expression in the child's play are the essential forms and laws of a spherical order of life. Here, his thought retains an essentialist dimension: expression reveals what is already given in the cosmos's structure. While I do not follow this essentialism, I take Fröbel's principle of expression as an invitation to think further. In line with resonance pedagogy, I propose a processual and performative understanding of expression—one that does not presuppose fixed essences but conceives expressive acts as the very medium through which meaning and connectedness are generated. In this way, Fröbel's principle of expression can be reinterpreted not as the revelation of eternal forms but as the performative process through which new forms of meaning and connectedness continually emerge.

First, expression is not the reproduction of predefined content. It is a process of shaping—of giving form, figure, or structure to what addresses us. When a child stacks blocks, sketches a pattern, sings a motif, or tells a story, she is not merely displaying an inner state. She is articulating something sensed as significant in a shareable medium. That outward shaping, in turn, transforms the inner world: how she perceives, feels, compares, judges, and intends.

Following Humboldt, we can call this the "double articulation" (Jung, 2009, pp. 79–122) of expression: inwardly (self-formation) and outwardly (world-formation). In this light, Fröbel's principle of life-unifying connection becomes tangible: inner and outer are bound together in a *formed relation*. Play is paradigmatic be-

cause it invites repeated cycles of shaping and reshaping, each time reconfiguring the relation among material, idea, rule, and self in an open process of formation.
A second aspect is epistemic. While Fröbel assumed that the structure of meaning lies already embedded in the cosmos and can be revealed through expression, I argue that meaning is not simply "there" to be lifted from objects, but is constituted in the very act of expression. We often discover that we truly understand a phenomenon only when we can translate it into our own words, sketch it, model it, or demonstrate it to others. In this sense, expression is not secondary to knowledge but constitutive of it: what is vague or implicit becomes clarified in the very act of articulation.
Fröbel emphasizes that children's diffuse impressions, half-formed ideas, or chaotic feelings achieve clarity only when they find outward form. Expression stabilizes and structures what would otherwise remain fleeting. The task of education is therefore not only to transmit content but to foster articulation: to provide materials, time, language, and responsive attention so that something can take shape. The educator becomes a partner in this process, helping the child move from the inchoate to the comprehensible.
Third, expression is the medium that links us to the world, to others, and—if one wishes to speak with Fröbel—to the divine. In relation to nature, expression leads us outward into the given structures of the objective world. By shaping materials, confronting resistance, and exploring patterns, children learn the lawfulness of their environment not as abstract information but as lived experience. Expression thus draws us beyond ourselves into a dialogue with what is there, with what resists and yet responds.
Expression is equally social. To express is always, in some sense, to share. Words, gestures, drawings, or constructions are invitations to another's understanding. In this way, expression creates bonds and opens public spaces in which meaning can circulate, be acknowledged, or even contested. The social dimension of expression anchors education in reciprocity: what is articulated becomes available to others and, in turn, reshapes the one who expressed it.
Finally, Fröbel interprets expression in relation to the divine. For him, the creative act of bringing inner life into outward form echoes the divine act of creation. In the capacity to express, human beings participate in that same generative power—not in the sense of being godlike in essence, but in the sense of exercising a force that connects them with the source of life. Even if one does not adopt Fröbel's metaphysical framework, the point remains: expression discloses what we take to be ultimate or worthy. It makes visible the values in whose light we wish to appear before one another.

6 Dignity as an Expressive Value: A Secular Translation

One way to bring Fröbel's religious horizon into contemporary view is to translate his appeal to the divine into the language of human dignity. For Fröbel, the power of expression was more than a practical faculty; it carried a creative significance

rooted in his Christian and panentheistic worldview. In the child's ability to bring inner life into outward form, he recognized an analogy to divine creativity: in shaping and giving form, the human being participates in the generative power through which the world itself comes into being. In a secular frame, this creative power of expression can be understood as the condition that allows human beings to appear in the world as themselves.

Dignity, in this sense, concerns how persons are permitted to show up—to be seen, heard, and taken seriously (Khaitan, 2011). When dignity is violated, our capacity for expression is curtailed: we are prevented from manifesting who we are in the shared world. This is why freedom of expression carries such weight in human rights discourse: it protects the conditions under which persons can appear as bearers of dignity. From this angle, early childhood education is not simply preparation for later competencies. It is the cultivation of expressive capacities and spaces without which dignity cannot fully unfold. Fröbel's warning is clear: if we neglect the expressive roots of play—if we reduce learning to imitation, reproduction, or narrow outcomes—we undermine one of the central foundations of a flourishing life.

7 Implications for Educational Practice

The dialogue between Fröbel and contemporary theories of resonance and expression has been conducted here on a philosophical level. Yet, such reflection is not an abstract exercise alone: it has direct and concrete consequences for educational practice. If education is understood not primarily as the transmission of knowledge but as the cultivation of resonant and expressive relations, then classrooms, kindergartens, and institutions must be organized accordingly. The following six implications highlight how this perspective can inform pedagogical design, guiding educators in their daily work with children and shaping the cultures of learning they inhabit.

Design for addressability (affection): Learning spaces, tasks, and teaching formats can be arranged so that material diversity, aesthetic quality, and meaningful input have the chance to "speak." Moments of silence and focus are just as important as variety and joy.

Enable answerability (self-efficacy): Children need opportunities to respond: to try, modify, and try again. Feedback that confirms that their actions make a difference can nurture confidence without becoming controlling.

Honor uncontrollability: Educational planning can remain open-ended. Not every activity will "work," but even missed moments can yield valuable insights for the next attempt. What matters is not the flawless execution of a plan but the ongoing responsiveness to what emerges. In this way, even interruptions and failures become part of a learning process that stays alive to the unexpected.

Value transformation over performance: What matters is not only measurable outputs but also shifts in relation: new questions, fresh ways of attending, and unexpected connections. Success in education cannot be reduced to the completion of tasks or the production of correct answers; it also lies in the subtle changes that occur in how learners relate to themselves, to others, and to the world.

Center expressive media: Different media, such as language, drawing, building, singing, moving, and digital creation, provide different paths of articulation. A range of possibilities allows children to find voices suited to the matter at hand. What counts is not mastery of one form but the chance to shape and share meaning.

Protect the dignity of appearance: Education flourishes in climates where children's expressions are welcomed as contributions to a shared world. Practices of recognition, turn-taking, and public celebration can help to make this dignity tangible.

8 Conclusion

Fröbel's great achievement was to take the child's connectedness with the world seriously and to place it at the very center of pedagogy. Equally significant was his insight that childhood is marked by a power of expressivity and that play is the privileged site where these expressive forces unfold. In both respects, he showed how the fundamental conditions of human development shape not only learning but also the possibility of a humane society. Starting from his principle of life-unifying relation, resonance offers an updated conceptual language for describing its qualities—dynamic, fragile, and transformative rather than static or complete. Expressivity, in turn, reveals how such relations are generated in practice: by giving form to what addresses us and by making inner and outer articulate together. The task for educators today is therefore not to secure a final unity but to sustain open processes of relation. Education must cultivate conditions in which children can be addressed by the world, respond in their own voices, and be transformed together with what they engage. Seen in this light, early childhood settings can become laboratories of democratic life: places where multiplicity seeks provisional unity without erasing difference; where dignity is enacted as the right to appear; and where joy in learning is not incidental but the sign of a living relation.

Bibliography

Bauer, W. (2003). Introduction. Educational Philosophy and Theory, 35(2), pp. 133–137.
Beljan, J. (2025). Expressive Bildung. Über Ausdruck, Entfremdung und die Fähigkeit zu lernen. Weinheim/Basel: Beltz Juventa.
Beljan, J. (2019a). Schule als Resonanzraum und Entfremdungszone. Eine neue Perspektive auf Bildung. Weinheim/Basel: Beltz Juventa.
Beljan, J. & Winkler, M. (2019b). Resonanzpädagogik auf dem Prüfstand. Über Hoffnungen und Zweifel an einem neuen Ansatz. Weinheim Basel: Beltz.
Brodbeck, M. (2017). Resonanzen: Gedanken zu 200 Jahren Keilhau. Eine Erinnerung für die Zukunft. Festrede. Gehalten am 21. April 2017. https://www.froebelweb.de/images/pdf/Rede%20Keilhau20170401_fuer_www.pdf
Brosterman, N. (1997). Inventing Kindergarten. New York: Harry N. Abrams.
Delanty, G. (2019). Formations of European Modernity. A Historical and Political Sociology of Europe. Palgrave: Macmillan.
Felski, R. (2020). Resonance and Education. In: on education. Journal for Research and Debate, 3(9), 1–5.
Froebel, F. (2005). The Education of Man. Translated by W. N. Hailmann. Mineola, New York: Dover Publications.
Fröbel, F. (1898). Mother-play and Nursery Songs. Poetry, Music and Pictures for the Noble Culture of Child Life, with Notes to Mothers. Ed. E. P. Peabody. Translated by F. E. Dwight and J. Jarvis. Boston: Lee and Shepard Publishers.
Froebel, F. (1895). Pedagogics of the Kindergarten: Or, His Ideas Concerning the Play and Playthings of the Child. Translated by Josephine Jarvis. New York: D. Appleton and Company.
Fröbel, F. (1862). Die Pädagogik des Kindergartens. Gedanken Friedrich Fröbel's über das Spiel und die Spielgegenstände des Kindes. In W. Lange (Ed.), Friedrich Fröbel's gesammelte pädagogische Schriften. Zweite Abteilung: Friedrich Fröbel als Begründer der Kindergärten. Berlin: Verlag von Th. Chr. Fr. Enslin.
Fröbel, F. (1844). "Kommt, laßt uns unsern Kindern leben!" Mutter- und Kose-Lieder. Dichtung und Bilder zur edlen Pflege des Kindheitslebens. Ein Familienbuch. Blankenburg: Anstalt zur Pflege des Beschäftigungstriebes der Kindheit und Jugend.
Fröbel, F. (1826). Die Menschenerziehung, die Erziehungs-, Unterrichts- und Lehrkunst, angestrebt in der allgemeinen deutschen Erziehungsanstalt. Keilhau: Verlag der allgemeinen deutschen Erziehungsanstalt.
Großkopf, S. & Winkler, M. (2025). Über das Unbehagen am Klassischen: Grauzonen in der Pädagogik. Baden-Baden: Ergon Verlag.
Hegel, G. W. F. (1807/2003). The Phenomenology of Mind. Translated by J. B. Baillie. Mineola, New York: Dover Publications.
Humboldt, W. v. (2000). Theory of Bildung (1794/95). Translated by G. Horton-Krüger. In I. Westbury, S. Hopmann & K. Riquarts (Eds.), Teaching as a Reflective Practice (pp. 57-62). New York/London: Routledge.
Humboldt, W. v. (1792/2009). The Limits of State Action. Cambridge: Cambridge University Press.
Jung, M. (2009). Der bewusste Ausdruck. Anthropologie der Artikulation. Berlin: De Gruyter.
Khaitan, T. (2011). Dignity as an Expressive Norm: Neither Vacuous Nor a Panacea. Oxford Journal of Legal Studies, pp. 1–19.
Luhmann, N. (2012). Theory of Society. Vol. 1. Translated by R. Barrett. Palo Alto: Stanford University Press.
Luhmann, N. (2013). Theory of Society. Vol. 2. Translated by R. Barrett. Palo Alto: Stanford University Press.
Read, J. (2019). Tracing Froebel's Legacy: The Spread of the Kindergarten Movement Across Europe and Beyond and his Influence on Educators. In T. Bruce, P. Elfer, S. Powell & L. Werth

(Eds.), The Routledge International Handbook of Froebel and Early Childhood Practice. Re-articulating Research and Policy (pp. 14–18). New York: Routledge.
Reckwitz, A. (2020). The Society of Singularities. Translated by C. A. Pakis. Cambridge: Polity Press.
Rosa, H. (2019). Resonance. A Sociology of Our Relationship to the World. Translated by J. C. Wagner. Cambridge: Polity Press.
Sauerbrey, U. & Winkler, M. (2018). Friedrich Fröbel und seine Spielpädagogik. Eine Einführung. Paderborn: Ferdinand Schöningh.
Taylor, C. (2015). Hegel and Modern Society. Cambridge: Cambridge University Press.
Wasmuth, H. (2020). Fröbel's Pedagogy of Kindergarten and Play. Modifications in Germany and the United States. New York/London: Routledge.
Wasmuth, H., Sauerbrey, U. & Winkler, M. (2024). Finding Froebel. The Man Who Invented Kindergarten. London/New York: Bloomsbury Academic.
Winkler, M. (2024). Froebel's *Law of Spheres* as a Theoretical Groundwork for his Pedagogy. In T. Bruce, Y. Nishida, S. Powell, H. Wasmuth & J. Whinnett (Eds.), The Bloomsbury Handbook to Friedrich Froebel (pp. 29–35). London/New York/Dublin: Bloomsbury Academic.

Author

Beljan, Jens, Prof. Dr.
Freie Hochschule Stuttgart, Germany
Professor of Education
Main areas of work and research: educational and social philosophy; ethical, cultural, and social conditions of teaching and schooling; resonance pedagogy; expressive learning; and the phenomenology of learning
Jens.Beljan@freie-hochschule-stuttgart.de

Ines Freitag-Amtmann

Froebel today: Explorer Dialogues with children

Abstract

Friedrich Froebel can be seen as an explorer in different fields. Communication with children is central in his ideas. The relevance of hands-on, experiential learning is often discussed. This article uses data from a study about *cognitive activation* in German *kindergarten***.** The aim of the study was to develop an ideal type of – *Explorer Dialogues* – which will support in-depth understanding of natural phenomena. In this article the description and definition of Explorer Dialogue will be discussed. Five different types of dialogues during inquiry with children will be presented, and it is also shown how to start and support dialogues during active work with children. At the same time, it is made clear how teachers can encourage children to communicate during *Inquiry-based Learning* so that *activity-integrated language development* takes place. Explorer Dialogues are examples for Freedom with Guidance.

Keywords: cognitive activation, kindergarten, Explorer Dialogues, Inquiry-based Learning, activity-integrated language development

Zusammenfassung

Friedrich Fröbel kann als Forscher und Entdecker in verschiedenen Bereichen angesehen werden. Die Kommunikation mit Kindern ist zentral für seine Ideen. Die Bedeutung des praktischen, erfahrungsorientierten Lernens wird oft diskutiert. Dieser Artikel stützt sich auf Daten aus einer Studie über *kognitive Aktivierung* in deutschen *Kindergärten*. Ziel der Studie war es, einen Idealtyp von *„Forscherdialogen"* zu entwickeln, der ein tiefgreifendes Verständnis natürlicher Phänomene fördert. In diesem Artikel werden die Beschreibung und Definition des Forscherdialoges diskutiert. Es werden fünf verschiedene Arten von Dialogen während forschenden Lernens mit Kindern vorgestellt und es wird gezeigt, wie man Dialoge während der aktiven Arbeit mit Kindern am Beispiel des Explorierens initiieren und unterstützen kann. Gleichzeitig wird deutlich gemacht, wie Pädagog*innen Kinder während des *forschungsbasierten Lernens* zur Kommunikation anregen können, damit eine *aktivitätsintegrierte Sprachentwicklung* stattfindet. Forscherdialoge sind Beispiele für Freiheit mit Anleitung – Freedom with Guidance.

Schlüsselwörter: Kognitive Aktivierung, Kindergarten, Forscherdialoge, forschendes Lernen, aktivitätsintegrierte Sprachförderung

1 Introduction

Cognitive activating dialogues and thinking during Inquiry-based Learning in early childhood rarely receive sufficient attention. Theoreticians and practitioners alike express their unease concerning frequently advised activity-orientated learning opportunities and question whether these suffice to promote a real understanding of science (Ansari, 2009; Freitag-Amtmann, 2024; Ramseger, 2018; Wagenschein, 1965). Some practitioners have asked for structural support to enable an orientation towards understanding science beyond hands-on activities. Those questions are central to this article.

The aim of this article is to describe an ideal type of Inquiry-based Dialogue, which will support children's in-depth understanding of natural phenomena. The different steps of this process are presented in a model called " KAD.NAWI Structural Model for cognitive activating dialogues with children during Inquiry-based Learning" (KAD NAWI Strukturmodell kognitiv aktivierender Dialoge beim naturwissenschaftsbezogenen Forschen mit Kindern in pädagogischen Settings), that was developed in the thesis from the author specifically for this purpose. The model is tested regarding its heuristic quality through the analyses of empirical video data of learning opportunities and further refined on the base of this analyses.

By using the KAD NAWI model in the study it was possible to clarify whether and to what extent the teaching concept of a science expert and reflected practitioner supports the cognitive activation of children. Videotaped teaching units were analysed in terms of surface structure as well as underlying structure. Results from analyses using time-sampling and event-sampling coding (Pauli, 2012) and content analysis (Kuckartz, 2005) following the Grounded Theory method (Strauss & Corbin, 1996) were triangulated as mixed methods. The aim of this part of the study was to discover the "choreography" (Oser & Baeriswyl, 2001) of guided and structured learning opportunities during Inquiry-based Learning episodes. The result is an example of Freedom with Guidance.

On the grounds of the theoretical premises different qualities of Explorer Dialogues were expected. These were grouped into different types of dialogues and were then viewed in relation to the different steps in science-related work with children in pedagogical settings and related competencies in scientific thinking and acting. Further types of dialogues were found through the analyses of empirical video data of learning opportunities. The study contributes to the awareness of the importance of a professional grounding of a combined science and language education in early childhood as demanded by the signatories of the Frankfurt Declaration of Early Childhood Language and Science Education („Frankfurter Erklärung zur frühen sprachlichen und naturwissenschaftlichen Bildung") in 2015 (c.f. vgl. Fachforum „Sprache und Naturwissenschaft", 2015, p. 1). Continuing a thought by Wagenschein (Wagenschein, 2010) the results of the study can be summarized as follows: When children are cognitively activated during inquiry-based science learning, they often think in surprising and in surprisingly deductive ways.

This article describes what is meant by Explorer Dialogue. It presents five different types of dialogue in research and shows how to initiate and facilitate dialogue in exploration activities. The aim is to motivate readers to conduct dialogue in their own work with children and activities. At the same time, it illustrates how educators can encourage children to communicate during exploration so that language development is integrated into activities.

2 KAD.NAWI – Structure of Explorer Dialogue

"Everything that floats has fins" (Hannah, age 4). "The potato sinks because it's heavy" (Leon, age 5). "The ball floats. There's air in it" (Lilli, age 4). These statements were made by children commenting on dialogue-oriented learning opportunities in a German kindergarten. They are an expression of thinking aloud during science-related research in search of knowledge (Freitag-Amtmann, 2020, p. 19). Researching with children in an educational context is linked to interactions between several people. Dialogue is indispensable as a means of communicating about the form and content of the joint approach. But what is the quality of dialogue in research? What goals can be achieved with it?
Studies show that practitioners in daycare centers, kindergarten and elementary schools engage in few cognitively stimulating interactions (König, 2009; Ramseger, 2009; Wadepohl, 2021). The positive impact of cognitively stimulating interactions on children's development is now widely recognized. Studies on the construct of sustained shared thinking demonstrate many benefits for mental and linguistic development (Siraj-Blatchford, Sylva, Muttock, Gilden & Bell, 2002).

2.1 Definition of Explorer Dialogues

Explorer Dialogues are cognitive, productive, and language-promoting interactions between adults and children or between children and adults in the context of science-related exploration.
In its basic structure, the Explorer Dialogue follows the phases of a scientific research process and focuses on promoting skills for scientific thinking and acting. Exploration and discussion are equally important parts of the process. The action-oriented approach of the children and the educators themselves is complemented by the additional discussion-oriented approach of the practitioners. With the aim of understanding science-related work, cognitive activation and content structuring stimulate thinking and problem-solving processes in children. Anyone who engages in dialogue while conducting exploration and follows the steps of research is undergoing an Explorer Dialogue.

2.2 The Model of Interaction KAD.NAWI – Structural Model for cognitive activating dialogues with children during Inquiry-based Learning

What makes cognitive activation so difficult? One area in which an English study found more sustained shared thinking was exploration and investigation (Sylva, Melhuish, Sammons, Siraj-Blatchford & Taggart, 2004). This appears to be an area of education that offers great potential for opportunities to speak. If a structuring aid existed for this purpose, it could be helpful to educational professionals in practice. This gave rise to the idea of developing such a structuring aid to stimulate cognitively activating dialogues during Inquiry-based Learning. Dialogues during everyday exploration in kindergarten contribute to a deeper understanding of scientific contexts. They challenge children's thinking and promote their scientific thinking and acting skills, especially when ideas, hypotheses, and explanations are communicated (Fthenakis, 2009, p. 81).

- Overview of competencies for scientific thinking and action (Fthenakis, 2009, p. 81):
- Observe
- Describe
- COMMUNICATE – Communication involves describing and expressing ideas, hypotheses, and explanations in oral and written form.
- Compare
- Classify
- Measure
- Experiment.

Based on scientific teaching methodology, cognitive science, learning psychology, and early childhood education research, the author developed the concept p. 250).

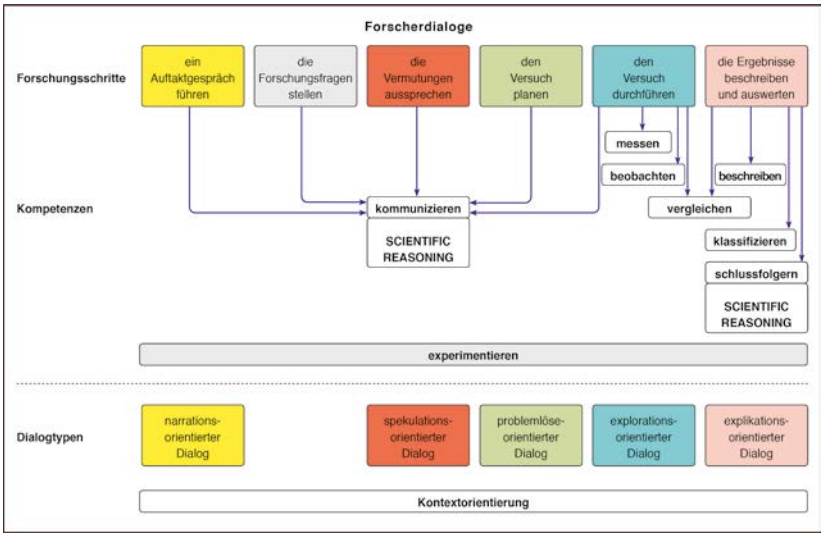


Fig. 1: Model of Interaction KAD.NAWI – structural model of cognitively activating dialogues in science-related Inquiry-based Learning with children in educational settings (Freitag-Amtmann, 2020, p. 250)

An ideal Explorer Dialogue, as shown in Figure 1, can be described on three levels. The first level consists of the six research steps (Forschungsschritte). The second level consists of the eight competencies for scientific thinking and acting (Kompetenzen). The third level consists of five types of dialogue (Dialogtypen). Each research step can promote different competencies for scientific thinking and acting and creates an opportunity for dialogue. In the model, the research steps and dialogue types are color-coded to support their practical connection.

Research steps and competencies
Six didactic segments for dialogues during exploration have become important as research steps:

1) Hold an introductory discussion (ein Auftaktgespräch führen) with the aim of giving children the opportunity to discuss their everyday experiences with the phenomenon being investigated and thus activate their prior knowledge (yellow).
2) Asking research questions (die Forschungsfragen stellen) with the aim of establishing a question that triggers a genuine problem-solving or knowledge-gathering process; questions can be submitted by children and adults (gray).
3) Expressing assumptions (die Vermutungen aussprechen) with the aim of communicating assumptions or assertions as well as general ideas (red)

4) Plan the experiment (den Versuch planen) with the aim of planning the investigation together in order to promote problem-solving skills (green).
5) Carry out the experiment (den Versuch durchführen) with the aim of implementing the experiment or test that has just been planned (blue).
6) Describe and evaluate the results (die Ergebnisse beschreiben und auswerten) with the aim of perceiving the observation results and securing them through various modes, such as conversation, drawings, or tables, as well as drawing conclusions from the observations by referring to the initial question and the hypotheses or assumptions. Discussions may lead to arguments (pink).

Dialogue types
Except for the research step "Asking research questions," discussions of theoretical assumptions and practical observations have shown that dialogues are entirely possible in all other research steps. In the following section of the article definitions of the five possible types of dialogue and examples are provided (Freitag-Amtmann, 2020, Materialband, p. 19 f.).

1 Narrative-oriented dialogue (narrationsorientierter Dialog)
Narration is a story or a report. Narrative-oriented dialogue in this setting arises in particular when children are encouraged to tell stories. It can serve to enable children to talk about their experiences with certain phenomena. This is a very context-oriented dialogue, as it activates images from the children's everyday lives. "Tell me about..." is a typical request for narration made by an educator to a child. Open-ended questions about the experiences shared can expand the conversation.
Example: All children can actively participate in the conversation, as each child is encouraged to speak and all children can contribute something from their own lives to a conversation about, for example, sand, water, and the sea.

2 Speculation-oriented dialogue (spekulationsorientierter Dialog)
Speculation is derived from the Middle High German word speculieren, where it is introduced as peering and observing. Here it is used in the sense of conjecturing or surmising something. An episode of shared attention that invites speculation can be described as speculation-oriented dialogue.
Example: A dialogue is initiated with the speculative phrase "What if...," which invites a thought experiment. Questions such as "What do you mean?" or "What do you think?" can also encourage speculation.

3 Problem-solving dialogue (problemlöseorientierter Dialog)
A typical problem-solving situation in research is experiment planning. The question "How we can see it" can be an invitation for the child and the practitioner to plan an experiment together.

Example: The dialogue begins with a research assignment. The group is asked to investigate whether it is possible to see air with the help of water. The teacher asks the children how this can be done: "How can we see air in the water?"

4 Exploration-oriented dialogue (explorationorientierter Dialog)
An exploration-oriented dialogue is a conversation that is directly related to the practical investigation. If verbal communication arises during experimentation or freely chosen exploration, this is an exploration-oriented dialogue.
Example:
While the children carry out experiments with water, they talk about their experiences and discoveries. This is picked up on by the adults. The dialogue is often opened with a "look" from the children.

5 Explanation-oriented dialogue (explikationsorientierter Dialog)
As the Latin word explicatio suggests, explanation-oriented dialogue is understood as the unfolding of explanations or a search for reasons. Questions starting with words such as "Why is that?" or "What do you think?" can serve as a starting point and help evaluate a longer period of experimentation.
Example: The practitioner asks specific questions about the reasoning behind a statement. "What do you mean?"
The types of dialogue can be initiated with specific prompting questions. Here is a practical summary of the linguistic tools.

1. Narrative-oriented dialogue: Tell me about ...
2. Speculation-oriented dialogue: What if ...
3. Problem-solving-oriented dialogue: How can we solve the problem? How can we test that?
4. Exploration-oriented dialogue: What happened?
5. Explanation-oriented dialogue: Why is that? What do you think? What do you mean?

2.3 Attitude of educational professionals toward Inquiry-based Learning and Exploration

In Inquiry-based Learning, the professional's attitude toward the child should be resource-oriented and child-centered (Nentwig-Gesemann, Fröhlich-Gildhoff, Harms & Richter, 2011; Hildebrandt & Dreier, 2014; Tytler, Aranda & Freitag-Amtmann, 2017; Wadepohl, 2021; Wirts, 2022). Explorer Dialogues and dialogues during exploration are co-constructive learning opportunities. The professional and the child are active. It is supportive for learning when the practitioner behaves empathetically, respectfully, and supportively toward the child and pays attention to using clear and concise language (Ramseger, 2020).

Supportive language tools:

- Use of mental verbs (What do you mean? What do you think?)
- Comparisons
- Epistemic markers (Maybe; I don't know)
- Asking for clarification, expanding on children's ideas
- Using sentence starters as thought prompts (What if – then)
- Syntactic scaffolds (because – then)
  (cf. Hildebrandt & Dreie, 2014; cf. Tytler, Aranda & Freitag-Amtmann, 2017).

In order to support and challenge exploratory learning, educators themselves should be curious and, ideally, have their own questions about nature. It is important to develop creative and open-ended questions that can serve as a starting point for shared attention and dialogue during exploration.

Creative questions and the ideas behind them:

The leaves on the trees are moving so violently today. Isn't that strange?

- Finding something strange, finding something odd; describing observations; making assertions, open questions

Bees can buzz. How do they do that? Can butterflies buzz too?

- Seeking comparisons: bees – butterflies; combination of open and closed questions
  (Freitag-Amtmann, 2009).

3 Practical Example

Dialogues during exploration activities are considered long-lasting dialogues and thus sustained shared thinking if they contain at least six speaker changes or turns (cf. Hopf, 2012, p. 108). In the cases of learning opportunities between a science expert and children observed by the author, the dialogues lasted between 36 seconds and ten minutes.

The following text is an example for a speculation-oriented dialogue. It is 49 seconds long. Dialogues are always episodes of shared attention. The following Explorer Dialogue takes place in a kindergarten. Eight children between the ages of three and five are sitting in the creative room of the kindergarten. The content of this activity focuses on the topics of soil quality and plant growth. The kindergarten has an outdoor area with three sandboxes. The children's experiences with sand and garden soil are the starting point for this conversation.

Transcript:

1 Teacher: Imagine there was no sand in the sandbox. Would that be good? It would be garden soil.

2 Children: No. (some shake their heads)

3 Lina: Then you couldn't dig anymore.

4 Teacher: Then you couldn't dig anymore. Yes. And? What would happen if it rained?

5 Finn: Then the sand would get wet.

6 Teacher: Wet.

7 Anna: And then it would be muddy slush.

8 Teacher: Ah, muddy slush. And that's not the case with sand, right? What do you think?

9 Jonas: Yes.

10 Teacher: Sand also turns into muddy slush? When sand gets wet? (nods toward Jonas) What do you think?

11 Finn: Then why is it like sugar?

12 Teacher: What do you think?

13 Jonas: No. When the sun shines, it becomes (// overlaps with educator)

14 Educator: Does the sand stay wet as long as the garden soil when it rains, or does it dry faster? What do you think?

15 Jonas: It dries faster. From the sun.

16 Educator: From the sun.

When examining this episode of shared attention, there are interesting insights to be gained from the way educator Salman Ansari conducts the conversation. He challenges the children to think and presents them with a problem. This stimulates their cognitive activity because it raises a problem for them to consider (line 1) – a thought experiment.
In addition, the children's visible thinking can be observed. In this episode of joint attention the children demonstrate their ability to think deductively in a variety of ways. Cause and effect are named by the children in the correct order.

Discussion/interpretation

In this case, research is experienced as an action performed by the educator in the form of questioning. He wants to know what experiences the children have had with sand and garden soil. To this end, he opens up a "what-if scenario." He conducts a thought experiment together with the children. He is the experiment leader in the research and the discussion leader in the discourse with the children. He provides various stimuli to clarify what would happen if there were garden soil in the sandbox instead of sand. The adult challenges the children's imagination by asking them to come up with a thesis or assumption about what happens to sand and garden soil when it rains. The children think and respond to the adult's questions. The expert's interaction strategy of constantly introducing new aspects can be seen as a means of continuing the conversation. Sentence constructions that

contain the words "if" and "then" as prompts for conclusions lead to deductive thinking on the part of the children, as their formulations show. In summary, it can be said that the reflective practitioner skillfully encourages the children to think through a cognitively stimulating dialogue: in this case, about the similarities and differences between sand and garden soil.

4 Conclusion

Explorer Dialogue is a form of language support integrated into everyday life. All children should be included. Dialogues during Exploration often use language teaching and learning techniques similar to those found in dialogic reading. Recommended teaching and learning strategies include techniques of teaching language: stimulating questions and modeling techniques.

In his training courses, Friedrich Froebel, the founder of the kindergarten (Schmid, Rathert & Schamberger, 2023), already practiced a course on "acquiring stimulating speech with children" (Berger, 2000, p. 21). Did he mean dialogues while exploring the gifts of play?

The model of interaction for Explorer Dialogues, the KAD.NAWI – Structural model of cognitively activating dialogues in science-related research with children in educational settings (see Figure 1), invites educational professionals to systematically engage in cognitively activating dialogues with children in episodes of shared attention. This promotes thinking while acting and stimulates speech in the long term. This is how activity-integrated language support can succeed.

"Froebelian educators facilitate and guide rather than instruct. They provide rich real life experiences and observe children carefully, supporting and extending their interests through freedom with guidance (Tina Bruce, Froebel Trust.org – Making Connection Video).

Bibliography

Ansari, S. (2009). Schule des Staunens. Lernen und Forschen mit Kindern. Heidelberg: Springer Spektrum.

Berger, M. (2000). Friedrich Fröbels Konzeption einer Pädagogik der frühen Kindheit. In E. F. Fthenakis & M. R. Textor (Eds.), Pädagogische Ansätze im Kindergarten (pp. 10–22). Weinheim, Basel: Beltz.

Bruce, T. (n.d.). Online: Making Connection Video. www.froebel.org.uk.

Fachforum „Sprache und Naturwissenschaften" (2015). Frankfurter Erklärung zur frühen sprachlichen und naturwissenschaftlichen Bildung. Online unter: https://www.nifbe.de/images/nifbe/Aktuelles_Global/2016/Frankfurter-Erklaerung_2015.pdf.

Freitag-Amtmann, I. (2009). Film „ENTDECKERGEIST. Forscherdialoge mit Dr. Salman Ansari" mit Booklet. DIGI:PÄD.

Freitag-Amtmann, I. (2020). Forscherdialoge. Eine videogestützte Studie zu kognitiv aktivierenden Dialogen beim Forschen. Berlin: Logos Verlag Berlin. Als Open Access Ausgabe mit Materialband. Online unter: https://www.logos-verlag.de/cgi-bin/engbuchmid?isbn=4995&lng=deu&id=.

Freitag-Amtmann, I. (2024). Forscherdialoge als kognitiv aktivierende Dialoge. Online unter: https://nifbe.de/wp-content/uploads/2025/02/5-2024_Kita-Fachtext_Ines_Freitag-Amtmann_Forscherdialoge_01.pdf

Fthenakis, W. E. (Ed.). (2009). Natur-Wissen schaffen. Bd. 3. Frühe naturwissenschaftliche Bildung. Troisdorf: Bildungsverlag Eins.

Hildebrandt, F. & Dreier, A. (2014). Was wäre, wenn...? Fragen, nachdenken und spekulieren im Kita-Alltag. Weimar, Berlin: verlag das netz.

Hopf, M. (2012). Sustained Shared Thinking im frühen naturwissenschaftlich-technischen Lernen. Internationale Hochschulschriften 572. Münster: Waxmann.

Kuckartz, U. (2005). Computergestützte Inhaltsanalyse. In L. Mikos & Wegener, C. (Eds.), Qualitative Medienforschung. Ein Handbuch (pp. 445–457). UVK-Verl.-Ges.: Konstanz.

König, A. (2009). Interaktionsprozesse zwischen ErzieherInnen und Kindern. Eine Videostudie aus dem Kindergartenalltag. Wiesbaden: Springer VS.

Mayer, J. (2007). Erkenntnisgewinnung als wissenschaftliches Problemlösen. In D. Krüger & H. Vogt (Eds.), Theorien der biologiedidaktischen Forschung. Ein Handbuch für Lehramtsstudenten und Doktoranden (pp. 177–186). Berlin, Heidelberg: Springer.

Nentwig-Gesemann, I., Fröhlich-Gildhoff, K., Harms, H. & Richter, S. (2011). Professionelle Haltung. Identität der Fachkraft für die Arbeit mit Kindern in den ersten drei Lebensjahren. Weiterbildungsinitiative Frühpädagogische Fachkräfte, WiFF Expertisen, Bd. 24. München.

Oser, F. & Baeriswyl, F. (2001). Choreographies of Teaching. Bridging Instruction to Learning. In V. Richardson (Ed.), Handbook of Research on Teaching (4th ed., pp. 1031–1065). Washington: American Educational Research Association.

Pauli, C. (2012). Kodierendes Beobachten. In H. de Boer & S. Reh (Hrsg.), Beobachtung in der Schule – Beobachten lernen (pp. 45–63). Wiesbaden: VS Verlag für Sozialwissenschaften.

Ramseger, J. (2009). Experimente, Experimente! Was lernen Kinder im naturwissenschaftlichen Unterricht? Die Grundschulzeitschrift, 23, 14–20.

Ramseger, J. (2018). Process-related quality criteria for science teaching. Ten criteria for effective didactic action at pre-primary and primary level. In Haus der kleinen Forscher Foundation (Ed.), Early science education – Goals and process-related quality criteria for science teaching. (Scientific studies on the work of the "Haus der kleinen Forscher" Foundation, Vol. 5, pp. 172–201), Opladen, Berlin, Toronto: Verlag Barbara Budrich.

Ramseger, J. (2020). Lernen als Selbstaneignung der Welt. In U. Hecker, M. Lassek & J. Ramseger (Eds.), Kinder – Lernen – Zukunft. Prinzipien und Perspektiven. (Beiträge zur Reform der Grundschule Bd. 151, pp. 10–22), Frankfurt/M.: Der Grundschulverband e.V..

Schmid, A. C., Rathert, N. A. & Schamberger, I. (2023). Fröbel, Friedrich Wilhelm August. socialnet Lexikon. Online unter: https://www.socialnet.de/lexikon/5933.

Siraj-Blatchford, I., Sylva, K., Muttock, S., Gilden, R. & Bell, D. (2002). Researching Effective Pedagogy in the Early Years, DfES Research Report 365. Norwich: Queens Printer.

Strauss, A. & Corbin, J. (1996). Grundlagen qualitativer Sozialforschung. Weinheim: Psychologische Verlags Union.

Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I. & Taggart, B. (2004). The Effective Provision of Pre-School Education (EPPE) Project: Findings from Pre-school to end of Key Stage 1. Online unter: http://dera.ioe.ac.uk/8543/7/SSU-SF-2004-01.pdf.

Tytler, R., Aranda, G. & Freitag-Amtmann, I. (2017). Teachers from Diverse Cultural Settings Orchestrating Classroom Discourse. In M. W. Hackling, J. Ramseger, & H.-L. S. Chen (Eds.), Quality Teaching in Primary Science Education. Cross-cultural Perspectives (pp. 123–148). Cham: Springer e-Book.

Wadepohl, H. (2021). Kognitiv aktivierende Interaktionsgestaltung. In R. Dreyer (Ed.), Kita-Fachtexte 10. Online unter: https://nbn-resolving.org/urn:nbn:de:kobv:b1533-opus-4611 und https://www.kita-fachtexte.de/de/fachtexte-finden/kognitiv-aktivierende-interaktionsgestaltung.

Wagenschein, M. (1965). Ursprüngliches Verstehen und exaktes Denken. Pädagogische Schriften. Stuttgart: Ernst Klett Verlag.
Wagenschein, M. (2010). Kinder auf dem Wege zur Physik (2. ed.). Weinheim, Basel: Beltz.
Wirts, C. (2022). Das Kind im Blick – Beobachtung als Grundlage für sprachliche Bildung nutzen. In R. Dreyer (Ed.), Kita Fachtext 6. Online unter: https://nbn-resolving.org/urn:nbn:de:kobv:b1533-opus-5202 und https://www.kita-fachtexte.de/de/fachtexte-finden/das-kind-im-blick-beobachtungen-als-grundlage-fuer-sprachliche-bildung-nutzen.

Author

Freitag-Amtmann, Ines, Dr.
DIGI:PÄD Agentur für Digitale Medien und pädagogische Werkstatt, Germany
Teacher of educational professionals
Main areas of work and research: digital media production and educational workshops; research in early childhood education
digipaed.info@email.de

Stephanie Harding

Froebel now: Singing with babies, children, and their carers in a community-based setting

Abstract

The article reflects how Froebel's ideas have informed the content and the development of a structure for a weekly, drop-in music group for children under 5 years old and their parents or carers. The focus is on Froebel's ideas of Unity and Connectedness, the Forms of Life, Beauty and Knowledge, the importance of representation and the symbolic, and most importantly, the key importance of relationships. It also describes how using Froebel's Mother's Songs as a model has helped to develop the structure of the sessions. By using a developmentally appropriate sequence that increases in complexity and moves from the sensory and the concrete towards more conceptual and complex physical, social, emotional, and cognitive actions and ideas, the opportunities for learning can be effectively exploited.

Keywords: mother songs, babies, community

Zusammenfassung

Dieser Beitrag reflektiert, inwiefern die pädagogischen Konzepte Friedrich Fröbels den Inhalt und die Struktur einer wöchentlichen Musikgruppe für Kinder unter fünf Jahren sowie deren Eltern oder Betreuer geprägt haben. Im Mittelpunkt der Reflexion stehen Fröbels Ideen von Einheit und Verbundenheit, den Formen des Lebens, der Schönheit und des Wissens, sowie die Bedeutung von Repräsentation und Symbolik, wobei insbesondere die zentrale Rolle von Beziehungen betont wird. Des Weiteren wird aufgezeigt, wie die Anwendung von Fröbels Mutterliedern als Modell zur Entwicklung der Sitzungsstruktur beigetragen hat. Durch eine entwicklungsgerechte Gestaltung der Aktivitäten, die in ihrer Komplexität schrittweise zunehmen und sich von sensorischen und konkreten zu konzeptionellen sowie komplexeren körperlichen, sozialen, emotionalen und kognitiven Handlungen und Ideen entfalten, werden effektive Lernmöglichkeiten geschaffen.

Schlüsselwörter: Mutterlieder, Babys, Gemeinschaft

Eight years ago, I retired and was interested in doing some voluntary work with young children and their families. I approached the local Children's Centre, and they needed someone to lead a "Bounce and Rhyme" group in the local library. "Bounce and Rhyme" groups are music groups for children under five years old and their parents or carers. Initially, they were set up to informally support children's developing communication skills. The group has continued over time, but the focus has broadened to include encouraging the use of the public library and signposting parents to organisations that can provide support on specific issues (through the Parent Champion programme, coram family and childcare, 2025).

I was already trained as a Froebel Travelling tutor, so I tried to use some of Froebel's principles (Froebel Trust) as well as specific ideas from the "Mother Play and Nursery songs" (1844, translated 1892) to inform the organisation of the group and the content of the songs and stories.

The group uses a space in the children's section of the local public library. There is space cleared for the group, and parents enter and sit in a circle on the floor for the session with their children, although chairs are available should any parent or carer need them. Mothers, fathers, grandparents, and childminders bring children to the thirty-minute sessions. The age of the children usually ranges from 4 months to 3.5 years. Although the sessions are for children up to 5 years old, because many children start school the term after their 4th birthday in England, most children are under 4.

The circle makes a link to Froebel's idea of Unity and Connectedness and is the starting point for developing a sense of a common purpose among the singers and movers. This link to Unity is continued by greeting each child by name as they arrive with a welcome song which introduces them to the group and to each other. This contributes to the sense of joining a community while acknowledging each child as an active and important member of the group. The intention is to respect individuality while at the same time encouraging everyone to feel that they are part of an interconnected whole. A working example of Froebel's idea of the whole and parts aspect of Unity.

My understanding of Froebel's idea of Unity is that everything in the universe is connected in some way. Developing awareness of this interconnectedness leads to a deeper understanding of oneself, of relationships with others, and of the wider world (Tovey, 2020). This has implications for education. To maximise learning and make it meaningful to the learner, it needs to be linked to what they already know or have experienced. This, in turn, leads to the idea of educating the "whole child" rather than offering fragmented and unconnected pieces of knowledge. This concept of Unity also meant that Froebel valued the child as a unique individual and as contributing and belonging to a wider family and community. Bruce (2021, p. 34) describes it

> "... Froebelian education leads children and adults involved in it to live in a world concerned with what is of universal importance. This occurs while at the same time finding through knowledge of the self, ways of contributing to the community and perhaps

beyond… The interconnectivity between, self-awareness, relationship with others and the universe are key to the concept of Unity."

The nature of a drop-in group means it needs to be flexible from week to week, with a new family joining most weeks and attendance fluctuating. There is no obligation to commit to attending a particular number of sessions, and for very young children, changing sleep and feeding routines can sometimes limit attendance.
The structure of the sessions provides continuity, so parents can have a fairly accurate expectation of how the session will proceed and which songs may be used. Alternatives to the regular routine need to be at hand for those days when there is a dominance of non-mobile babies, or alternatively, a majority of active 3 and 4-year-olds, and I am always open to suggestions and contributions from children and their families. For example, one young mother asked if we could sing "You Are My Sunshine" as she loved singing it to her son. So, for as long as she and her son attended "Bounce and Rhyme" sessions, she led us in singing this song together. I found this request very interesting. Most songs for babies and children are about introducing them to the physical and cultural worlds around them. They communicate the singer's view of the world to the baby or child from their point of view towards the baby. The song this mother wanted to share operates differently, with the baby at the centre and the singer describing the emotional effects of the child on the carer. Another example of responding to a suggestion was when I suggested singing "Three Little Ducks," and a three-year-old called out, "Can we have three butterflies instead?" So, together, the child, all the parents, and I spontaneously composed a song about three butterflies.
The structure of each session reflects the idea of a sequence of songs increasing in physical, cognitive, and social complexity. It uses picture books to take the role of Froebel's illustrations, using them as a tool to focus on the importance of caring for other living things and to emphasise the social, emotional, and moral aspects of life. This sense of a routine or regular sequence to frame the singing and storying contributes to the sense of Unity and connectedness focused on the significance of relationships.
There is a sequence of increasing complexity in the songs and fingerplays (informed by Bruce and Spratt, 2011). Songs where the adults play out the movements on the baby or child's body (e.g., "Slowly, slowly creeps the garden snail") are at the beginning. These help children become aware of their own bodies, encourage anticipation and laughter, and support the bonding between the child and adult by encouraging intimacy through eye contact and the pleasure in touch. The sequence continues with songs and rhymes that use the whole hand ("Open, shut them") and then moves to songs where the physical movements become more intricate and intentional, including clapping and pointing. As the songs demand increasingly complex movements, I have found that the carers have spontaneously adapted these for the youngest children, sometimes playing the actions out on the child's body and sometimes modelling them for the child to see. For example, the parent uses their hand on the baby's body to represent the spider

while singing "Incy, wincy spider." This is evidence of tuning into the individual child's needs and being led by the infant. Towards the end of the session, after children have sat and listened to a picture book, we continue with songs with larger and whole-body movements ("Head, Shoulders, Row the Boat"). The session finishes with songs that suggest calm ("Twinkle, twinkle") and completion ("If you are happy") and concludes with a song that bids farewell until next session ("Goodbye song").

An aspect of Froebel's concept of Unity was seeing the child as having an inner and outer world, which helps them make sense of the experiences and relationships they encounter. The child's inner ideas, thoughts and feelings are expressed to the external world through representing them in different ways using symbols. A symbol is when a gesture, object, sound, or mark is used to represent something else (Tovey, 2020). Through using symbols, children can give their ideas a visible form and reflect on them. "Growing confidence in the use of symbols helps children move from concrete to more abstract thinking and is essential for subsequent learning" (Tovey, 2020).

The sessions aim to support representational skills in several different ways:

- First of all, in modelling and moving in ways that use faces, fingers, hands, bodies and props to represent the world around them, for example, "Beehive".
- Secondly, scarves, egg shakers, and bells are used in different sessions to introduce a range of tactile and aural experiences. They offer the opportunity to start making connections between the sound of the songs, the movements of the body, and how the props respond to that movement. Using sensory and tactile props helps to bring the child's attention to particular combinations of sounds, movements and ideas (e.g., "Wave your scarves" describes up and down, etc, fast/slow, "Everyone can shake, shake, shake" illustrates movement/sound, start/stop).
- Thirdly, by making sure that the narrative content of the songs and rhymes and the illustrations in the picture books are simple, clear, and rooted in the experiences and interests of babies and young children.

Further development to a more complex and abstract form of representation introduces storying through sharing songs that have a simple, narrative sequence with a beginning, middle and end (for example, "Incy, wincy spider", "Miss Polly"). This idea of a narrative sequence is consolidated and presented in an alternative form through the sharing of a picture book with the whole group. If the book is well known, parents often speak the words alongside me (for example, "Owl Babies").

Another abstract form of representation, the concept of number can be introduced using counting songs that present examples of number words, cardinal numbers, and simple addition and subtraction. Counting forward and counting backwards, for example, 1 little baby, Hickory, dickory dock, 2 blue birds, 3 little butterflies.

To help me decide on stories and songs I might use with the group, I have tried to think about the content in terms of Froebel's Forms of Life, Beauty and Knowledge.

I ask myself these questions:

- Does this song or story reflect the everyday experience of children? (Form of Life/Life experience)
- Does this song or story link to the observation and enjoyment of Nature or of relationships? (Form of Beauty/Harmony)
- Does this song or story consolidate and build on children's knowledge and understanding? (Form of Knowledge). For this form, props that are directly related to the song or rhyme are sometimes used, for example, leaves (for 3 Little Leaves) or a real bobbin (for Wind the Bobbin up). This form is also often linked to stories and songs about the seasons and to celebrations, and it builds on children's direct experience.

Relationships are key to Froebel's idea of Unity and Connectedness, and this is supported in different ways. A physical sense of self is encouraged by building and strengthening self-awareness of the fingers, hands, and other parts of the body. This is linked to the cognitive aspect of beginning to understand how movement is linked to meaning (Davies, 2003).

Children are encouraged not only to develop self-awareness but also to develop an understanding of their role within the group. This is promoted by responding to individual children's preferences and requests and celebrating them with the group. For example, I have noticed that individual children are attracted to some body movements (fast movements or clapping) and therefore ensure that if that child is attending, we include those movements. This developing sense of their individual agency links with Froebel's idea of self-activity.

Emotional connectedness is supported through songs (Malloch and Trevarthen 2010, communicative musicality in Manning-Morton 2024). The use of music as a conduit for emotion marks the beginning of children's ability to understand and recognise their own feelings and those of others. Feelings are also more explicitly explored through the content of the picture books (Owl Babies, Into the Wild).

Stories, songs, and structure help to create a feeling of belonging to a group and a developing awareness of other people. The content of the picture books chosen often reflects interactions with others and being part of a connected world, as well as promoting positive and respectful relationships. The strengths and contributions of others who work in and with our communities are also celebrated through the picture books and some songs. More work needs to be done by me to develop songs and rhymes that promote respect for the work of people who provide services in the community (a contemporary equivalent to Froebel's "The Charcoal Burner").

The group reflects a changing and diverse local community. To celebrate and embrace the group's variety, parents and carers are encouraged to share songs from their respective cultural and linguistic backgrounds. For example, an Italian parent shared a number song where you count your fingers and say hello and goodbye, and an Irish parent shared a song in Irish Gaelic. An interesting side story is when I asked a Japanese mother if she would like to share a Japanese song with us. She

said, "Oh, but you already sing a song that I sing to my daughter." I racked my brain to think which song she might mean, but I could not think of a Japanese song. "Which one is that?" I asked her, and she replied, "Twinkle, Twinkle Little Star."
Coincidentally, a colleague had been doing research based on surveys with parents, which also highlighted the use of "Twinkle, Twinkle Little Star" in different cultural groups, and especially in the Travelling community. This led me to look the song up, using Opie's "Oxford Dictionary of Nursery Rhymes" (1951) to look at the song's history in case there was a common root, but I found this to be written as a poem by an English woman, Jane Taylor, and published in 1806.
Roles and responsibilities relating to nature and the wider world are explored through the content of the picture books (e.g., "The Tree"), and these stories are also chosen to reflect on our links with nature and how we can care for and support the natural world and all living things.

> "[The family songs]……connect with the concept of Unity. They illuminate engagement with nature. They bring alive the symbolic life, through the imagination and creativity of hands and fingers becoming characters as people, animals, plants, trees, machines. They involve others, as a community and they gently support children as they move from reflection on real experiences they had had, to representing those experiences in a literal way through hands and fingers symbolically, to increasingly abstract representations of experiences." Bruce, T. (2021, p. 91)

This quote from Tina Bruce explains concisely the links between the family songs and Froebel's ideas. The modelling of how to use bodies and sounds to represent objects, ideas, and living things offers examples that children can develop in their expressive play.
The experience of being part of a community of singers and movers is a step towards becoming self-aware, seeing yourself as an individual and as an active member of a group.
The same words are also a fit description of how this more broadly applies to the community music sessions that I lead. I have used Froebel's ideas as a guide to developing both the form and the content of the weekly drop-in sessions. I hope that this demonstrates how you can apply Froebel's ideas about the importance of singing and movement for babies and young children in a contemporary, community context.
Using Froebelian principles (Froebel Trust, 2025) helped me to structure the organisation and the form of the group. I have emphasised the recognition and naming of individual children while at the same time trying to create a small community of singers and movers that meet weekly. As the attendance fluctuates, it is important to encourage relationships between parents and carers so that friendships extend beyond the group and people feel confident to share their knowledge and experience with others in the group.
An emphasis on nature, relationships and on children's first-hand experience has helped me to be clear about why I choose particular songs and books to share with the group.

I reflect weekly on the successes and challenges of each session in order to be responsive to the children and their families and to improve the sessions and my practice.
I would like to move forward by adapting and composing more songs that reflect the people the children might encounter in the community (e.g., the librarian, the bus driver, the shop assistant) in the same way that Froebel included songs that showed respect for those who provided services to people in his time (e.g., Pat-a-cake, the Charcoal Burner).
I have used Froebel's ideas as a guide to developing both the form and the content of the weekly drop-in sessions. This is a demonstration of how you can apply Froebel's ideas about the importance of singing and movement for babies and young children in a contemporary, community context.

Bibliography

Bruce, T. & Spratt J. (2011). Essentials of Literacy from 0-7: A Whole-child Approach to Communication, Language and Literacy (2nd ed.) London: Sage Publications Ltd.
Bruce, T. (2021). Friedrich Froebel: A Critical Introduction to Key Themes and Debates. London: Bloomsbury Academic.
Coram family and childcare (2025). Parent champion programme. Online: https://www.coram-familyandchildcare.org.uk/parent-champions/
Davies, M. (2003). Movement and dance in Early Childhood. London: Paul Chapman Publishing.
Fröbel, F. (1892). Mother's Songs, Games and Stories (translated by H. F. Lord and E. Lord). London: William Rice.
Froebel Trust (2025). Froebelian Principles. online: Froebel.org.uk (accessed 18 September 2025).
Layton, N. (2016). The Tree. London: Walker Books.
Malloch, S. & Trevarthen, C. (2010). Communicative Musicality: Exploring the Basis of Human Companionship. Oxford: Oxford University Press.
Manning-Morton, J. (2024). From Birth to Three. An Early Years Educator's Handbook. Abingdon, Oxfordshire: Routledge.
Opie, I., & Opie, P. (1951). The Oxford Dictionary of Nursery Rhymes. Oxford: Oxford University Press.
Waddell, M. (1992). Owl Babies (ill. by Benson, P.). London: Walker Books.
Vescio, R. (2020). Into the Wild (ill. by Armstrong, M.). London: New Frontier Publishing Europe Ltd.

Author

Harding, Stephanie
Froebel Trust, UK
Froebel Travelling Tutor
Main areas of work and research: Froebel's mother songs; Froebel in contemporary practice

Naoko Matsumura

Numbers, shapes, words, and communication through Origami: A case study of Froebelian practice in japanese teacher education

Abstract

This paper presents an origami workshop for prospective kindergarten and elementary school teachers in Japan. Drawing on Froebel's theory of gifts and occupations, participants explored geometry, creativity, and communication with origami "Paku-Paku." It shows how origami connects play-based and subject-based learning and fosters collaboration.

Keywords: origami, Froebel, teacher training, collaborative learning

Zusammenfassung

In diesem Beitrag wird ein Origami-Workshop für angehende Erzieher*innen und Grundschullehrkräfte in Japan vorgestellt. Aufbauend auf Friedrich Fröbels Theorie der Gaben und Beschäftigungen setzten sich die Teilnehmenden mithilfe des Origami-Modells „Paku-Paku" mit Inhalten aus Geometrie, Kreativität und Kommunikation auseinander. Der Beitrag zeigt auf, wie Origami spielerisches und fachbezogenes Lernen miteinander verbindet und kooperative Lernprozesse fördert.

Schlüsselwörter: Origami, Lehrer*innenbildung, kollaboratives Lernen

1 Purpose

The objective of this study is to investigate the potential efficacy of integrating Froebel's pedagogical concepts into the Japanese teacher training curriculum through the implementation of origami workshops. This initiative aims to address the evident discrepancy between early childhood and elementary school education.

The present discussion draws on empirical data obtained from a workshop conducted in 2025 with 28 participants enrolled in a teacher training program. Initiated in 2015, this workshop has been held annually, with the 2025 iteration including 14 prospective kindergarten teachers and 14 prospective elementary school teachers. In this paper, the 2025 workshop is presented as a practical case study, and its outcomes as well as potential implications are examined.

In recent years, Japan has confronted mounting challenges in aligning early childhood education with elementary school curricula. The transition from play-based learning to subject-based instruction has been shown to cause adjustment difficulties for children, a phenomenon referred to as the "first-grade problem." This paper presents a case study of a university-level course that addresses this issue by incorporating Froebelian principles into teacher training through origami-based workshops.

Origami, an integral part of Japanese cultural tradition, is traditionally introduced to children at an early developmental stage. During the Meiji period, the kindergarten model developed by Froebel was introduced in Japan, and origami was incorporated into his system of "gifts." While origami is widely recognized as a cultural practice in Japan, Froebel and his followers conceptualized it as a pedagogical tool for play and cognitive development. This study builds on Froebel's notion of play as a continuous process integrated with instruction (Froebel's "Spiel" and "Unterricht"). It emphasizes the educational potential of origami in fostering holistic learning.

The subsequent section provides a comprehensive examination of the relevant background and theoretical framework.

2 The Reception of Froebel's Play Theory in Japan and Its Influence on Origami Culture

Origami is a traditional Japanese art form that many children encounter in their early years. The integration of this practice into the education system coincided with the introduction of kindergartens during the Meiji period, marking a significant development in the country's early education. At that time, Froebel's practices were adopted in Japan, including origami, which was incorporated into the system of "gifts."

The "Twenty Play Activities of Kindergarten Method", developed by Seki Shinzo (1843-1880), played a pivotal role in the establishment of the Tokyo Women's Normal School Kindergarten. This method, influenced by Froebel's theories on the "Gift" and "Occupation", was introduced to Japan through this pedagogical framework, albeit with significant inaccuracies. Seki introduced origami as the "18th Gift", featuring an illustration of a child holding a folded crane before a lattice-patterned table (see Fig. 1). This illustrates how the Froebelian method was adapted within Japanese culture. Concurrently, he presented origami as a valuable means to recognize "the form of cognition", "the form of life", and "the form of beauty" (Seki, 1879).



Fig. 1: Seki's Introduction of "The 18th Gift" (1879)

Furthermore, Konishi Nobuhachi (1854–1938) established the specific educational value of origami in kindergartens. According to Yukawa, Konishi stated in "Kindergarten Teaching Methods" (1885, Tokyo Women's Normal School) that Origami, the Japanese art of paper folding, has been utilized as a tool to cultivate children's imagination. In this activity, children are provided with colored paper and instructed to fold it into shapes such as paper boats or cranes. This activity has been shown to engage children's creativity and imagination. The author's argument placed particular emphasis on the simplicity, enjoyment, and low cost of origami, highlighting its potential for widespread use, even in rural areas. Konishi's guide served as a textbook for kindergarten teacher training and was widely referenced at women's normal schools nationwide. Concurrently, it functioned as a compendium that advocated for the development and expansion of kindergartens (Yukawa, 2018).

Furthermore, records from women's normal schools, magazines, and kindergartens across Japan during the Meiji, Taisho, and early Showa periods clearly demonstrate the development of origami play as one of the core manual activities (Kiyohara, 2014). Consequently, as early childhood education advanced in Japan, origami was firmly established as a medium for play.

3 Educational Challenge in Japan Today: "Bridging-Period Education"

3.1 A Discourse on the Transition from Early Childhood to Elementary School Education in Japan

The challenge of integrating early childhood education and elementary school education in Japan is not a recent development.

In 2005, the Central Council for Education stated in its report, "On the Future Direction of Early Childhood Education in Light of Changes in the Environment Surrounding Children," that kindergarten education "emphasizes not merely expecting immediate results but building the foundation for lifelong learning and cultivating the 'potential for later growth" (Central Council for Education, 2005). The report further underscored the imperative to enhance early childhood education, grounded in the continuity of children's lives, development, and learning.

Discussions regarding this connection have been initiated within the context of policy and institutional deliberations since 2010. The report, titled "On the Smooth Transition Between Early Childhood Education and Elementary School Education", underscored the necessity for a seamless transition between early childhood and elementary education, emphasizing the importance of developmental and learning continuity. This was the first formal introduction of the concept of institutional connection to ensure continuity of learning in Japan (Central Council for Education, 2010).

3.2 Recent Discussions on "Bridging-Period Education" in Japan

In 2021, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) established the "Special Committee on Bridging Early Childhood and Elementary Education" within the Central Council for Education. This committee was created to discuss educational continuity and quality assurance. Consequently, the committee published a report in 2023 titled Building Foundations for Learning and Life. The objective of this study is to establish a collaborative network between nursery schools, kindergartens, and elementary schools to enhance the quality of education during the transitional period between early childhood education and elementary education. This report reaffirmed that the "bridging-period" refers to the two years from approximately age five, just before compulsory education begins, to the first year of elementary school (Special Committee on Bridging Early Childhood and Elementary Education, 2023).

A key issue is the need for both early childhood and elementary education to share a perspective that reflects children's developmental stages. This shared understanding forms the foundation for the reconstruction of the curricula for both educational stages.

A pressing challenge is to create an educational framework that integrates play-based learning in early childhood with the structured academic learning of elementary school. This discrepancy can be attributed to the varying educational methodologies and school cultures between the two stages. For instance, early childhood education prioritizes play-based learning, emphasizing experiences such as "feeling" and "creative thinking". Conversely, elementary education emphasizes subject-based learning aimed at "understanding". To address this discrepancy, kindergartens and nurseries have established collaborative relationships with elementary schools, facilitating a natural transition for children to their new environment.

The objective of bridging-period education is to integrate the characteristics of early childhood education – such as learning through play and fostering initiative – with the structured, subject-based learning of elementary education. The enhancement of this connection is instrumental in ensuring that children can acclimate to a novel environment with assurance. This approach is designed to provide a high-quality learning environment for all children. To achieve this objective, elementary school teachers must develop a comprehensive understanding of the experiences, emotions, knowledge, and developmental processes that children acquire through early childhood education.

3.3 Froebel Education as a Response to "Bridging-Period Education": Integrating Play-Based Learning into Academic Practice

Considering the challenges in the realm of Japanese education, it is imperative to reexamine the foundational principles of early childhood education through the prism of Froebel's theoretical and practical contributions. With respect to the relationship between early childhood and elementary education, Froebel's work can be regarded as a paradigmatic exemplar. It is widely acknowledged that, before his contributions to the field of early childhood education, Froebel was a pioneering figure in the realm of school education.

My research and translation of Rockstein's "Kindergarten" (2013[2]) have centered on Froebel's effort to show his views on play (Spiel) and instruction (Unterricht) as ongoing and connected processes. However, the broad scope of Froebel's theoretical and practical work—which still strongly influences modern educational discussions, often called the "living Froebel"—requires more than simple explanation for beginners to fully understand.

Consequently, a workshop was designed, employing origami as a medium through which to "rediscover" Froebel's Gifts and Occupations. The objective of this workshop is twofold: first, to enhance comprehension of Froebel's educational philosophy; and second, to investigate methodologies for integrating play-based

learning with academic content. This approach is designed to cultivate so-called "non-cognitive skills" such as curiosity, cooperation, and independence.

4 A Workshop for Teacher Training: The present study utilizes the principles of origami in accordance with Froebel's theoretical framework

4.1 The background of the workshop

Universities that are responsible for teacher training are expected to cultivate professionals capable of addressing the challenges of collaboration between early childhood and elementary education in contemporary Japan. Specifically, there is an increasing demand for educators who can contribute to the development of innovative curricula, promote collaborative practices among nursery schools, kindergartens, and elementary schools, and encourage interaction among children. Additionally, the cultivation of non-cognitive skills, including autonomy, inquisitiveness, and collaboration, has gained significant prominence.

In light of these considerations, the present study was conducted within the framework of the university course, "Introduction to Early Childhood Education" in Japan. This course is designed for students who aspire to obtain qualifications to teach kindergarten and elementary school. The workshop activities were meticulously designed to ensure accessibility for both groups, with the overarching objective being to cultivate pedagogical awareness and foster interdisciplinary thinking.

The material selected for this workshop is origami, a readily available material. Furthermore, it is anticipated that the age group expected to participate in origami activities created during workshops in educational settings will be five years of age and older.

4.2 The workshop activities

Activity 1: Fold a "Paku-Paku"

The first activity in this series is to fold a "Paku-Paku".

First, participants fold a three-dimensional "Paku-Paku" (fortune teller) using origami paper (see Fig. 2). This activity is typically enjoyed by children as a form of play, wherein they manipulate the object with their fingers.



Fig. 2: Origami "Paku-Paku" (Finished piece) (own illustration)

Activity 2: Restore the "Paku-Paku" to Its Original Square Shape

The second activity entails the restoration of the "Paku-Paku" to its original square shape.

Participants then unfold the "Paku-Paku" to return it to its original square shape and observe the fold lines (see Fig. 3 and Fig. 4).

The following question is presented to the participants: "The inquiry posed pertains to the significance of the lines inscribed within the square. What shapes can you find?"

This question fosters participants' cognitive awareness of numerical and geometric concepts. For instance, the inquiry "What is the smallest shape?" can be used to explore the concept of minimalism in art. Participants are then asked how many of these shapes they can find within the origami. It was observed that the square origami under consideration was comprised of precisely 32 right triangles, each of which was of minimal size. After this initial observation, the participants proceed to articulate their findings in a manner that clearly delineates the visual phenomena perceived within the confines of the square frame.

After this sequence, Activity 3 is conducted.

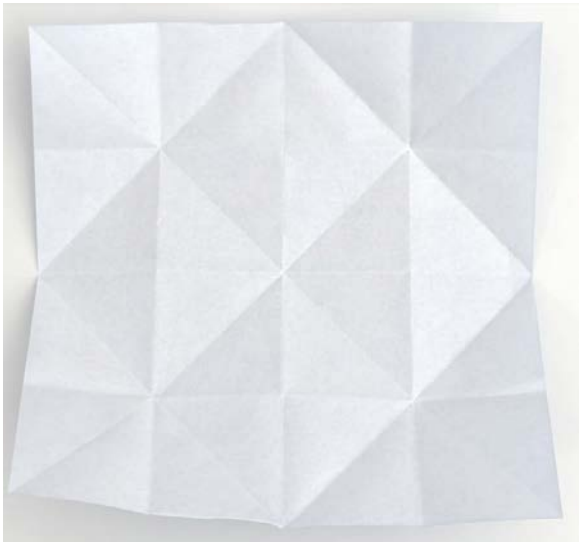


Fig. 3: Origami "Paku-Paku" (Refolded) (own illustration)

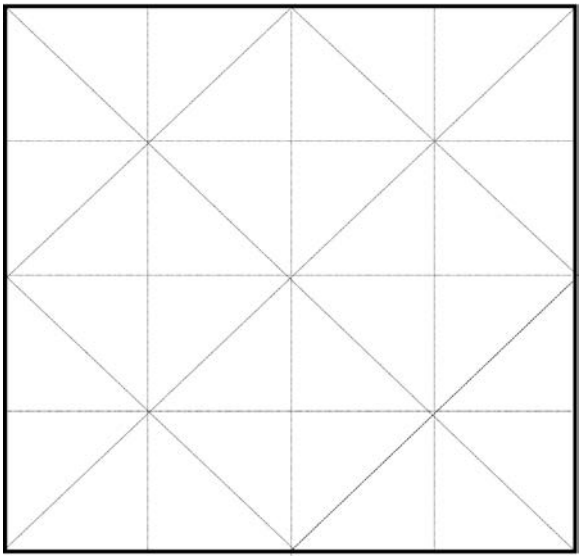


Fig. 4: Fold lines for "Paku-Paku" (own illustration)

Activity 3: Reconstruct the Shape

Subsequently, participants are invited to employ their imagination and communication skills:

The following step involves cutting along the fold lines of the origami paper and arranging the pieces to form a flat surface. It is imperative to conceptualize the potential for integrating these elements to generate a novel entity.

Participants are instructed to cut along predetermined fold lines. This divides the paper into a series of small right triangles and various other polygons. At this stage, a rule is established: "If someone has an object of the same shape, you may exchange it with another participant." Consulting with participants who have the desired color is recommended. (See Fig. 5)

Each participant exchanges pieces, arranges them on a base sheet, and affixes them with adhesive to create a new composition that is entirely different from the original "Paku-Paku". This activity has been demonstrated to promote language use and communication.

Participants engage in the following types of dialogue:

"Would you like to trade three blue triangles for three red ones?"

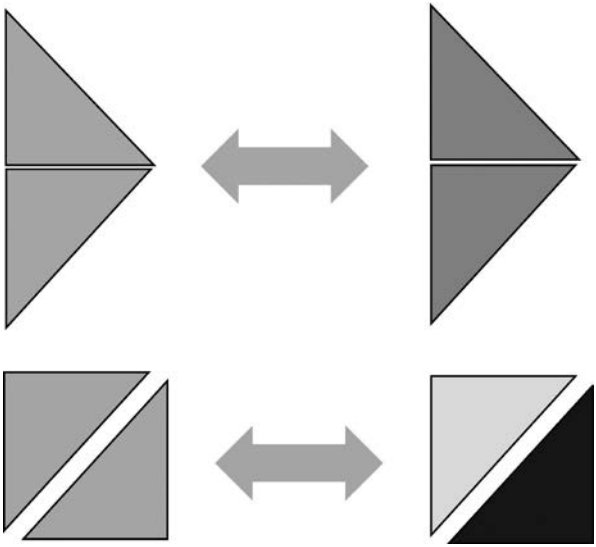


Fig. 5: "When exchanging pieces, swap pieces of the same shape but different colors." (own illustration)

This fosters negotiation and social interaction, which in turn gives rise to further inquiries:

"What are you making?"

"I intend to create..."

"I am uncertain at this time. What course of action should I pursue?"

Activity 4: Appreciate Each Other's Work

Ultimately, the participants proceed to appreciate the completed works of their peers.

At this juncture, the participants engage in the exchange of "shou" (prizes). In the Japanese language, the term "deshō" carries connotations of speculation or potentiality, phonetically analogous to "shou", which signifies "prize". It is noteworthy that "show" shares a striking resemblance to the Chinese word "shou," thereby introducing an element of playfulness into the activity.

This reflects the Japanese language's tendency for wordplay and multiple meanings. Upon completion of the work, participants are encouraged to shift their focus to appreciation. While the "artist's intention" is a critical component, this study places equal emphasis on the sentiments of the "appreciators" regarding the artwork. They listen to the artist's explanation and consider multiple perspectives. By assigning the work a new appellation in the form of a "prize", a new value is ascribed to it, constituting yet another manifestation of creative wordplay.

4.3 Examples of Participant Work: What Did They Create?

The participants' two-dimensional compositions reveal their creativity and interpretation. This paper presents works from a workshop conducted in 2025.

One participant created watermelons using red and yellow-green origami paper (see Fig. 6). This composition, particularly the "watermelon rind after being eaten" formed by two yellow-green right triangles, surprised the other participants.

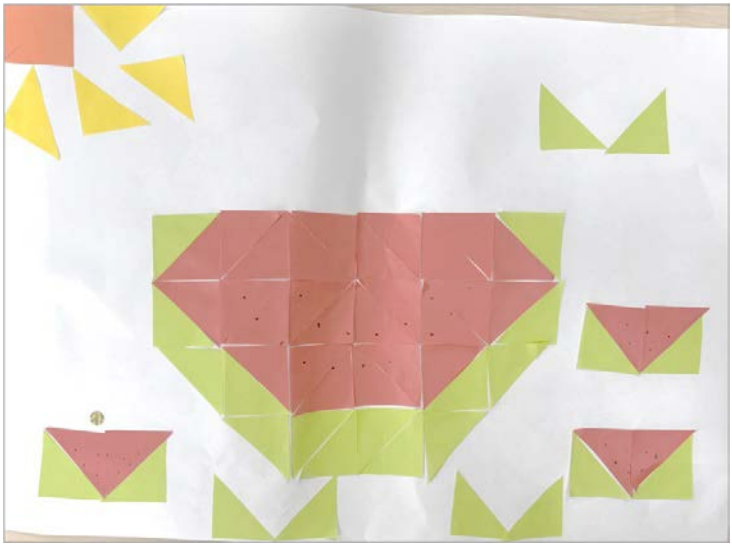


Fig. 6: "Summer is here!" (own illustration)

- **Title**: Summer is here!
- **Prize**: Onaka-Ippai-de-shou ("You must be full")
- **Reasons**:
  * "The colors make it look almost finished."
  * "The nibbled-on watermelons add a nice accent."
  * "There are plenty of watermelons—you can eat your fill!"

Another participant placed green and brown paper fragments in the center of the base paper (see Fig. 7).



Fig. 7: "Beautiful MORI" (MORI = Forest) (own illustration)

- **Title**: Beautiful MORI (MORI = Forest)
- **Prize**: Dosshiri-de-shou ("It's so towering, isn't it?")

- **Reasons**:
  - "The tree is large and impressive."
  - "The flowers and butterflies accentuate the tree."
  - "The shape of the tree roots is beautiful."

Other works featured bold compositions (see Fig. 8).

- **Title**: Diversity Clown
- **Prize**: Hitotsu-no-sakuhin-ni-matometa-de-shou ("You have combined them into one work")
- **Reasons**:
  - "The hairstyle is well expressed."
  - "The triangles placed on the eyebrows, nose, and cheeks make the face look like it's smiling."
  - "The colors are good—it really feels like a clown."



Fig. 8: "Diversity Clown" (own illustration)

One piece appeared to depict a dreamlike landscape (Fig. 9). On the left side, fish and seaweed were arranged to represent the sea, while on the right side, elements resembling flowers and the sun were included.



Fig. 9: "Coexistence of Sea and Land" (own illustration)

- **Title**: Coexistence of Sea and Land
- **Prize**: Happy-de-shou ("Sounds happy, right?")
- **Reasons**:
  - "Colorful and bright."
  - "Both the sea and land are represented."
  - "Instead of using one color for one object, two colors were used creatively."

Among the participants, one was inspired by Kenji Miyazawa (1896-1933)'s "Night on the Milky Way Train", a classic of Japanese children's literature (see Fig. 10). This fantastical piece was created primarily using violet and silver paper fragments.

- **Title**: Milky Way Train
- **Prize**: Ichiban-iro-wo-tsukatta-de-shou ("Used the most colors")
- **Reasons**:
  - "You used ten colors to create a flat composition."
  - "The violet paper stood out—it was the most vivid in the group!"

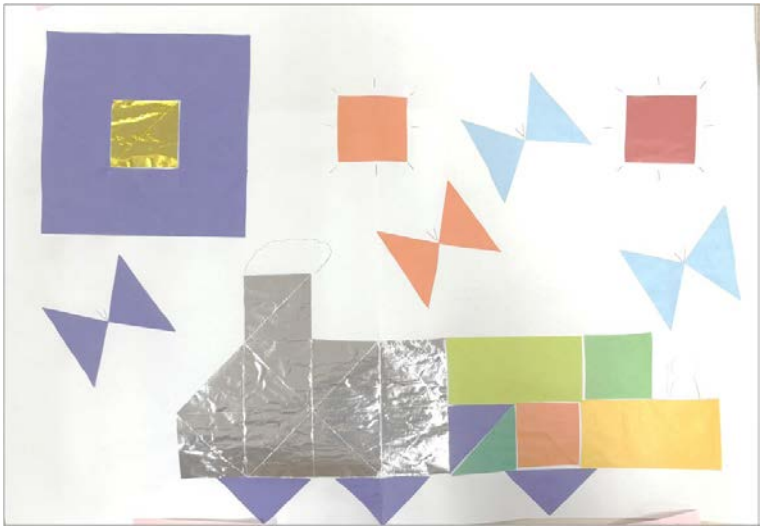


Fig. 10: "Milky Way Train" (own illustration)

4.4 Reflections from Participants

The following are reflections from participants, illustrating the educational impact of the workshop:

- "I realized that many more things can be made using triangles."
- "It's fun to make things, but it's also fun to look at the finished work."
- "Even with similar colors and shapes, the resulting images are different, which I found interesting."
- "It's fascinating how people express the same thing—like a cat, sun, or flower—in various shapes."
- "Everyone used colored paper to create their unique works, which allowed them to express diverse worlds. I found that truly amazing."
- "Some people created a story within a single drawing, structuring the flat surface. I found that beautiful."
- "It was a good activity because I realized that everyone puts a lot of thought into their creations."
- "It was fun to look at a drawing and wonder, 'What is this supposed to be?' without reading the explanation. Reading the reasons for the prizes made me chuckle. I'd like to do it again."

These reflections demonstrate the development of so-called "non-cognitive skills" and the promotion of collaborative learning.

5 Considerations

Let us now revisit the intentions behind this group activity. They can be summarized in the following three points:

A. Through Creative Activities

1. Participants engage in tracing, cutting, and reconstructing origami to explore the concept of *das Gliedganze*—understanding the whole through its parts.
2. By tracing the fold lines of a square origami sheet, counting the shapes within it, and creating a two-dimensional composition based on triangles, participants recognize the whole through its components.
3. Observing the part-whole relationship (*das Gliedganze*) through fold lines.
4. Cutting along the folds to decompose the shapes into elements.
5. Reconstructing the shapes into a new planar composition—each participant's envisioned "whole."

B. Mathematical Thinking

1. Counting and classifying shapes.
2. Identifying geometric properties—recognizing characteristics of triangles, squares, and other polygons.

C. Language and Communication as a Medium

1. Asking, "What does it look like?" and responding with, "This is the shape of ___."
2. Engaging in dialogue during idea exchange.
3. Self-evaluating and appreciating reconstructed works by expressing, "I felt it was ___."
4. Mutual recognition fosters smooth interpersonal relationships, promoting harmony and unity.

Through origami, students experience Froebel's philosophy—not just learn about it. They explore shapes, communicate, reflect, and create. This workshop helps future educators understand how play leads to learning and how tradition can support innovation.

Acknowledgment
This work was supported by JSPS KAKENHI Grant Number 25K05856.

Bibliography

Central Council for Education (2005). Kodomo wo torimaku kankyo no henka wo fumaeta kongo no youji-kyouiku no arikata ni tsuite [On the Future Direction of Early Childhood Education considering Changes in the Environment Surrounding Children]. Ministry of Education, Culture, Sports, Science, and Technology (MEXT). https://www.mext.go.jp/b_menu/shingi/chukyo/chukyo0/toushin/05013102.htm

Central Council for Education (2010). Youjiki no kyoiku to shougakkoukyouiku no enkatsu na setsuzoku no arikata ni tsuite [On the Smooth Transition Between Early Childhood Education and Elementary School Education]. Ministry of Education, Culture, Sports, Science, and Technology (MEXT). https://www.mext.go.jp/b_menu/shingi/chukyo/chukyo3/045/siryo/__icsFiles/afieldfile/2010/12/02/1299259_11.pdf

Kiyohara, M. (2014). Shugi no rekishi: Froebel no "Onbutsu" to "Sagyo" no juyo to sonogo no riron-teki, jissen-teki tenkai [History of Handicraft: The reception of Froebel's 'Gifts' and 'Occupation' and their subsequent theoretical and practical developments]. Shindokushosya.

Konishi, N. (1885). Youchien hoikuhou [Kindergarten Teaching Methods]. Tokyo Women's Normal School.

Ministry of Education, Culture, Sports, Science and Technology (2010). Youjiki no kyouiku to syougakkou kyouiku no enkatsu na setsuzoku ni tsuite [On the Ideal Approach to Smooth Transitions Between Early Childhood Education and Elementary Education]. Ministry of Education, Culture, Sports, Science, and Technology (MEXT). https://www.mext.go.jp/b_menu/shingi/chukyo/chukyo3/045/siryo/__icsFiles/afieldfile/2010/12/02/1299259_11.pdf

Rockstein, M. (2013). Kindergarten (2nd ed.). Friedrich-Fröbel-Museum.

Rockstein, M. (2014). Asobi ga kodomo wo sodateru: Froebel no "Youchien" to "Kyouikuyugu" [Play nurtures children: Froebel's kindergarten and educational play materials] (M. Ogasawara, Supervising Trans.; Y. Kiuchi & N. Matsumura, Trans.). Fukumura Publishing. (Original work published in German)

Seki, S. (Ed.). (1879). Youchien Hou Nijyu Yugi [Twenty Play Activities for Kindergarten Methods]. Aoyamado. National Diet Library Digital Collection. https://dl.ndl.go.jp/pid/812556/1/1

Special Committee on Bridging Early Childhood and Elementary Education (2023). Manabi ya Seikatsu no Kiban wo tsukuru Youji-Kyouiku to Shougakkou-Kyouiku no Setsuzoku ni tsuite: You-Ho-Shou no Kyoudou ni yoru Kakehashi-ki no Kyouiku no Jujitsu [Building Foundations for Learning and Life: Connecting Early Childhood Education – Enhancing Education During the Bridging Period Through Collaboration Between Nursery Schools, Kindergartens, and Elementary Schools.] Ministry of Education, Culture, Sports, Science, and Technology (MEXT). https://www.mext.go.jp/content/20220307-mxt_youji-1258019_03.pdf

Yukawa, K. (2018). Souseiki no youchien hobo yousei: Tokyo joshi shihan gakkou ni okeru "Youchien hoiku hou" no kentou wo chushin ni [Training of Kindergarten Teachers in Pioneer Days: Focusing on "The Methods of Kindergarten Education" in Tokyo Normal School for Females.] Ningenkyouiku no tankyu [Research on Education of Man: Bulletin of Japan Society for the Study of Pestalozzi and Froebel], 30, 1–26.

Author

Matsumura, Naoko
ORCID: 0009-0005-3255-7107
Yamaguchi Gakugei University, Japan
Professor, Faculty of Education
Main areas of work and research: Froebel's educational theory; history of educational thought
matsumura@y-gakugei.ac.jp

Lynn J. McNair, Caroline Walsh, Selvaraja Selvarani, Suzanne Hermiston and Mairi Ferris

Our Wee Garden at the Royal Botanic Garden Edinburgh: Inspiring children to learn, whilst learning to inspire others through their actions

Abstract

Botanic gardens offer rich yet underused opportunities for early learning and childcare. In September 2021, the Royal Botanic Garden Edinburgh launched a six-month outdoor nursery pilot, ‚Our Wee Garden,' in a previously disused area of the Garden. Working with the University of Edinburgh and Thrive Outdoors at Inspiring Scotland, the project explored whether an outdoor nursery could operate successfully in a botanic garden. Around 40 children aged 2-5 from two contrasting nurseries participated. The pilot examined the benefits of outdoor learning in this distinctive setting, while seeking to engage children and families with nature, bolster community connections, enabled research-informed outdoor practice, and generate learning for early years practitioners.

Keywords: early childhood, outdoor spaces, child-led pedagogy, learning through play, sustainable living.

Zusammenfassung

Botanische Gärten bieten ein reichhaltiges, bislang jedoch wenig genutztes Potenzial für frühkindliche Bildung und Erziehung. Im September 2021 startete der Royal Botanic Garden Edinburgh in einem zuvor ungenutzten Bereich des Gartens das sechsmonatige Pilotprojekt „Our Wee Garden". In Zusammenarbeit mit der University of Edinburgh und Thrive Outdoors von Inspiring Scotland wurde die Realisierbarkeit dieses naturpädagogischen Angebots untersucht. An dem Pilotprojekt nahmen rund 40 Kinder im Alter von zwei bis fünf Jahren aus zwei Kindertageseinrichtungen teil. Im Mittelpunkt standen die Potenziale des Lernens in der Natur in diesem Bildungsraum. Zugleich zielte das Projekt darauf, Kinder und Familien für Natur zu sensibilisieren, gemeinschaftliche Bezüge zu stärken, eine forschungsbasierte naturpädagogische Praxis zu ermöglichen sowie Erkenntnisse für Elementarpädagog*innen zu gewinnen.

Schlüsselwörter: frühe Kindheit, Naturpädagogik, kindgerechte Pädagogik, spielerisches Lernen, nachhaltiges Leben

1 Introduction

More specifically, the project aimed to:

- Meet learning aims and outcomes through planning in the moment (O Grady, 2024)
- Create a child-led pedagogy (Froebel, 1885)
- Focus on learning through play (Bruce, 2021; 2015).
- Develop the child's emotional literacy, resilience, and enhanced problem-solving skills (Clarke, 2023).
- Increase confidence, mobility, physical capability, and communication skills
- Develop a strong attachment to the local landscape, past, present, and future (Attenburgh, 2020)
- Promote sustainable living (Stevens & Rewse, 2021)

2 Literature

The increasing urbanisation of the world has prompted a growing interest in the integration of green spaces within city environments (Attenburgh, 2020; Broughton, 2020). As cities expand, the need for sustainable practices that enhance biodiversity and provide educational opportunities becomes paramount (Tovey, 2017; Lamba & Lamba, 2017). One such opportunity lies in the utilisation of botanical gardens, which have historically served as repositories of plant diversity and centres for public education (Acheampong, 2021). This literature review explores the role of botanical gardens in urban settings, particularly as environments for outdoor learning and engagement for young children, focusing on the project at the Royal Botanical Gardens (Edinburgh).

2.1 The Role of Botanical Gardens in Urban Biodiversity

Botanical gardens are recognised as critical players in the conservation of plant diversity and the promotion of environmental education (Acheampong, 2021). They serve as living laboratories for the study of plant science and provide a sanctuary for both native and exotic species. The role of these gardens extends beyond mere conservation; they are increasingly seen as vital components in urban ecosystems that can contribute to the mitigation of climate change (Attenburgh, 2020). Botanical gardens are pivotal in raising awareness about biodiversity loss and the urgent need for conservation actions. They create a platform for public engagement and foster a deeper understanding of ecological interconnections (Stevens & Rewse, 2021). They also encourage positive future stewardship through the continued delivery of informal short courses and formal horticultural / plant science qualifications – the latter of which has seen a concerning decline in previous years – all of which are necessary to ensure future generations of horticulturalists (House of Lords, 2023, npn).

2.2 Outdoor Learning and Early Learning and Childcare

The concept of outdoor learning has gained traction in recent years, particularly in early learning and childcare (ELC) Education Scotland, 2020).
Research indicates that outdoor environments can significantly enhance children's learning experiences (Scottish Government, 2024; Tovey, 2017).

> The child needs to experience nature "in all its aspects – form, energy, substance, sound and colour" (Froebel in Lilley, 1967, p. 148).

Children exposed to nature exhibit improved holistic growth (Craft et al., 2012). Furthermore, outdoor settings provide unique opportunities for experiential learning, enabling children to engage directly with their environment. As Froebel argued:

> "To learn a thing in life and through doing is much more developing, cultivating, and strengthening, than to learn it merely through the verbal communication of ideas" (Froebel, 1885, S. 279).

The importance of nature in ELC is underpinned by the Convention on the Rights of the Child, which recognises the right of children to play and engage in recreational activities in natural environments (UNCRC, 1989). As is argued:

> "[T]he child whose training has always been connected with the gradual development of their capacities will attempt only a little more than they have already been able to do and will come safely through all these dangers. It is the child who does not know their strength and the demands made on it who is likely to venture beyond their experience and run into unexpected danger." (Froebel in Lilley, 1967, p. 126-7).

However, many traditional ELC settings have been criticised for their restrictive nature, often limiting children's freedom to play, explore, and interact with their surroundings. This has led to a growing interest in alternative education models that prioritise outdoor learning, particularly in fully outdoor settings where outdoor learning is immersive. Botanical gardens can offer an important role within the cityscape to enable children to experience nature in a structured yet liberating context. As must be considered:

> "Every single person on this earth has the power to change the world" (Stevens & Rewse, 2021, p. 59).

2.3 Challenges of Implementing Outdoor Learning in Botanical Gardens

> "Children feel themselves drawn towards the spiritual in nature, but unless these yearnings be welcomed and strengthened by their elders, either they die away or they lose their confidence in those whom they should respect." (Froebel, 1912, p. 101).

Despite the benefits associated with outdoor learning, there are significant challenges in implementing such experiences within botanical gardens. One primary concern is the perception of botanical gardens as restricted environments, where children may feel constrained by rules that limit their freedom to explore (Clarke, 2022). This perception can hinder the effectiveness of outdoor learning initiatives, as children may be less likely to engage with the environment if they feel they are being monitored or restricted (Watts, 2020). Moreover, the integration of outdoor learning in botanical gardens requires careful planning and collaboration among practitioners, garden staff, and the local community (Whinnett, 2024). The pilot project at the Royal Botanical Gardens (Edinburgh) exemplifies this collaborative approach, as it involved partnerships with local nurseries and educational institutions to create a supportive learning environment for young children. The success of such initiatives depends on the ability to create relationships between practitioners and the community, ensuring the educational experiences offered to the children are relevant and accessible to all families (Whinnett, 2024; Imray, 2023; Stevens & Rewse, 2021; Brewer, 2016).

2.4 Community Engagement and Parental Involvement

Community engagement is a critical aspect of successful outdoor learning initiatives (Watts, 2020; Tovey, 2017). Research suggests that when parents and other family members are actively involved in their children's learning experiences, the benefits extend beyond the educational setting and into the home environment (Bruce, 2021).

> "Today the most urgent need in education is that the school should be united with the life of home and family" (Froebel in Lilley, 1967, p. 156).

The pilot project at the Royal Botanical Gardens not only aimed to engage children but also sought to involve parents in the learning process, creating a sense of community and shared responsibility for environmental stewardship (Bruce, 2021; Tovey, 2020; Cameron & Moss, 2011). Furthermore, the role of botanical gardens in promoting community engagement extends to addressing issues of social equity (Imray, 2023). Many urban botanical gardens are located in areas with diverse populations, and their programs cannot be tailored to meet the needs of various demographic groups (Whistler & Montgomery, 2024). By creating inclusive educational opportunities, botanical gardens can help bridge gaps in access to nature and environmental education, promoting a more equitable society.

2.5 Summary

The literature highlights the multifaceted role of botanical gardens in urban environments, particularly as spaces for outdoor learning and community engagement. The pilot project at the Royal Botanical Gardens (Edinburgh) represents a promising step toward harnessing the potential of these green spaces for the ben-

efit of children and their families. By addressing the challenges of perception and accessibility, botanical gardens can become vital educational resources that create a deeper connection between children and nature, ultimately contributing to the broader goals of biodiversity conservation and climate action. As cities continue to evolve, the integration of outdoor learning within botanical gardens presents a unique opportunity to engage the next generation in environmental stewardship (Acheampong, 2021).

3 Methodology

3.1

In order to answer the question: ***Can you actually run an outdoor nursery in a botanic garden?***, it was agreed an ethnographic methodology would enable the researchers to answer the research question. Before the conduction of the research, it was agreed that the researchers would live alongside the children in the everyday life of the 'Wee Garden'. Naturalistic observations were captured as the children (and adults) co-constructed and made sense of their surroundings (O Grady, 2024). Our thoughts align with Louis':

> "It is a privilege to observe and to listen to a child to find out how they are thinking and making sense of the world." (Louis, 2022, p. 111).

As ethnographic research is relatively unstructured, the researchers captured raw/fluid data, which was analysed and interpreted for meaning. Qualitative data were primarily gathered through daily journaling, observations, informal dialogue with children, children's contributions (figure 1), and semi-structured interviews with early years practitioners.

> "Children who are just becoming confident in any kind of expression need a sensitive audience who recognise their intentions and right to express themselves." (Whinnett, 2012, p. 125).

The essence of what was being observed was captured on site, through narrative notes, all observations were written up fully after the end of the session. The semi-structured interviews were carried out with the participants and with the early years practitioners from the two visiting early learning and childcare settings (Whinnett, 2024). A series of open questions encouraged each participant to recount the details of their involvement. The interviews were carried out both online and in-person, at a time that was convenient for each participant. Where respondents agreed, the interviews were recorded and fully transcribed. Drawing on the approach set out by Silvermann (2006), a content analysis was conducted, which involved reading carefully through observation notes and interview transcripts (Louis, 2022). A copy of the data was electronically stored on a password-protected device. The files were then re-read, and important aspects were highlighted.

These temporary constructs enabled the coding process. The data was then read through again; a table was then created with the temporary constructs on the left and transcript details on the right. This allowed for some temporary constructs to be eliminated. No data was deleted. A further reading reinforced important themes. A final reading allowed for a refining of the data which revealed the constructs that captured the essence of the data. Emerging patterns and divergent data were identified, and the findings collated.

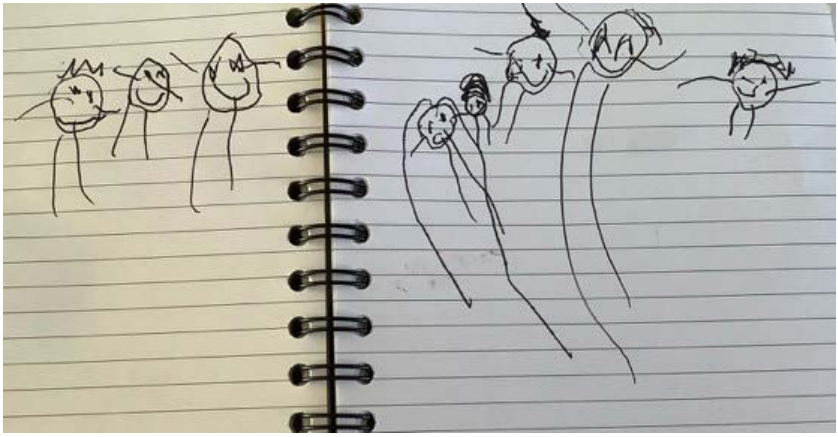


Fig. 1: Children's contributions (own illustration)

3.2

Ethical approval was obtained from Inspiring Scotland. Inspiring Scotland upholds the highest standards of rigor and integrity in all aspects of research and evaluation. That is research is conducted according to appropriate ethical, legal, and professional frameworks, obligations, and standards; the research environment is underpinned by a culture of integrity and based on good governance, best practice, and support for the development of researchers; transparent, timely, robust, and fair processes are in place; the research process is reviewed regularly and openly. Inspiring Scotland's ethical standards are designed to protect participants as well as the researchers.

4 Findings

The pilot program at the Royal Botanical Gardens (Edinburgh), affectionately dubbed 'Our Wee Garden', provided a unique opportunity to observe and analyse the multifaceted educational and developmental benefits of an outdoor nursery in a botanical garden setting.

> "...we want to cultivate that sense of connectedness so that it can become the emotional foundation for the more abstract ecological concept that everything is connected to everything else." (Sobel, 2013, p. 16)

This section presents the results of the pilot, focusing on three primary themes: spiritual encounters, nature interests, and sharing learning. Each theme encapsulates the children's experiences and interactions within the garden, highlighting the potential of botanical gardens as vibrant learning environments for children.

4.1 Spiritual Encounters:

The children spent several days creating fairy houses. Returning time and time again to elaborate on their design and on their storytelling. The children's engagement with the concept of fairy houses and related storytelling revealed a thoughtful connection to imaginative play and symbolic thinking (Bruce, 2023; Bruce et al., 2020; Casey et al., 2019).

> "Storytelling and sociodramatic play are complementary modes of narrative activity and initially emerge separately and distinctly." (Gill, 2020, p. 187).

As they constructed fairy houses from natural materials, the children demonstrated an understanding of narrative and symbolism inherent in fairy tales (Tovey, 2020).

> "Allowing time and space for children's authentic responses involved at times setting up and creating play-spaces, stepping back, observing, holding back from interrupting, following children's interests, and also creating a space for children's participation." (Craft, McConnon and Matthews 2012, p. 57).

The following observations illustrate the depth of their engagement:

Imaginative Play:

> "The children saw their fairy houses were still there and asked if I would read the story again..." (Early Years Practitioner).

The act of building fairy houses enabled children to immerse themselves in a world of fantasy. One child expressed a desire to have the story read again upon seeing their fairy houses still standing. This interaction supports the importance of narrative in cultivating creativity and emotional connections to the environment (Bruce & Spratt, 2011).

> "The child's need to make use of the most pliable and delicate material in his creative work is in accordance with the activity and phenomena of Nature which creates from light, air, water, earth and dust.... We must respect the child's desire to affirm his powers of expression through these objects, since he is proving that he is both a creative being and also part of the whole circle of life" (Froebel in Lilley, 1967, p. 115).

Collaboration and Creativity:

> "E, F and Z chose to make another fairy house, with razor shells".

The collaborative nature of creating fairy houses was evident when children worked together to gather materials and construct their homes. This experience encouraged teamwork and enabled the exploration of open-ended materials.

Symbolic Interaction:

> "'A' spotted me and trapped me with a stick again, he repeated this action and laughed, when I suggested magic words to get free..." (Early Years Practitioner).

One notable interaction involved a child playfully trapping a practitioner with a stick, demonstrating a blend of imaginative play and social interaction. The suggestion of using 'magic words' to escape highlights the children's understanding of narrative structures and their desire to engage in imaginative storytelling (Bruce, 2023; Bruce et al., 2020).

These spiritual encounters inspired creativity and enabled the children to explore their emotions and social dynamics in a supportive environment. The stories and experiences provided a framework for children to express themselves and develop a sense of belonging within the garden (Carson, 1998).

4.2 Nature Interests:

The children's interactions with the natural environment revealed a curiosity and fascination with the biodiversity present in the garden. This theme illustrates how outdoor learning experiences can enhance children's understanding of nature and promote inquiry-based learning. Key observations include:

Exploration and Discovery:

> I found a nest on a bench...some children were fascinated, wanted to touch it and wondered about the bird that built it...one child asked: "what happened to the eggs" (Early Years Practitioner).

The discovery of a nest on a bench prompted questions and discussions about the bird that built it, illustrating the children's innate curiosity about wildlife. Such moments allowed for spontaneous learning opportunities, inspiring a sense of wonder and inquiry (Scottish Government, 2024).

> "The child who has cared for another living thing... is more easily led to care for his own life." (Froebel in Lilley, 1967, p. 129).

Engagement with Ecosystems:

> Someone knocked over a log from round the tree between the shed and the mud kitchen, and we found lots of little snails, a millipede and some slugs, all hiding in the crevices in the rotten wood (Early Years Practitioner).

The children's encounters with various creatures, such as snails, millipedes, and slugs, provided opportunities for first-hand experiences about ecosystems and biodiversity. Their reactions to finding these creatures demonstrated a growing understanding of the interconnectedness of life (Froebel, 1885).

Seasonal Awareness:

> The children found the nest that had blown down often the storm, it fell from the Silver Birch, 'P' said, "Squirrels maybe hibernate in it." (Early Years Practitioner).

Observations of seasonal changes, such as the discovery of a nest that had fallen after a storm, prompted discussions about animal behaviour and habitats. This engagement with the environment nurtured a sense of place and awareness of the natural world (Mayer & Frantz, 2004).

Active Observation:

> "'D' was standing by the tent and pointed to a frog that was jumping up the tent. I asked what he thought was happening? D smiled and pointed. I suggested we watch the frog, it jumped and fell down into a little pool of water at the bottom of the tent, then he jumped into the tent... the frog was very still and next he jumped out again and we went to see if he was out the tent again, we went out and saw him jump, jump, jump around the back" (Early Years Practitioner)

The children's interactions with a frog exemplified their capacity for observation and inquiry. By watching the frog's movements, they engaged in a process of scientific exploration, asking questions and hypothesising about the creature's behaviour.

These natural interests illustrate the importance of outdoor settings in creating a sense of curiosity and engagement with the environment. The children's interactions with the natural world supported their holistic development and their connections to the ecosystem (Scottish Government, 2024).

4.3 Sharing Learning

The pilot program also highlighted the significance of sharing learning experiences among children and practitioners (O Grady, 2024).

> "Dispositions towards the natural world are formed early in life and Froebel argued that if adults show indifference or disdain for nature, the child's seed of knowledge and interest which is just beginning to germinate can be crushed. It is therefore important

> that those who work with young children should be knowledgeable and keen observers of both children and nature." (Tovey, 2022, p. 5).

This theme reflects the collaborative nature of learning in 'Our Wee Garden' setting, where children were encouraged to express their thoughts and insights. Notable observations include:

Peer Learning:

> 'I spoke to Luke about schemas, as two children were transporters, he had never heard of this before' (Early Years Practitioner)

The concept of schemas, particularly the idea of children as 'transporters', was introduced to a practitioner during a session with a child. This example exemplifies how learning can be mutually beneficial, with children contributing to the professional development of educators.

Artistic Expression:

> Some children took time to draw what was important to them – the hanging twigs (figure 2) (Early Years Practitioner).

Children took time to draw what was significant to them, such as the hanging dried twigs (Bruce & Spratt, 2011). This artistic expression provided a platform for children to communicate their thoughts and feelings, further enhancing their learning experience (Craft et al., 2012).

> "A Froebelian approach to creativity is about children representing their own ideas in their own way. As children gain experience and understand the symbolic potential of materials, ideas can be explored with increasing complexity. It is not about copying and assembling adult-designed artefacts or filling-in pre-drawn outlines." (Tovey 2020 in Cave, 2021, p. 9).

Community Engagement:

The pilot also aimed to strengthen links with the wider community. By involving parents and other family members in the learning process, the program created a sense of community and shared responsibility for children's learning and development.

> "My child loved Our Wee Garden, she usually won't get out of bed in the morning but the days she was coming to the Botanics, she was up, dressed, fed and ready to go." (Parent quote, shared with a practitioner).

> "If a child is to keep alive his inborn sense of wonder he needs the companionship of at least one adult who can share it, rediscovering with him the joy, excitement and mystery of the world we live in." (Carson, 1998, p. 55).

These observations draw attention to the importance of collaborative learning environments where children can share their experiences and insights with peers and practitioners (Louis, 2022). The sharing of knowledge enriches the learning experience and creates a sense of community and belonging (Robb et al., 2015).



Fig. 2: Some children took time to draw what was important to them - the hanging dried twigs (own illustration)

The results of the pilot program at 'Our Wee Garden' indicate that botanical gardens can serve as effective outdoor learning environments for children. By engaging in imaginative play, exploring nature, and sharing learning experiences, children developed holistically (Scottish Government, 2024; Liebschner, 2001; Cuffaro, 1995).

> "Play is the right of every child. Not a privilege." (Souto-Manning, 2017, p. 785).

The findings suggest that outdoor nurseries in botanical gardens can provide valuable opportunities for children to connect with their environment, creating a lifelong appreciation for nature and learning.

5 Conclusion

The pilot project at the Royal Botanical Gardens (Edinburgh), known affectionately as 'Our Wee Garden', has illuminated the vast potential of botanical gardens as dynamic and engaging outdoor learning environments for children. This initiative not only sought to answer the fundamental question of whether an outdoor nursery could be successfully operated within a botanical garden, but it also provided

valuable insights into the multifaceted benefits of outdoor learning, particularly in the context of biodiversity education and community engagement. As we draw conclusions from this project, we must reflect on its implications for Early Learning and Childcare (ELC) (Education Scotland, 2020) environmental stewardship, and urban biodiversity conservation.

The findings from 'Our Wee Garden' project emphasise the critical role that botanical gardens can play in enhancing ELC (Scottish Government, 2024). The children's engagement with the garden's natural environment facilitated a rich tapestry of learning experiences that were both educational and transformative (Liebschner, 2001). Through imaginative play, exploration, and collaboration, children developed holistically (Craft et al., 2012).

> "Froebelian educators create long periods of open-ended, uninterrupted time so that both children and adults can become deeply involved in play and other learning activities. Time is not 'filled' but is freed from all unnecessary interruptions" (Tovey, 2017, p. 42).

The project demonstrated that when children are provided with opportunities to interact slowly and freely with their surroundings, they are more likely to engage deeply with their learning (Clark, 2023; Orr, 1996).
The pilot project revealed that children's imaginative play, such as the construction of fairy houses, inspired creativity and symbolic thinking (Bruce, 2023; Cuffaro, 1995).

> "Play is the highest expression of human development in childhood for it alone is the free expression of what is in a child's soul." (Froebel, 1912, pp. 50-51).

This type of engagement is essential for holistic development, as it enables children to express their emotions and forge connections with their environment (Clarke, 2022). The narrative-driven experiences, where children requested stories to be retold, highlight the importance of storytelling in ELC (Bruce et al., 2020). Such interactions enhance language skills and encourage children to develop their own narratives, inspiring a sense of ownership and belonging within the space.

> "Place is where people, location and resources combine to create a sense of identity and purpose, and are at the heart of addressing the needs and realising the full potential of communities. Places are shaped by the way resources, services and assets are directed and used by the people who live in and invest in them" (Scottish Government, 2019, npn).

Inviting children to engage, explore, and be visible with the botanical gardens is to acknowledge their place as citizens within the space and within the urban environment. This, in turn, shapes how children are perceived within such spaces and aids the evolution of multi-generational civic assets.

Moreover, the findings suggest that outdoor learning in botanical gardens can facilitate a child-led pedagogy. This approach empowers children to take the lead in their learning, creating autonomy and confidence. By enabling children to explore their interests and curiosities, practitioners can create a more engaging and responsive learning environment. The project exemplified how practitioners can adopt a flexible and adaptive teaching style that meets the diverse needs of children, thus promoting inclusivity and accessibility.

The observations gathered during the pilot project highlight the inherent curiosity of children and their capacity for inquiry-based learning when immersed in natural settings (Louis, 2022). The children's interactions with the biodiversity within the garden – whether discovering a bird's nest or observing the behaviour of frogs – served as powerful catalysts for spontaneous learning. These experiences enriched the children's understanding of ecological concepts and nurtured a sense of wonder and respect for the natural world. Research consistently supports the notion that outdoor environments, particularly those rich in biodiversity, can significantly enhance children's learning experiences. The children's engagement with various ecosystems and their observations of seasonal changes encouraged a deeper understanding of ecological interconnections (Louis, 2022). This aligns with the principles set forth by the Convention on the Rights of the Child, which emphasises the right of children to engage with their environment in meaningful ways. By integrating outdoor learning into ELC, we can cultivate a generation of environmentally conscious individuals who appreciate and advocate for biodiversity conservation.

The pilot project also emphasised the importance of community engagement and parental involvement in the educational process.

> "Feeling part of a community strengthens educational practice, according to the Froebelian tradition." (Bruce, 2020, p. 28).

Successful outdoor learning initiatives are not solely confined to the interactions between children and practitioners; they extend to the broader community (Cameron & Moss, 2011). By actively involving parents and family members in the learning experiences the project created a sense of shared responsibility for children's education and environmental stewardship.

The collaborative nature of the pilot project created opportunities for families to connect with the garden and with each other, thereby strengthening community ties. This approach is particularly important in urban settings, where diverse populations may face barriers to accessing nature and environmental education. By tailoring programs to meet the needs of various demographic groups, botanical gardens can play a pivotal role in promoting social equity and inclusivity in environmental education.

Furthermore, the pilot project highlighted the potential for botanical gardens to serve as hubs for community engagement. By offering inclusive educational opportunities that resonate with local families, botanical gardens can help bridge

gaps in access to nature, creating a more equitable society (Whistler & Montgomery, 2024). The reciprocal relationship between the garden and community can lead to increased awareness of biodiversity issues and a collective commitment to environmental stewardship.

While the pilot project yielded promising results, it also illuminated the challenges associated with implementing outdoor learning within botanical gardens. The perception of these spaces as restricted environments can hinder children's willingness to explore and engage with their surroundings. It is crucial for practitioners and garden staff to work collaboratively to create an environment that feels safe yet liberating for children (Watts, 2020). This requires a shift in mindset, where the rules governing the use of botanical gardens are re-evaluated to prioritise exploration and play.

Moreover, the successful integration of outdoor learning in botanical gardens necessitates careful planning and collaboration among practitioners, garden staff, and the local community. The pilot project exemplified this collaborative approach, demonstrating that effective relationships between practitioners and the community are essential for creating relevant and accessible educational experiences (Imray, 2023; Brewer, 2016). By creating partnerships and open communication, botanical gardens can overcome the challenges of perception and accessibility, ultimately enhancing their role as vital educational resources (Stevens & Rewse, 2021).

The findings from 'Our Wee Garden Nursery' have significant implications for future research and practice in ELC and environmental stewardship. As cities continue to evolve, the integration of outdoor learning within botanical gardens presents a unique opportunity to engage the next generation in environmental conservation. Further research is needed to explore the long-term impacts of outdoor learning experiences on children's development, particularly in relation to their attitudes towards nature and biodiversity conservation, subsequently building a future generation of horticulturists and botanists who are currently lacking in the fight against biodiversity loss and climate change.

Additionally, this project warrants further investigation of professional development opportunities for practitioners to enhance their understanding of outdoor learning and child-led pedagogies (Whinnett, 2024; Watts, 2020). By equipping practitioners with the knowledge and skills necessary to facilitate meaningful outdoor experiences, we can ensure that children benefit from the rich educational opportunities that botanical gardens offer (Lyschinska, 1889).

In conclusion, the pilot project at the Royal Botanical Gardens (Edinburgh) has demonstrated that botanical gardens can serve as vibrant and dynamic learning environments for young children. Through imaginative play, inquiry-based learning, and community engagement, children can develop a deeper connection to nature and cultivate a sense of environmental stewardship (Scottish Government, 2024; Froebel, 1887). As we move forward, it is essential to harness the potential of botanical gardens as educational resources, ensuring that they remain accessible and relevant to all families (Imray, 2023). By doing so, we can inspire the next

generation to appreciate and protect the natural world, ultimately contributing to the broader goals of biodiversity conservation and sustainable living.

> "If we want children to flourish, to be truly empowered, we must first allow them to love the earth before we ask them to save it." (Sobel, 2013, p. 47).

Bibliography

Acheampong, E. B., Manu, G., Asante, W. A., & Kyere, B. (2021). The role of urban tropical botanic gardens in biodiversity conservation: An example from the KNUST botanic garden in Kumasi, Ghana. Biotropica, 53(5), 1109–1120. https://doi.org/10.1111/btp.12950

Arnott, L., & Duncan, P. (2019). Exploring the pedagogic culture of creative play in early childhood education. Journal of Early Childhood Research, 17(4), 309–328. https://doi.org/10.1177/1476718X19875791

Athey, C. (1990). Extending thought in young children: A parent-teacher partnership. SAGE Publication Ltd.

Artinian, T. (2018). Engaging teachers and toddlers in science. Voices of Practitioners, 13(1), 62–68.

Attenborough, D. (2020). A life on our planet: My witness statement and a vision for the future. Ebury Press.

Australian Government Department of Education, Employment and Workplace Relations. (2009). Belonging, being and becoming: The Early Years Learning Framework for Australia. Commonwealth of Australia.

Bai, P., Thornton, A., Lester, L., Schipperijn, J., Trapp, G., Boruff, B., & Christian, H. (2020). Nature play and fundamental movement skills training programs improve childcare educator supportive physical activity behavior. International Journal of Environmental Research and Public Health, 17(1), 223. https://doi.org/10.3390/ijerph17010223

Bairaktarova, D., Evangelou, D., Bagiati, A., & Brophy, S. (2011). Early engineering in young children's exploratory play with tangible materials. Children, Youth and Environments, 21(2), 212–235. https://doi.org/10.7721/chilyoutenvi.21.2.0212

Barratt Hacking, E., Flanders Cushing, D., & Barratt, R. (2020). Exploring the significant life experiences of childhoodnature. In A. Cutter-Mackenzie, K. Malone, & E. Barratt Hacking (Eds.), Research handbook on childhoodnature (pp. 1–18). Springer. https://doi.org/10.1007/978-3-319-51949-4_60-1

Beery, T. (2020). Exploring access to nature play in urban parks: Resilience, sustainability, and early childhood. Sustainability, 12(12), 4894. https://doi.org/10.3390/su12124894

Beery, T., & Jørgensen, K. A. (2018). Children in nature: Sensory engagement and the experience of biodiversity. Environmental Education Research, 24(1), 13–25. https://doi.org/10.1080/13504622.2016.1250149

Brewer, K. (2016, May 1). Nature is the best way to nurture pupils with special educational needs. The Guardian. https://www.theguardian.com/teacher-network/2016/may/01/nature-nurture-pupils-special-educational-needs-outdoor-education

Broughton, S. (2020). The extraordinary gardener. Tate Publishing.

Bruce, T. (2023). Empowering learning: Play, symbols and creativity. Froebel Trust.

Bruce, T. (2021). Friedrich Froebel: A critical introduction to key themes and debates. Bloomsbury Academic.

Bruce, T., McNair, L., & Whinnett, J. (Eds.). (2020). Putting storytelling at the heart of early childhood practice: A reflective guide for early years practitioners. Routledge.

Bruce, T. (2015). Early childhood education (5th ed.). Hodder Education.

Bruce, T., & Spratt, J. (2011). Essentials of literacy from 0–7. Sage.

Brussoni, M., Olsen, L. L., Pike, I., & Sleet, D. A. (2012). Risky play and children's safety: Balancing priorities for optimal child development. International Journal of Environmental Research and Public Health, 9(9), 3134–3148. https://doi.org/10.3390/ijerph9093134

Bucher, E., & Hernández, M. (2016). Beyond bouncing the ball: Toddlers and teachers investigate physics. YC Young Children, 71(3), 17–24.

Campbell Galman, S. (2020). Nicole's mother is dead: Death games, unruly stories, and what matters in preschool. Ethnography and Education, 15(4), 1–17. https://doi.org/10.1080/17457823.2020.1861956

Cameron, C., & Moss, P. (Eds.). (2011). Social pedagogy and working with children and young people. Jessica Kingsley.

Carson, R. (1998). The sense of wonder. HarperCollins.

Casey, D., Richardson, A., & d'Ascoli, H. (2019). The children's forest: Stories and songs, wild food, crafts and celebrations, all year round. Hawthorn Press.

Cave, S. (2021). Shaping our future: A guide to our ethos. Guildford Nursery School and Family Centre. https://thefroebelpartnership.co.uk/wp-content/uploads/2021/11/Shaping-our-future.pdf

Clark, A. (2023). Slow knowledge and the unhurried child: Time for slow pedagogies in early childhood education. Routledge.

Clarke, N. (2022). Children and nature [Webinar]. Froebel Trust. https://www.froebel.org.uk/training-and-resources/children-and-nature

Colliver, Y., & Fleer, M. (2016). "I already know what I learned": Young children's perspectives on learning through play. Early Child Development and Care, 186(10), 1559–1570. https://doi.org/10.1080/03004430.2015.1111880

Craft, A., McConnon, L., & Matthews, A. (2012). Child-initiated play and professional creativity: Enabling four-year-olds' possibility thinking. Thinking Skills and Creativity, 7(1), 48–61. https://doi.org/10.1016/j.tsc.2011.11.005

Cremin, T., Glauert, E., Craft, A., Compton, A., & Stylianidou, F. (2015). Creative little scientists: Exploring pedagogical synergies between inquiry-based and creative approaches in early years science. Education 3–13, 43(4), 404–419. https://doi.org/10.1080/03004279.2015.1020655

Cuffaro, H. (1995). Experimenting with the world: John Dewey and the early childhood classroom. Teachers College Press.

Cutcher, A., & Rousell, D. (2014). Collaborative visual mapping as performance: Visual arts pre-service teachers' reflections on practicum. International Journal of Education through Art, 10(2), 247–254. https://doi.org/10.1386/eta.10.2.247_1

Cutcher, A., Rousell, D., & Cutter-Mackenzie, A. (2015). Findings, windings and entwinings: Cartographies of collaborative walking and encounter. International Journal of Education through Art, 11(3), 449–458. https://doi.org/10.1386/eta.11.3.449_1

Cutter-Mackenzie, A., & Edwards, S. (2006). Environmental education as a content area in early childhood education and curriculum. Australian Journal of Environmental Education, 22(2), 13–27. https://doi.org/10.1017/S0814062600001593

Cutter-Mackenzie, A., & Edwards, S. (2013a). The next 20 years: Imagining and re-imagining sustainability, environment and education in early childhood education. In S. Elliott, J. Davis, S. Edwards, & A. Cutter-Mackenzie (Eds.), Best of sustainability: Research, practice and theory (pp. 61–67). Early Childhood Australia.

Cutter-Mackenzie, A., & Edwards, S. (2013b). Toward a model for early childhood environmental education: Foregrounding, developing, and connecting knowledge through play-based learning. The Journal of Environmental Education, 44(3), 195–213. https://doi.org/10.1080/00958964.2012.751892

Cutter-Mackenzie, A., Edwards, S., Moore, D., & Boyd, W. (2014). Young children's play and environmental education in early childhood education. Springer. https://doi.org/10.1007/978-3-319-03740-0

Cutter-Mackenzie, A., Edwards, S., & Widdop Quinton, H. (2015). Child-framed video research methodologies: Issues, possibilities and challenges for researching with children. Children's Geographies, 13(3), 343–356. https://doi.org/10.1080/14733285.2015.1004525

Cutter-Mackenzie-Knowles, A., Lasczik, A., Wilks, J., Logan, M., Turner, A., & Boyd, W. (2019). Touchstones for deterritorialising socioecological learning: The Anthropocene, posthumanism and common worlds as creative milieux. Palgrave Macmillan. https://doi.org/10.1007/978-3-030-27274-0

Cutter-Mackenzie-Knowles, A., Malone, K., & Barratt Hacking, E. (Eds.). (2020). Research handbook on childhood nature: Assemblages of childhood and nature research. Springer. https://doi.org/10.1007/978-3-319-67286-1

Davids, K. (2018). Affordances guiding Forest School practice: The application of the ecological dynamics approach. Journal of Outdoor and Environmental Education, 21(1), 103–117. https://doi.org/10.1007/s42322-017-0006-9

Deleuze, G., & Guattari, F. (1987). A thousand plateaus: Capitalism and schizophrenia. University of Minnesota Press.

Deleuze, G., & Guattari, F. (1994). What is philosophy? Columbia University Press.

Dodd-Nufrio, A. (2011). Reggio Emilia, Maria Montessori, and John Dewey: Dispelling teachers' misconceptions and understanding theoretical foundations. Early Childhood Education Journal, 39(4), 235–237. https://doi.org/10.1007/s10643-011-0451-3

Dowdell, K., Gray, T., & Malone, K. (2011). Nature and its influence on children's outdoor play. Australian Journal of Outdoor Education, 15(2), 24–35. https://doi.org/10.1007/BF03400925

Education Scotland. (2020). Realising the ambition: Being me. https://education.gov.scot/media/3bjpr3wa/realisingtheambition.pdf

Edwards, S., & Cutter-Mackenzie, A. (2011). Environmentalising early childhood education curriculum through pedagogies of play. Australian Journal of Early Childhood, 36(1), 51–60. https://doi.org/10.1177/183693911103600108

Edwards, S., & Cutter-Mackenzie, A. (2013). Next time we can be penguins: Expanding the concept of 'learning play' to support learning and teaching about sustainability in early childhood education. In O. Lillemyr, S. Dockett, & B. Perry (Eds.), Varied perspectives on play and learning: Theory and research in early years education (pp. 255–274). Information Age Press.

Ernst, J. (2012). Early childhood nature play: A needs assessment of Minnesota licensed childcare providers. Journal of Interpretation Research, 17(1), 7–24. https://doi.org/10.1177/109258721201700102

Ernst, J. (2014). Early childhood educators' use of natural outdoor settings as learning environments: An exploratory study of beliefs, practices, and barriers. Environmental Education Research, 20(6), 735–752. https://doi.org/10.1080/13504622.2013.833596

Fleer, M. (2010). Concepts in play: A cultural-historical view of early learning and development. Cambridge University Press. https://doi.org/10.1017/CBO9780511844839

Froebel, F. (1885). The education of man (H. P. Peabody, Trans.; Original work published 1826). Appleton & Co.

Froebel, F. (1887). Froebel's letters on the kindergarten (F. S. S. Fletcher & J. Welton, Trans.). Swan Sonnenschein.

Froebel, F. (1912). Froebel's chief writings on education (S. S. F. Fletcher & J. Welton, Trans.). Edward Arnold.

Gill, C. (2020). Stomping giants and diamond castles: A study of the use of story grammars to support the development of coherence in written narrative within the context of a Froebelian play-based Primary 1 classroom. In T. Bruce, L. McNair, & J. Whinnett (Eds.), Putting storytelling at the heart of early childhood practice: A reflective guide for early years practitioners (pp. 167–188). Routledge.

Green, C. (2020). Embodied childhood nature experiences through sensory tours. In A. Cutter-Mackenzie-Knowles, K. Malone, & E. Barratt Hacking (Eds.), Research handbook on childhood nature (pp. 1–14). Springer. https://doi.org/10.1007/978-3-319-51949-4_31-1

Greenfield, D. B., Alexander, A., & Frechette, E. (2017). Unleashing the power of science in early childhood: A foundation for high-quality interactions and learning. Zero to Three, 37(5), 13–20.

Grieshaber, S. (2008). Interrupting stereotypes: Teaching and the education of young children. Early Childhood Education and Development, 19(3), 505–518. https://doi.org/10.1080/10409280802065382

Hamlin, M., & Wisneski, D. (2012). Supporting the scientific thinking and inquiry of toddlers and preschoolers through play. YC Young Children, 67(3), 82–88.

Haraway, D. (2016). Staying with the trouble: Making kin in the Chthulucene. Duke University Press.

Harper, N. J. (2017). Outdoor risky play and healthy child development in the shadow of the "risk society": A forest and nature school perspective. Child & Youth Services, 38(4), 318–334. https://doi.org/10.1080/0145935X.2017.1412825

Herbert, T. (2008). Eco-intelligent education for a sustainable future life. In I. P. Samuelsson & Y. Kaga (Eds.), The contribution of early childhood education to a sustainable society (pp. 63–66). UNESCO.

Hobbs, M. E., Williams, R. A., & Sherwood, E. A. (2012). Collaborating with teacher researchers to study what young children know and can do in science. Voices of Practitioners, 7(1), 1–11.

House of Lords. (2023). Sowing the seeds: A blooming English horticultural sector (Horticultural Sector Committee Report). https://publications.parliament.uk/pa/ld5803/ldselect/ldhortcom/268/26807.htm

Howell, E. (2017, July 18). Humans really are made of stardust, and a new study proves it. Space.com. https://www.space.com/35276-humans-made-of-stardust-galaxy-life-elements.html

Imray, S. (2023). A sense of belonging – Recognising the importance of being truly inclusive. Froebel Trust. https://www.froebel.org.uk/research-library/a-sense-of-belonging-recognising-the-importance-of-being-truly-inclusive

Jackson, A. Y., & Mazzei, L. A. (2016). Thinking with an agentic assemblage in posthuman inquiry. In C. A. Taylor & C. Hughes (Eds.), Posthuman research practices in education (pp. 93–107). Palgrave Macmillan.

James, J., Bixler, R., & Vadala, C. (2010). From play in nature, to recreation then vocation: A developmental model for natural history-oriented environmental professionals. Children, Youth and Environments, 20(1), 231–256. https://doi.org/10.7721/chilyoutenvi.20.1.0231

Kahn Jr., P. H., & Weiss, T. (2017). The importance of children interacting with big nature. Children, Youth and Environments, 27(2), 7–24. https://doi.org/10.7721/chilyoutenvi.27.2.0007

Kahn Jr., P. H., Weiss, T., & Harrington, K. (2020). Child-nature interaction in a forest preschool. In A. Cutter-Mackenzie-Knowles, K. Malone, & E. Barratt Hacking (Eds.), Research handbook on childhoodnature (pp. 1–17). Springer. https://doi.org/10.1007/978-3-319-51949-4_34-1

Knight, L. (2016). Playgrounds as sites of radical encounters: A mapping of material, affective, spatial, and pedagogical collisions. In N. Snaza, D. Sonu, S. E. Truman, & Z. Zaliwska (Eds.), Pedagogical matters: New materialisms and curriculum studies (pp. 13–28). Peter Lang.

Kuo, M., Barnes, M., & Jordan, C. (2019). Do experiences with nature promote learning? Converging evidence of a cause-and-effect relationship. Frontiers in Psychology, 10, 305. https://doi.org/10.3389/fpsyg.2019.00305

Lamba, M., & Lamba, B. (2017). Green green: A community gardening story. Farrar, Straus and Giroux.

Langton, M. (2019). Welcome to country (Youth ed.). Hardie Grant Travel.

Lasczik Cutcher, A., & Irwin, R. L. (2017). Walkings-through paint: A c/a/r/tography of slow scholarship. Journal of Curriculum and Pedagogy, 14(2), 116–124. https://doi.org/10.1080/15505170.2017.1310680

Leopold, A. (1949). A sand county almanac and sketches here and there. Oxford University Press.
Lenz-Taguchi, H. (2011). Investigating learning, participation and becoming in early childhood practices with a relational materialist approach. Global Studies of Childhood, 1(1), 36–50. https://doi.org/10.2304/gsch.2011.1.1.36
Liebschner, J. (2001). A child's work: Freedom and guidance in Froebel's educational theory and practice (Original work published 1992). Lutterworth Press.
Lillard, A. S., & Taggart, J. (2019). Pretend play and fantasy: What if Montessori was right? Child Development Perspectives, 13(2), 85–90. https://doi.org/10.1111/cdep.12314
Lilley, I. M. (1967). Friedrich Froebel: A selection from his writings. Cambridge University Press.
Louis, S. (2022). Observing learning in early childhood. Sage.
Loizou, E. (2017). Towards play pedagogy: Supporting teacher play practices with a teacher guide about socio-dramatic and imaginative play. European Early Childhood Education Research Journal, 25(5), 784–795. https://doi.org/10.1080/1350293X.2017.1356574
Louv, R. (2005). Last child in the woods: Saving our children from nature-deficit disorder. Algonquin Books.
Louv, R. (2011). The nature principle: Human restoration and the end of nature-deficit disorder. Algonquin Books.
Louv, R. (2016). Vitamin N: The essential guide to a nature-rich life: 500 ways to enrich your family's health & happiness. Algonquin Books.
Lyschinska, M. (1889). The kindergarten principle. Wm. Isbister.
Malone, K., & Tranter, P. (2003a). Children's environments: A study of children's environmental learning in relation to their schoolground experiences. RMIT University.
Malone, K., & Tranter, P. (2003b). School grounds as sites for learning: Making the most of environmental opportunities. Environmental Education Research, 9(3), 283–303. https://doi.org/10.1080/13504620303459
Malone, K., & Tranter, P. (2005). "Hanging out in the school ground": A reflective look at researching children's environmental learning. Canadian Journal of Environmental Education, 10(1), 212–224.
Malone, K. (2015). Posthumanist approaches to theorising children's human-nature relations. In K. Nairn, P. Kraftl, & T. Skelton (Eds.), Space, place and environment (Vol. 3, pp. 1–22). Springer. https://doi.org/10.1007/978-981-4585-96-5_28-1
Malone, K. (2016). Reconsidering children's encounters with nature and place using posthumanism. Australian Journal of Environmental Education, 32(1), 1–15. https://doi.org/10.1017/aee.2015.48
Malone, K., & Moore, S. J. (2019a). Sensing ecologically through kin and stones. International Journal of Early Childhood Environmental Education, 7(1), 8–25.
Malone, K. (2019b). Worlding with kin: Diffracting child fish sensorial ecological encounters through moving image. Video Journal of Education and Pedagogy, 4(1), 69–80. https://doi.org/10.1163/23644583-00401005
Malone, K., Birrell, C., Boyle, I., & Gray, T. (2015). Wild nature play: Researching out of school hours in the bush. University of Western Sydney, Centre for Educational Research.
Malone, K., Truong, S., & Gray, T. (2016). Reimagining sustainability in precarious times. Springer.
Mayer, F. S., & Frantz, C. M. (2004). The connectedness to nature scale: A measure of individuals' feeling in community with nature. Journal of Environmental Psychology, 24(4), 503–515. https://doi.org/10.1016/j.jenvp.2004.10.001
Moomaw, S., & Davis, J. A. (2010). STEM comes to preschool. YC Young Children, 65(5), 12–18.
Moyle, K. (2019). Literature review: Indigenous early childhood education, school readiness and transition programs into primary school. Australian Council for Educational Research. https://research.acer.edu.au/cgi/viewcontent.cgi?article=1001&context=littlejbigcuz

Nelson, N. (2020). Rats, death, and Anthropocene relations in urban Canadian childhoods. In A. Cutter-Mackenzie-Knowles, K. Malone, & E. Barratt Hacking (Eds.), Research handbook on childhoodnature (pp. 1–17). Springer. https://doi.org/10.1007/978-3-319-51949-4_67-1

Nxumalo, F. (2020). Situating Indigenous and Black childhoods in the Anthropocene. In A. Cutter-Mackenzie-Knowles, K. Malone, & E. Barratt Hacking (Eds.), Research handbook on childhoodnature (pp. 1–14). Springer. https://doi.org/10.1007/978-3-319-51949-4_12-1

O'Grady, R. (2024). Honoring the moment in young children's lives: Observation, documentation, and reflection. Redleaf Press.

Orr, D. W. (1996). Slow knowledge. Conservation Biology, 10(3), 699–702. https://doi.org/10.1046/j.1523-1739.1996.10030699.x

Pacini-Ketchabaw, V. (2013). Frictions in forest pedagogies: Common worlds in settler colonial spaces. Global Studies of Childhood, 3(4), 355–365. https://doi.org/10.2304/gsch.2013.3.4.355

Pacini-Ketchabaw, V., & Taylor, A. (Eds.). (2015). Unsettling the colonial places and spaces of early childhood education. Routledge.

Park, J. (2019). A comparison of the pretending elements between constructive play and pretend play. The Turkish Online Journal of Educational Technology, 18(4), 1–6.

Payne, P. G., & Wattchow, B. (2009). Phenomenological deconstruction, slow pedagogy and the corporeal turn in wild environmental/outdoor education. Canadian Journal of Environmental Education, 14, 15–32.

Platz, D., & Arellano, J. (2011). Time-tested early childhood theories and practices. Education, 132(1), 54–63.

Pineda, M. (2018). Mama Spider. Journal of Childhood Studies, 43(1), 73–80. https://doi.org/10.18357/jcs.v43i1.18267

Pyle, A., & Danniels, E. (2017). A continuum of play-based learning: The role of the teacher in play-based pedagogy and the fear of hijacking play. Early Education and Development, 28(3), 274–289. https://doi.org/10.1080/10409289.2016.1220771

Robb, M., Mew, V., & Richardson, A. (2015). Learning with nature. Green Books.

Rousell, D., & Cutter-Mackenzie-Knowles, A. (2020). A systematic review of climate change education: Giving children and young people a 'voice' and a 'hand' in redressing climate change. Children's Geographies, 18(2), 191–208. https://doi.org/10.1080/14733285.2019.1614532

Rousell, D., Cutter-Mackenzie, A., & Foster, J. (2017). Children of an earth to come: Speculative fiction, geophilosophy and climate change education research. Educational Studies, 53(6), 654–669. https://doi.org/10.1080/00131946.2017.1369086

Samuelsson, I., & Carlsson, M. (2008). The playing learning child: Towards a pedagogy of early childhood. Scandinavian Journal of Educational Research, 52(6), 623–641. https://doi.org/10.1080/00313830802497265

Sandseter, E. B. H. (2010). Scaryfunny: A qualitative study of risky play among preschool children [Unpublished doctoral thesis]. Norwegian University of Science and Technology.

Scottish Government. (2024). Out to play. Section 12: Caring for our outdoor spaces. https://www.gov.scot/publications/out-play-caring-outdoor-spaces/

Scottish Government. (2019). Place principle: Introduction factsheet. https://www.gov.scot/publications/place-principle-introduction/

Smithner, N. (2011). Creative play: The importance of incorporating play, liminality and ritual in teaching K–12. In S. Schonmann (Ed.), Key concepts in theatre/drama education (pp. 95–99). Sense Publishers.

Sobel, D. (2013). Beyond ecophobia: Reclaiming the heart in nature education (2nd ed.). The Orion Society.

Somerville, M., & Hickey, S. (2017). Between Indigenous and non-Indigenous: Urban/nature/child pedagogies. Environmental Education Research, 23(10), 1427–1439. https://doi.org/10.1080/13504622.2017.1325451

Souto-Manning, M. (2017). Is play a privilege or a right? And what's our responsibility? On the role of play for equity in early childhood education. Early Child Development and Care, 187(5–6), 785–787. https://doi.org/10.1080/03004430.2016.1266588

Stevens, G., & Rewse, K. (2021). Climate action: The future is in our hands. Little Tiger.

Taylor, A. (2013). Reconfiguring the natures of childhood. Routledge.

Taylor, A., & Giugni, M. (2012). Common worlds: Reconceptualising inclusion in early childhood communities. Contemporary Issues in Early Childhood, 13(2), 108–119. https://doi.org/10.2304/ciec.2012.13.2.108

Thoreau, H. (2014). Walden. CreateSpace Independent Publishing Platform. (Original work published 1854)

Tooth, R., & Renshaw, P. (2020). Children becoming emotionally attuned to "nature" through diverse place-responsive pedagogies. In A. Cutter-Mackenzie, K. Malone, & E. Barratt Hacking (Eds.), Research handbook on childhoodnature (pp. 1–16). Springer. https://doi.org/10.1007/978-3-319-51949-4_19-1

Tovey, H. (2022). An introduction to Froebel, children and nature. Froebel Trust. https://www.froebel.org.uk/training-and-resources/pamphlets

Tovey, H. (2020). Froebel's principles and practice today. Froebel Trust.

Tovey, H. (2017a). Bringing the Froebel approach to your early years practice (2nd ed.). Routledge.

Tovey, H. (2017b). Outdoor play and exploration. Froebel Trust. https://www.froebel.org.uk/training-and-resources/pamphlets

Tranter, P., & Malone, K. (2004). Geographies of environmental learning: An exploration of children's use of school grounds. Children's Geographies, 2(1), 131–155. https://doi.org/10.1080/1473328032000168801

Tuhiwai Smith, L., Tuck, E., & Yang, K. W. (Eds.). (2018). Indigenous and decolonizing studies in education: Mapping the long view. Routledge.

Ulmer, J. B. (2017). Posthumanism as research methodology: Inquiry in the Anthropocene. International Journal of Qualitative Studies in Education, 30(9), 832–848. https://doi.org/10.1080/09518398.2017.1336806

United Nations International Children's Emergency Fund (UNICEF). (n.d.). United Nations Convention on the Rights of the Child. https://www.unicef.org.uk/what-we-do/un-convention-child-rights/

Watts, T. (2020). "I'm learning nature now with them": What can a holistic perspective contribute to our understanding of the influential relations between young children, adults and a natural environment? Froebel Trust. https://www.froebel.org.uk/research-library/an-exploration-of-the-influence-of-young-children-on-adults-within-natural-environments

Wee, B. (2020). The nature of childhood in childhoodnature. In A. Cutter-Mackenzie-Knowles, K. Malone, & E. Barratt Hacking (Eds.), Research handbook on childhoodnature (pp. 29–42). Springer. https://doi.org/10.1007/978-3-319-67286-1_3

Weston, A. (1994). Back to earth: Tomorrow's environmentalism. Temple University Press.

Whinnett, J. (2024). Editor's introduction, Section III: Reconnecting – exploring and working through the challenges of Froebelian practice. In T. Bruce, Y. Nishida, S. Powell, H. Wasmuth, & J. Whinnett (Eds.), The Bloomsbury handbook to Friedrich Froebel (pp. 175–180). Bloomsbury Academic.

Whitehead, A. N. (1920). The concept of nature: Tarner lectures delivered in Trinity College November 1919. Cambridge University Press.

Whistler, E. M., & Montgomery, L. (2024). Supporting children with additional needs. Froebel Trust.

Whitty, P., Hewes, J., Rose, S., Lirette, P., & Lee, M. (2018). (Re)encountering walls, tattoos, and chickadees: Disrupting discursive tenacity. Journal of Childhood Studies, 43(2), 1–16. https://doi.org/10.18357/jcs.v43i2.18574

Whyte, K. P. (2018). Indigenous science (fiction) for the Anthropocene: Ancestral dystopias and fantasies of climate change crises. Environment and Planning E: Nature and Space, 1(1–2), 224–242. https://doi.org/10.1177/2514848618777621

Williams-Siegfredsen, J. (2017). Understanding the Danish forest school approach: Early years education in practice (2nd Ed.). Routledge.

Authors

McNair, Lynn J., Ph.D.
ORCID: 0000-0002-5730-0704
University of Edinburgh, Edinburgh, UK
Senior Lecturer in Early Childhood Practice and Froebel, Moray House School of Education and Sport, Institute for Education, Community & Society
Main areas of work and research: early childhood; Froebelian pedagogy, principles/liberal education and environment; children/human rights; children in nature; pedagogy as a critical and political practice/pedagogical culture of questioning; practitioner inquiry; relational pedagogy
Lynn.mcnair@ed.ac.uk

Walsh, Caroline
Royal Botanic Gardens Edinburgh, UK
Outdoor Early Years Learning Officer
Main areas of work and research: early years research
CWalsh@rbge.org.uk

Selvarani, Selvaraja, M.Sc. in Early Education and Froebel
University of Edinburgh, Moray House School of education and Sport
Main areas of work and research: early childhood, Froebel, social justice, outdoor education

Hermiston, Suzanne
University of Edinburgh, UK
Director of Open Studies
Main areas of work and research: focuses on innovative sustainability education through cross-curricular lenses and its potential impact on societal behaviour change. This includes reflection on the value of outdoor learning and learning technology, assessing its potential for long-term change and improvement in learner outcomes.
Suzanne.Hermiston@ed.ac.uk

Ferris, Mairi, M.A. (Hons), M.Sc.
Inspiring Scotland, UK
Thrive Outdoors Programme Manager
Main areas of work and research: outdoor play and learning; nature connection; more-than-human approaches
mairi@inspiringscotland.org.uk

Mie Nojiri

Creative storytelling and Froebelian pedagogy: The early reception of block play in Britain and Japan

Abstract

The article examines the reception and development of Froebelian block play in early Britain and modern Japan. It draws on English-language pedagogical materials from the 1850s and student lecture notes from Christian kindergartens in Japan in the 1910s–1920s. Methodologically, the study offers a close reading of British instructions on block play and creative storytelling, and of a story that was recorded in a notebook by a Japanese kindergarten educator-in-training and that documents a transition from narrative introduction to block-based reconstruction. The analysis identifies a durable pedagogical coupling of narrative (a circuit of meaning) and construction (a circuit of method). In Britain, this appeared as an interest-evoking story linked to modeling and collaboration. In Japan, it was adapted within the Christian kindergarten milieu as a conservative Froebelian practice integrating Bible narratives and everyday materials while avoiding formalism and sustaining meaningful learning.

Keywords: Froebelian pedagogy; block play; creative storytelling

Zusammenfassung

Der Artikel untersucht die Rezeption und Weiterentwicklung des Spiels mit Fröbel-Bausteinen im frühen Großbritannien und im modernen Japan. Grundlage sind englischsprachige pädagogische Materialien aus den 1850er Jahren sowie Mitschriften von Auszubildenden aus christlichen Kindergärten in Japan der 1910er und 1920er Jahre. Analysiert werden britische Anweisungen zum Bausteinspiel und kreativen Erzählen sowie die Aufzeichnung einer japanischen Kindergärtnerin in Ausbildung, in denen sich der Übergang von narrativer Einführung zur Rekonstruktion mit Bausteinen dokumentiert. Die Untersuchung zeigt eine beständige Verknüpfung von Narration (Sinnbildungsprozess) und Konstruktion (methodischer Prozess). In Großbritannien erscheint sie als erzählerisch eingeführtes, kooperatives Modellieren, in Japan als konservative fröbelpädagogische Praxis, die Bibelgeschichten und Alltagsmaterialien einbezieht, Formalismus vermeidet und sinnvolles Lernen fördert.

Schlüsselwörter: Fröbelpädagogik, Spiel mit Fröbel-Bausteinen, kreatives Storytelling

1 Introduction

The *Guidelines Explained for the National Curriculum Standard for Kindergartens* (Ministry of Education, Culture, Sports, Science and Technology, 2017) underscores the importance of children encountering and enjoying blocks, as well as the experiences cultivated through block play. In contemporary practice, blocks have long been recognized as foundational materials closely related to infants' and toddlers' holistic development. Historically, present-day block play can be traced to the Froebel gifts (*Fröbelgaben*), a set of educational toys (including blocks) that originated in Germany after their invention by pedagogical innovator Friedrich Froebel (1782–1852), and which spread through Britain and the United States before taking root in Japan alongside the founding of kindergartens. In Britain and America, Froebel's disciples ("Froebelians") and kindergarten teachers who had emigrated from Germany played a pivotal role in both the reception and the practical elaboration of pedagogy through the English-language books they authored. According to Yukawa (2001, pp. 116-210), many of these English texts were then translated and introduced to Japan, where they were widely studied by childcare and educational practitioners.

After the introduction of kindergarten education to newly opened Japan, two broad streams emerged. One was the public–private stream that took the kindergarten attached to the (Tokyo) Women's Higher Normal School as its model. The other was the Protestant Christian stream, in which female missionaries from North America directly introduced cutting-edge Froebelian methods. While the former adopted Froebel's gifts but developed an independent curriculum amid critiques of formalism, the latter expanded rapidly—accounting for roughly half of all private kindergartens by about 1889 — while preserving Froebelian pedagogy and introducing creative storytelling alongside block play. Some Christian kindergartens in Japan even continued using gift-based education until approximately 1955.

1.1 Research Questions

This study addresses two research questions (RQs):

RQ1: How were gift blocks initially received and practiced in Britain in the 1850s?

RQ2: How did Christian kindergartens in Japan adopt and develop those practices during the 1910s–1920s?

2 Materials and Methods

2.1 Materials

Placing the international reception of Froebelian pedagogy within educational history requires attention to concrete practices, particularly in the early English-language dissemination of Gift-based work. While theoretical literature on Froebelian education is abundant, detailed portrayals of block practice in classroom settings are relatively limited. For that reason, this study focused on two bodies of material, both closely tied to enactment. Nevertheless, these sources enabled a cross-border comparison that closely followed practice: they describe what teachers said and did, how children were introduced to tasks, and how narrative materials were linked to block-based reconstruction and collaborative work.

The first source was Johannes and Bertha Ronge's (1858) *A Practical Guide to the English Kindergarten (Children's Garden)*. This text presents the procedures, illustrations, and stories that introduce and frame block play. The analysis refers to the second edition, drawing out salient features of the approach to modeling, questioning, narrative, and collaborative construction. According to the preface to the work, the Ronges had long been providing scholarly expositions in English of Froebel's kindergarten education, adapting his ideas to British culture and customs. The Educational Exhibition held at St. Martin's Hall in 1854 became a turning point, when the Council of the Society of Arts requested Mrs. Ronge to offer further explanations of Froebel's "Gifts". This, in turn, created a demand for a book that would enable these play materials to be used in domestic nurseries, in school classrooms, and in public educational institutions—that is, a book accessible to parents and guardians. In this sense, the present work may be regarded, from the standpoint of the history of education, as a valuable volume that makes a German-origin kindergarten pedagogy readily comprehensible to readers in the English-speaking world. Details of the author and this book are discussed in Section 3.1.1.

The second set of materials was the student lecture notes compiled in the 1910s–1920s in training settings associated with Christian kindergartens. In particular, the notebook of Kazuko Ohta—a Toyo Eiwa Jogakuin graduate who later served as a kindergarten principal in Hakodate—provided examples of creative stories and Bible-based narratives for "story time," along with the aims and procedures of block activities. The notebook is presumed to have been compiled between 1925 and 1928.

2.2 Methods

This study employed a practice-oriented qualitative textual analysis. The procedure consisted of four steps, each applied to every source. The British corpus is represented by *Children's Garden* (Ronge & Ronge, 1858), whereas the Japanese corpus centers on a single notebook compiled between 1925 and 1928 by one student within the lineage of a particular Christian institution. *Children's Garden*

was the first publication on Froebelian kindergarten education in Britain and was also used in both the United States and Japan. In Japan in particular, it was translated into Japanese between 1876 and 1878 and, because it presented concrete methods of kindergarten education in an accessible form, it was regarded at the time as a foundational text. In light of the restricted and historically specific nature of these sources, the findings of this study reflect these particular vantage points and are not intended to be generalized beyond them.

2.2.1 Selection and Scope

I selected *Child's Garden* (Ronge & Ronge, 1858) passages that explicitly address blocks, story-based introductions, teacher prompts (questions, riddles), and collaborative construction for extraction. From the Ohta notebook, I selected an exemplary creative story together with the indicated intentions and procedures for subsequent block play.

2.2.2 Descriptive Coding

Each passage was coded for the position and function of the narrative, the transition from narrative to block manipulation, the role of the teacher (model presentation, prompting, advising), and the domain emphasis (Forms of Life, Knowledge, and Beauty).

2.2.3 Comparative Reading

The codes were compared across the British and Japanese materials to identify continuities (e.g., narrative as motivator) and adaptations (e.g., choice of content, institutional context).

2.2.4 Synthesis

The findings were organized around a core sequence: introduction → reproduction (imitation) → construction. They are discussed in relation to the avoidance of formalism and the maintenance of meaning in learning.

3 Results and Discussion

3.1 Early British Reception

3.1.1 Author and Context

Bertha Ronge (1818–1863) established the first Froebelian kindergarten in Britain in 1851. Born Bertha Meyer and raised in Hamburg as the second of seven siblings, she was the elder sister of Margarethe Meyer-Schurz (1833–1876), who founded one of the earliest American kindergartens. In 1851, Meyer married the religious reformer Johannes Ronge (1813–1887) in London and opened a kindergarten in Hampstead. As its principal, she taught Froebelian education to young children and trained parents and teachers in these methods (Grolle, 2013,

pp. 64–70; Rednak, 2013, pp. 57–62; Rednak, 2014a, pp. 53–59; Rednak, 2014b, pp. 64–70).
Her practice and lectures attracted attention in Britain and beyond, including in the United States, and calls arose for a book that would explain the handling of kindergarten apparatus. In 1855, the couple published *Children's Garden*. According to Yukawa (2001, p. 145), this was the earliest publication on Froebelian kindergartens in Britain. It went through multiple editions and was widely read as a basic pedagogical text in Britain, the United States, and Japan.

3.1.2 Block Play in *Children's Garden*

Children's Garden (Ronge & Ronge, 1858) distills several main points for implementing block play. In the "story after model," after presenting a model block construction, teachers introduce a story that children can imagine in relation to everyday life, thereby supporting individualized creative expression (Third Gift). The "question and transition" model engages children with questions and riddles, then transitions to block play following short creative stories (Fourth Gift). Ronge and Ronge (1858) also suggest including relevant historical figures such as Benjamin Franklin and Admiral Nelson to stimulate interest in historical events (Fourth Gift). Collaborative work is stressed; teachers should facilitate "village building," emphasizing their advisory role in fostering children's engagement (Fourth Gift). Throughout, procedural clarity should be maintained: teachers should number and illustrate each gift and provide step-by-step procedures for its use. The gifts should also be used to teach mathematics, with multiples, fractions, and the four operations being grounded in formulas and diagrams alongside sample prompts (Fifth and Sixth Gifts).
At the center of this approach stands the story, a device that gives children a meaningful frame before they handle the blocks. In contemporary terms, this is an interest-evoking introduction that both motivates and orients the subsequent constructive activity (Ronge & Ronge, 1858, pp. 7–20). This study used the following story and its accompanying block model:

> Have you all tasted honey? How very sweet it is. Have you all seen the little insects that collect it? What do you call them? Bees. Yes, bees collect honey from flowers, — pretty flowers, — they put the ends of their long trunks into the tubes of the flowers, and suck the honey out of them: when they have got as much as they can carry, they fly home with it, and put it carefully by in little six-sided cells, called honey-combs. Did you ever see a honey-comb? It is made of yellow wax; the bees make it themselves. They are very industrious little insects. Men make hives for bees to live in, and little houses to put the hives in. Let us try to make one of those houses (No. 41, Plate XVIII. [Figure 1]), and while we make it, we can talk about the bees. They get up early in the morning, when the sun rises, and away they go, many together, humming sweet music to tell us they are happy, and working away to tell us they are not idle. Good little children are like bees, they like to do something useful, they like what is sweet, they sing sweetly, and those who know them say what sweet little children they are (Ronge & Ronge, 1858, p. 19).

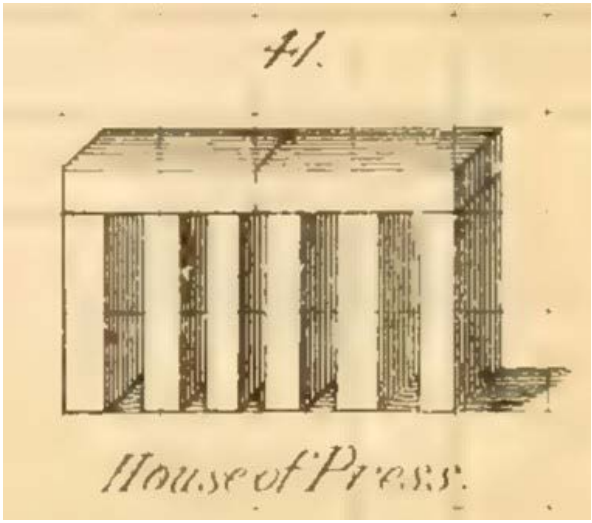


Fig. 1: House for Bees (Source: Ronge & Ronge, 1858, Plate XVIII, No. 41)

The passage proceeds from perceptual appeal ("Have you all tasted honey?"), to naming ("What do you call them? Bees"), then to process description (collecting nectar; hexagonal cells), and finally to productive analogy ("Let us try to make one of those houses"). The language thus links experience (taste, sight, sound) to the construction of a model beehive with blocks. Parallel to this, the teacher's voice invites participation ("Let us try") and conveys moral valence ("Good little children are like bees"), guiding attention without foreclosing the children's own contributions. The example encodes Froebel's triad—Forms of Life, Knowledge, and Beauty—by drawing on everyday life, introducing knowledge of natural forms and human work, and guiding toward orderly, harmonious construction.

3.2 Reception and Development in Japanese Christian Kindergartens

3.2.1 Institutions and Personnel

Christian kindergartens and nursery-teacher training schools in modern Japan developed through the efforts of female missionaries of multiple denominations, including Congregationalist, Methodist, and Anglican. This section focuses on the Kindergarten Training School at Ueda and Toyo Eiwa Jogakuin, both associated with Canadian Methodism and supported by the Women's Missionary Society (WMS) of the Methodist Church of Canada. The WMS, established in Toronto in 1881, supported the establishment of Toyo Eiwa Jogakuin in 1884, with Martha Cartmell serving as its de facto principal. Initially oriented toward the urban middle class, their work expanded to regional evangelism, including "Free Kindergarten" initiatives in the Nagano area. These programs integrated home visits for

hygiene, nutrition, and child-rearing guidance, mothers' groups, and Bible studies, aligning with the church-and-community model of American Free Kindergartens. In 1905, the WMS established the Kindergarten Training School at Ueda on the premises of Baika Kindergarten. Henrietta DeWolfe (1873–1959) served as its first director, with Rie Kudo, head kindergarten teacher at Baika Kindergarten, leading practical instruction; local school personnel participated as lecturers. Without a dedicated building, morning lectures were held at the missionary residence, and afternoon sessions at the kindergarten facility. Practical training was emphasized—ten hours per week in the first year, twelve in the second—and outdoor activities leveraged the surrounding natural environment. Training centered on Gifts and Occupations.

Among the missionaries working at the Kindergarten Training School at Ueda, Katherine I. Drake—its second and fourth director—is regarded as particularly influential within the WMS lineage. Born in Ontario, she entered Ferris Institute (Michigan) in 1905 (now Ferris State University). After graduation, she worked for about a year at a kindergarten in Danville, Ontario, indicating hands-on experience in early childhood settings. Research on Canadian early childhood education characterizes the period as conservatively Froebelian well into the 1930s. Drake arrived in Japan in 1909 and served as the head of kindergarten administration and nursery-teacher training until 1937.

Although Drake studied in the United States, the WMS's Canadian base suggests that practice at Toyo Eiwa and its affiliated kindergarten bore a strong Canadian influence. Some studies characterize Drake's practice as "progressive," yet first-hand sources—student notebooks and childcare journals—indicate continued use of Gift methodology and subject-setting based on *Mother Play*, supporting an assessment of conservative Froebelian practice from the Taisho through early Showa eras.

3.2.2 Froebelian Practice in a Student Notebook

The primary Japanese source is the class notebook of Kazuko Ohta, a Toyo Eiwa graduate who became a kindergarten principal in Hakodate after graduating in 1928. Presumed to have been compiled between 1925 and 1928, the notebook records creative stories and Bible-based narratives used for "story time," alongside aims and procedures for block activities:

> Once upon a time, there were two lovely six-year-olds, Michiko and Yoshiko, who were great friends living across the street from each other. Every day, they held hands and walked to kindergarten together. One day, Yoshiko fell ill and was hospitalized. Michiko prayed to God for her speedy recovery. Then one day, Michiko decided to visit her friend. She brought a handicraft piece from kindergarten activities and a flower from the garden, and took the train to the hospital with Yoshiko's sister. After talking, Yoshiko recovered day by day and was finally able to return home.[1]

1 Author's translation; Kazuko Ohta. "Gift Note" in the collection of Iai Kindergarten.

Ohta's narrative is structured to support Froebel's sequence of introduction → reproduction (imitation) → construction. First, it elicits interest and emotion through the experience of friendship and illness. It then projects a scene that can be reproduced with blocks (train, hospital, bed). Next, it prepares students for a construction activity that consolidates understanding through material arrangement and collaborative work.

Two features are notable. The first is the proximity to everyday life (e.g., streets, school routines, visiting a friend, travel by train), ensuring that the block reconstruction remains anchored in familiar experiences. The second is an intentional orientation to the Forms of Life, realized by choosing scenes and objects from daily practice that already hold meaning for children and can therefore be re-expressed in constructive play.

3.3 Comparative Analysis

The two contexts—British and Japanese Christian kindergartens—shared a common pedagogical core yet demonstrated distinctive institutional and cultural inflections. This section provides a synthesis of the insights from the sources.

3.3.1 Core Sequence and Teacher's Role

Both contexts implement a story-based introduction, invite students to engage in reproduction/construction through blocks, and culminate in group-level collaboration or shared outcomes. In *Children's Garden* (Ronge & Ronge, 1858), the teacher presents models, uses questions and riddles, and provides advice to sustain engagement (e.g., "village building"). In the Japanese notebook, the teacher's planning links a creative story to specific scenes and objects that children can rebuild.

3.3.2 Content Selection and Experiential Anchoring

In the British material, the story includes natural phenomena and historical figures (e.g., Franklin, Nelson), opening pathways to general knowledge and public history. Meanwhile, the Japanese material includes a creative narrative close to children's daily lives and Bible narratives (e.g., Samuel), integrating moral formation within a religious community's values. The lifeworld fit is systematic, incorporating nature, seasons, Japanese events, and urban artifacts.

3.3.3 Formalism and Conservative Continuity

Both contexts avoid formalism by pairing meaning (narrative) with method (construction). The Japanese Christian lineage is marked by a conservative Froebelian continuity—retaining the system of gift use and the idea of a "partial whole"—even as progressive, center-of-interest approaches became more widespread elsewhere.

4 Limitations

The analysis was confined to *Children's Garden* (Ronge & Ronge, 1858) as a representative British source and to a single student notebook from a single institutional lineage in Japan. These materials provide detailed descriptions of practice description but do not, by themselves, cover the full diversity of Froebelian reception across regions, denominations, or time periods. The conclusions, therefore, refer only to what these sources display.

5 Implications and Conclusion

The materials considered here demonstrate how creative storytelling and block activities formed a durable pedagogical pair. In Britain, *Children's Garden* (Ronge & Ronge, 1858) formalized this pairing with procedural clarity, illustrated sequences, and teacher prompts that linked stories to construction and collaboration. In Japan's Christian kindergartens, the same pairing was sustained and adapted within religiously grounded educational communities. The result was a practice that kept children's interest at the center through narrative, turned their interest into a constructive activity anchored in familiar scenes and artifacts, avoided formalism by ensuring that procedures were consistently tied to meaningful content, and maintained a conservative Froebelian continuity while situating learning in a specific sociocultural and religious context.

From a contemporary vantage point, the practice anticipated current forms of introductory or theme-based early childhood education. Presenting Forms of Life through story and inviting reproduction and exploration via block play remain pedagogically significant. The cross-context continuity documented here suggests that the combination of narrative (meaning) and construction (method) provided a resilient framework for avoiding formalism while enabling developmentally appropriate, interest-driven learning.

Bibliography

Grolle, I. (2013). "Yōchien (Osanago no Sono)" no genchosha Bertha Ronge no rūtsu o tadoru 1: Bertha to yōchien kyōiku to no deai [Tracing the roots of Bertha Ronge, original author of Yōchien (Osanago no Sono), 1: Bertha's encounter with kindergarten education]. Yōji no Kyōiku, 112(3), 64–70. (Translated by Y. Berger; commentary by M. Ohto.)

Ministry of Education, Culture, Sports, Science and Technology (2017). Guidelines explained for the national curriculum standard for kindergartens. Tokyo: MEXT.

Rednak, D. (2013). "Yōchien (Osanago no Sono)" no genchosha Bertha Ronge no rūtsu o tadoru 2: Kigyōka Maiyā-ke no hitobito [Tracing the roots of Bertha Ronge, original author of Yōchien (Osanago no Sono), 2: The entrepreneurial Meyer family]. Yōji no Kyōiku, 112(4), 57–62. (Translated by Y. Berger; commentary by M. Ohto.)

Rednak, D. (2014a). "Yōchien (Osanago no Sono)" no genchosha Bertha Ronge no rūtsu o tadoru 3: Bertha no haran no kōhansei [Tracing the roots of Bertha Ronge, original author of Yōchien (Osanago no Sono), 3: The turbulent later life of Bertha]. Yōji no Kyōiku, 113(1), 53–59. (Translated by Y. Berger; commentary by M. Ohto.)

Rednak, D. (2014b). "Yōchien" no genchosha Bertha Ronge no rūtsu o tadoru 4: Bertha no haran no kōhansei (zoku) [Tracing the roots of Bertha Ronge, original author of Yōchien, 4: The turbulent later life of Bertha (continued)]. Yōji no Kyōiku, 113(2), 64–70. (Translated by Y. Berger; commentary by M. Ohto.)

Ronge, J., & Ronge, B. (1858). A practical guide to the English kindergarten (Children's Garden). London: Hodson and Son.

Yukawa, K. (2001). Nihon yōchien seiritsushi no kenkyū [A study on the formation of kindergartens in Japan]. Tokyo: Kazama Shobō.

Author

Nojiri, Mie, Ph.D.
ORCID: 0009-0004-3489-8282
Jissen Women's University, Japan
Associate Professor, Child Care and Education, Department of Human Sciences and Arts, Faculty of Human Life Sciences
Main areas of work and research: Froebelian pedagogy; history of early childhood education and care
nojiri-mie@jissen.ac.jp

Sabine Plamper and Titia Sprey

Learning through your hands in our digital era

Abstract

The digital world is endless and can offer benefits for children. The availability of knowledge and the many interactive exercises can serve as a preparation for their future in a digital world. However, hands-on activities next to digital learning experiences are crucial for providing a well-rounded education, in art as well as in science. The contribution highlights the importance of hands-on experiences for children's cognitive, motor, and creative development. Working with real materials supports multisensory learning, strengthens understanding of abstract concepts, and enriches artistic processes. Digitally guided, outcome-oriented activities limit children's autonomy. In this article, it promotes an approach centered on material Inquiry, tactile reasoning, and constructive play in an inviting environment to foster motivation, self-expression, and agency. Practical examples show how simple starting points encourage children to play and create independently and meaningfully.

Keywords: Experiential learning, material inquiry, tactile reasoning, evidence-based practice, constructive play

Zusammenfassung

Die digitale Welt ist grenzenlos und kann Kindern viele Vorteile bieten. Die Verfügbarkeit von Wissen und zahlreiche interaktive Übungen können eine gute Vorbereitung auf ihre zukünftige Lebenswelt darstellen. Dennoch sind praktische, haptische Aktivitäten neben digitalen Lernerfahrungen entscheidend, um Kindern – sowohl in der Kunst als auch in den Naturwissenschaften – eine ganzheitliche Bildung zu ermöglichen. Der Beitrag hebt die Bedeutung von Hands-on-Erfahrungen für die kognitive, motorische und kreative Entwicklung von Kindern hervor. Die Arbeit mit realen Materialien unterstützt multisensorisches Lernen, stärkt das Verständnis abstrakter Konzepte und bereichert künstlerische Prozesse. Digital gesteuerte, ergebnisorientierte Aktivitäten schränken hingegen die Autonomie der Kinder ein. In diesem Artikel wird ein Ansatz betont, der auf Materialerkundungen, taktilem Denken und konstruktivem Spiel in einer einladenden Umgebung basiert, um Motivation, Ausdrucksfähigkeit und Selbstwirksamkeit zu fördern. Praktische Beispiele zeigen, wie mit einfachem und offenem Spielangebot, Kinder zu unabhängigem und bedeutungsvollem Gestalten angeregt werden können.

Schlüsselwörter: Erfahrungslernen, Materialerkundung, taktiles Denken, evidenzbasierte Praxis, konstruktives Spiel



Fig. 1: An Egyptian girl enthusiastically draws her flag, using a phone photo for reference. She works on her drawing with great concentration and attention to detail for about half an hour. She is deeply connected to her work. © Sabine Plamper

Young and also older children need to play and work with their hands, with real materials and tools. This is how they gain knowledge and understanding of the world itself. The brain needs physical experiences to learn about something. The concepts of size, texture, temperature; all start with an actual physical realisation. Take salt bread dough, perfect for offering several surprising experiences for very young children. How does this feel? Cold, warm, wet, sticky, soft, hard or rough? A child cannot learn about big or small, long or short through a screen; they must already have prior knowledge to understand contexts.

Hands-on experiences are therefore of great importance for the development of the child's brain. They provide multisensory learning experiences that enhance neural connections and strengthen memory retention. They allow learners to explore concepts in a tangible way and to develop a deeper understanding of abstract concepts and principles, which also leads to richer learning. Material research is essential for developing fine motor skills (see fig. 2 and 3).



Fig. 2: An 18-month-old paints for an hour, amazed by the colours on her paper © Sabine Plamper

It leads to better long-term retention than passive forms of instruction because it creates stronger memory traces, making it easier to recall information later. Incorporating hands-on learning as an essential part of educational practices will therefore facilitate more effective learning outcomes.
The area of visual arts is especially suitable for incorporating these kinds of activity. The process of creating often involves collaboration and social interaction, as well as critical thinking and problem-solving skills.
As Pete Moorhouse (Early Childhood Creative Consultant, Bristol, UK) says: "Mark-making and visual arts provide children with opportunities to express themselves and make meaning.

> ... Art is a mode of communication as we express our ideas and feelings, and in doing so we develop theories of how the world works. In this way children discover understanding as they make sense of their experiences." (Moorhouse, 2023, p. 9)

Unfortunately, many people feel uncomfortable in the arts and think they are professionally unskilled. They might look for answers and support in the digital world. This causes a reversed route in the creative process where children are step by step guided towards a creation that is already thought up by an adult in advance. The book (Plamper & Weterings, 2023), see fig. 6) offers a feasible and very basic alternative for working on the children's creative development.



Fig. 3: Three-year-old is fascinated by a garlic press and makes long clay strips © Sabine Plamper

It all starts with prioritizing the journey of creation over the end result. By offering material research as creative play (see fig. 3), without predetermined outcomes, children are encouraged to investigate, take risks, make mistakes, and learn from their experiences. This way, children will foster a sense of curiosity, agency, and self-expression. Material research and mark-making are in line with children's need to research and play freely. As they go from one mark to another, they will gain associations and ideas about what they want to make. Adults often find it difficult not to set a goal beforehand. They fish for the result by asking: 'What are you making?' That way, they jump to the end of the process while children are still at the beginning: what does this material do?

When children are invited to draw, paint or craft, many will quickly respond with a "No." Often, a digital screen has greater appeal. Sometimes the question is too abstract for children, as they don't know in advance what they want to make. Getting started takes effort, and that can be a reason why a creative offer is not always received with enthusiasm. To get children from the consuming mode into an engaged creating mode can be a challenge, especially in competition with digital play, where things are exciting and often effortless. Therefore, the start is essential. Try to entice children to play freely in a well-prepared environment (see fig. 4 and 5). Make everything inviting. It is a bit like the way you would set a table in a restaurant so that guests want to sit down and try the food. It is important that

children become amazed and intrigued by being offered open-ended materials, preferably from the real world. If children are personally motivated, they are eager to research or want to make something by themselves.



Fig. 4: Small amounts spark big discoveries and support fine motor skills © Sabine Plamper

Don't give an assignment. Invite children to material research and mark-making. That's in line with children's need to research and play freely. As they go from one mark to another, they will get associations and ideas about what they want to make. Use everyday material, often familiar but surprising for children to use in creative activities. Recycle or look for material in nature, the supermarket, or a do-it-yourself store. Dismantle broken speakers, saw an old chair in small pieces, or collect different kinds of sand. Children will be eager to get started. Good quality tools are essential for a rich creative process. This way, children can experience the possibilities and impossibilities of material.

Drawing is the most basic creative offer; children can be invited to start simply by scribbling and drawing on A6-size paper. This is a small size that invites playing and trying out. In addition, a black pen, two felt-tipped pens, a hole punch, or scissors can be added (see fig. 5). Scribbling is a good way to get started, for all ages. It is important to give room to these spontaneous marks, as children will often start without a fixed idea and then recognize something and work this out. Then, they are literally understanding through their hands. Adults make marks too; doodles.

By explaining this to children, it values scribbling and eases the pressure to make something beautiful.



Fig. 5: Set the table like a restaurant with good scissors, markers, and small A6 paper © Sabine Plamper

Young children up to the age of around 6 will draw from an internal image. So, if they want to draw something specific, they have to first construct the image in their heads. By asking questions about size or details, adults can support this process. It helps to state that it doesn't have to look like something or already be something. A circle may stand for a person, a pizza, an elephant, or a treasure island. Here, the abundance of good photographs on the internet can also be a support to the creative process. If a child wants to draw a specific item or animal, real images that show the object's diversity and details can deepen this research. Drawing means looking carefully (see fig. 1 above).

In a class with 25 children, a feasible creative activity is reading aloud from a picture book, while the children sit in a circle, on their knees so they can use their chairs as drawing tables. With just a black pen and a small A6 card, they can make marks, scribble and draw freely during the reading. Again, there is no assignment to draw from the story. Some children will do that, others won't. It also doesn't matter if whatever the children make is unrecognisable to us as adults. Children understand their own visual language. At the end, the children can be invited to

tell something about what they made. It is surprising to hear their stories. When these stories are documented alongside the cards, it demonstrates to children that they are valued. The layered nature of a creative process becomes visible, and the wealth of play experience is valued. When children create something on their own, they build self-esteem. This inner compass is vital for navigating today's complex digital and analogue world.

Impulses for advanced study

In their recent book, Plamper and Weterings (2023) show that creativity extends far beyond drawing or producing visually pleasing artefacts. Rather, it is understood as a hands-on way of engaging with the world through play, art, and scientific exploration. The volume offers a wide range of accessible, low-cost activities that require little preparation and can involve children in open-ended creative processes. Complemented by appealing full-colour photographs, the fully revised English edition combines practical guidance with a sustainable and feasible educational vision. Overall, the book provides valuable support for those seeking to foster children's development as self-aware, creative, and responsible individuals.[1]

Bibliography

Bamford, A. (2006). The Wow Factor: Global Research Compendium on the Impact of the Arts in Education. Münster: Waxmann Verlag.

Csikszentmihalyi, M. (2008). Flow: The Psychology of Optimal Experience. New York: Harper Perennial Modern Classics.

Kathke, P. (2019). Sinn und Eigensinn des Materials. Projekte, Anregungen, Aktionen. Mellingen: verlag das netz.

Mieras, M. (2009). 'Kunst als slijpsteen voor het brein'. In A. Huisingh, R. Hulshoff Pol & E. van den Bomen (Eds.), Toeval Gezocht. Kunst, kunstenaars en jonge kinderen. Rotterdam: Leniscaat.

Moorhouse, P. (2023). preface. In S. Plamper & A. Weterings (Eds.), How Children Learn and Create Using Art, Play and Science: Understanding Through Your Hands. London: Routledge.

Lunde, M. (2025). Rettet die Kindheit (Unplug our Kids). München: btb Verlag.

Plamper, S., & Weterings, A. (2023). How Children Learn and Create Using Art, Play and Science: Understanding Through Your Hands. London: Routledge, URL: https://www.routledge.com/How-Children-Learn-and-Create-Using-Art-Play-and-Science-Understanding/Plamper-Weterings/p/book/9781032523811

Plamper, S. (2012). 'Van krastekening naar eigen beeldtaal'. HJK – De wereld van Het Jonge Kind, 3-2012, 26-29.. Online unter: https://atelierineenkoffer.nl/publicaties/

Seitz, R. (2009). Kreative Kinder. Das Praxisbuch für Eltern und Pädagogen. München: Kösel-Verlag.

Spitzer, M. (2013). Digitale Dementie: Hoe we ons verstand kapotmaken. Amsterdam: Atlas Contact.

Walder, E. & B. Zschokke B. (2008). Sehreise. In Kindern Malfreude wecken. Bern: Verlag Haupt.

1 In summer 2026, an abridged version of the book was published in German: "Begreifen mit den Händen" (Das Netz Verlag). The book is also available in Dutch. For more information see www.atelierineenkoffer.nl/publicaties

Authors

Plamper, Sabine
training institute Atelier in een Koffer, the Netherlands
cultural pedagogue and teacher of educational professionals
at training institute 'Atelier in een Koffer'(studio in a case) in Amsterdam, the Netherlands
Main areas of work and research: evidence-based practice; educational workshops and training courses; children play and learning; creativity and flow
www.atelierineenkoffer.nl

Sprey, Titia
Art Academy's Hertogenbosch, the Netherlands
Studio pedagogue and teacher of educational professionals
at training institute 'Atelier in een Koffer'(studio in a case) in Amsterdam, the Netherlands
Main areas of work and research: evidence-based practice; educational workshops and training courses; children play and learning; creativity and flow
www.atelierineenkoffer.nl

Main areas of work and research: Sabine Plamper and Titia Sprey both work with children starting from age 18 months till 16 years. Regularly they give training courses for adults with a rich combination of theory and practice. They research on creativity, play and learning with focus on young children.

Stella Louis

How do open-ended resources support representation through the forms of life, beauty and knowledge?

Abstract

Play is foundational to a Froebelian approach (Froebel Trust, n.d.). Froebel described play with Gifts as forms of life, beauty and knowledge. This session explores how open-ended resources, Froebel's Gifts and Occupations, support children to express inner ideas in outer forms. Froebel's aim was the unification of life, self-knowledge, others and the universe as a connected whole. Observing babies' fascination with a ball, he created Gift 1; later Gifts embody unity, connection and contrasts. Emphasising self-activity and sensory exploration within loving relationships, he advocated freedom with guidance (Liebschner, 1992) and adults who observe, support and extend (Bruce, 1987). Goldschmied & Jackson (2004) extended this through treasure baskets and heuristic play.

Keywords: play, open-ended resources, gifts, self-activity, freedom with guidance

Zusammenfassung

Das Spiel ist grundlegend für den fröbelschen Ansatz (Froebel Trust, o. D.). Fröbel beschrieb es mit den „Gaben" als Formen des Lebens, der Schönheit und der Erkenntnis. Der Beitrag untersucht, wie offene Materialien, Fröbel'sche Gaben und Beschäftigungen Kinder dabei unterstützen, innere Vorstellungen in äußere Formen zu überführen. Fröbels Ziel war die Einheit von Leben, Selbsterkenntnis, Mitmenschen und Welt als zusammenhängendes Ganzes. Ausgehend von der Faszination von Säuglingen für den Ball entwickelte er die Erste Gabe; spätere Gaben verkörpern Einheit, Verbindung und Gegensätze. Mit der Betonung von Selbsttätigkeit, sinnlicher Erkundung und liebevollen Beziehungen plädierte er für Freiheit mit Begleitung (Liebschner, 1992) sowie für Erwachsene, die beobachten, unterstützen und anregen (Bruce, 1987). Schatzkörbe und heuristisches Spiel, die eigenaktive Erkundung offener Alltagsmaterialien fördern, gelten als Weiterentwicklungen (Goldschmied & Jackson, 2004).

Schlüsselwörter: Spiel, offene Materialien, Fröbelgaben, Selbsttätigkeit, Freiheit mit Begleitung

Play is like a canvas, and open-ended resources are the paints

Just as a painter uses a variety of colours and brushstrokes to create a unique masterpiece, children use open-ended resources to represent their experiences and ideas about life, beauty, and knowledge. By providing children with a range of materials and objects, we give them the freedom to explore, create, and express themselves in their own way, as advocated by Elinor Goldschmied's concept of treasure baskets (Goldschmied, 1987).

Life is like a collage, made up of diverse textures and colours. Open-ended resources, such as everyday household objects and natural materials, allow children to represent their experiences and ideas about life. Just as a collage artist combines different textures and colours to create a new whole, children use these resources to construct their own understanding of the world, aligning with Friedrich Froebel's emphasis on self-activity and play (Froebel, 1826).

Beauty is like a sculpture, shaped by creativity and imagination. Open-ended resources like fir cones, feathers, and pebbles inspire children to create and appreciate beauty. Just as a sculptor shapes and moulds materials to create a work of art, children use these resources to develop their understanding of aesthetics and creativity.

Knowledge is like a puzzle, made up of interconnected pieces. Open-ended resources, such as measuring cups and everyday objects, help children represent their experiences and ideas about knowledge. Just as a puzzle solver fits together different pieces to reveal a larger picture, children use these resources to develop their critical thinking and analytical skills. By providing children with open-ended resources, we give them the tools they need to create their own masterpieces, whether that's a work of art, an imaginative story, or a new understanding of the world.

Bibliography

Bruce, T. (1987). Early Childhood Education. London: Hodder and Stoughton. Froebel Trust Principles. (2020). London: Froebel Trust.

Froebel, F. (1826). Die Menschenerziehung [The Education of Man]. Keilhau, Germany.

Goldschmied, E. (1987). Infants at Work: Relationship and Development in their Care. National Children's Bureau.

Goldschmied, E., & Jackson, S. (2004). People Under Three: Young Children in Day Care (2nd ed.). Routledge.

Liebschner, J. (1992). A Child's Work: Freedom and Guidance in Froebel's Educational Theory and Practice. Cambridge: Lutterworth Press.

Author

Louis, Stella, Dr.
ORCID: 0000-0001-5726-3539
University of Roehampton
My main areas of work and research: focus on the power of observation in developing learning, particularly through children's schemas, underpinned by Froebelian principles that prioritise child-led exploration and discovery
sramlouis@aol.com

Ulf Sauerbrey

The reception of Fröbel's ideas on children's play in the work of childhood researcher Martha Muchow

Abstract

The article examines the reception of Friedrich Fröbel's ideas on children's play in the writings of Martha Muchow (1892–1933), a pioneering childhood researcher in early 20th-century Germany. Using historical document analysis of four key publications, it traces how Fröbel's pedagogy influenced her concept of the 'life space of the child'. Muchow regarded Fröbel as an early psychological researcher whose insights into play and development anticipated modern child psychology. She stressed play as a unifying principle in early childhood and critiqued the rigid use of Fröbel's 'gifts'. In her comparative analysis of Fröbel's and Montessori's educational approaches, she highlighted both similarities and key differences, particularly regarding the preparation for school.

Keywords: Friedrich Fröbel; Martha Muchow; children's play; Fröbel reception; child psychology

Zusammenfassung

Der Beitrag untersucht die Rezeption von Friedrich Fröbels Ideen zum Kinderspiel in den Schriften von Martha Muchow (1892–1933), einer führenden Kindheitsforscherin des 20. Jahrhunderts in Deutschland. Mittels einer historischen Dokumentenanalyse anhand von vier Schlüsselpublikationen Muchows wird nachgezeichnet, wie Fröbels Pädagogik ihr Konzept vom ‚Lebensraum des Kindes' beeinflusst hat. Muchow betrachtete Fröbel als einen frühen psychologischen Forscher, dessen Erkenntnisse über Spiel und Entwicklung moderne kinderpsychologische Erkenntnisse vorwegnahmen. Sie betonte das Spiel als ein ‚lebenseinigendes' Prinzip in der frühen Kindheit und kritisierte eine starre Anwendung von Fröbels ‚Gaben'. In ihrer vergleichenden Auseinandersetzung der Fröbel- mit der Montessori-Pädagogik hob sie sowohl Gemeinsamkeiten als auch deutliche Unterschiede hervor, insbesondere im Hinblick auf schulvorbereitende Praktiken.

Schlüsselwörter: Friedrich Fröbel; Martha Muchow; Kinderspiel; Fröbel-Rezeption; Kinderpsychologie

1 Introduction

A historical examination of how Friedrich Fröbel's ideas were received and interpreted in the work of the teacher and childhood researcher Martha Muchow (1882-1933) is relevant to both educational science and professional practice. Muchow, internationally known as research assistant to the psychologist William Stern (1871-1938) (Schoggen, 1985; Wohlwill, 1985) at the University of Hamburg, made fundamental contributions to social science-oriented childhood research with her empirical study "The Life Space of the Urban Child" ["Der Lebensraum des Großstadtkindes"] (Muchow & Muchow, 2012/1935; Mey & Günther, 2015) conducted in the Hamburg district of Barmbek, where Muchow observed children together with students and extensively documented children's lives in these specific environments. Her three-part classification of children's life spaces as (1) spaces in which children live, (2) spaces that children experience, and (3) spaces that children inhabit (Muchow & Muchow, 2012/1935) is considered to give an insight into the importance of spatial learning environments, which are still highly relevant for research and for the practical design of educational settings in early childhood—especially with regard to play environments, as introduced into the discussion by educators such as Friedrich Fröbel (Bruce, 2021; Sauerbrey, 2023; Wasmuth et al., 2023).

However, Muchow's reception of Fröbel's ideas on early childhood play is less well known (Konrad, 2022). Günther Mey and Hartmut Günther merely mention that there is clear evidence that Muchow extensively studied Fröbel's work on play during her time working at the laboratory of William Stern (Mey & Günther, 2015, p. 169). However, the extent to which this occurred has not yet been the subject of historiographical and educational research. Therefore, my paper focuses on four selected publications by Martha Muchow: an essay entitled "Friedrich Fröbels kinder- und bildungspsychologische Anschauungen und die moderne Psychologie" from the journal "Kindergarten" (Muchow, 1927), a joint book with the Montessori advocate Hilde Hecker on a controversy called "Fröbel-Montessori-Streit" in the 1920s (Hecker & Muchow, 1927), a monograph entitled "Psychologische Probleme der frühen Erziehung" (Muchow, 1929) and a chapter with the title "Friedrich Fröbels Erziehungsgedanken und der moderne Kindergarten im Lichte der gegenwärtigen Kinder- und Bildungspsychologie" (Muchow, 1932). I used a historical document analysis, drawing on the research approaches of Nicole Hoffmann (2018) and Lindsay Prior (2003), to examine how Muchow received Fröbel's ideas on children's play and how he influenced her in developing her internationally renowned concept of the life space of the child. All German citations from the historical sources are translated, directly followed by the original quotes.

2 Muchow's Fröbel reception

In 1927, the Journal "Kindergarten" published a reprint of a lecture given by Muchow at the invitation of the Fröbel Association in Hamburg ["Hamburger Fröbelverein"]. The occasion was the 75th anniversary of Friedrich Fröbel's passing. Muchows essay is entitled "Friedrich Fröbel's child and educational psychology views and modern psychology" ["Friedrich Fröbels kinder- und bildungpsychologische Anschauungen und die moderne Psychologie"] and thus also indicates Muchow's intention: She deals with Fröbel's writings, including in particular his book "Menschenerziehung" from 1826, but not in order to place Fröbel as "a great of the past in front of us so that he may find imitators and followers" ["nicht einen Großen der Vergangenheit vor uns hinzustellen, damit er Nachahmer und Anhänger finde"] (Muchow, 1927, p. 166). She explicitly rejected "Fröbelians" ["Fröbelianer"] (Muchow, 1927, p. 166).

Although Fröbel worked as a pedagogue and psychology as a discipline was only just emerging at his time, Muchow explicitly recognizes *a psychology of the child* in Fröbel's writings, which she describes as the "result of serious study, continuous empirical observation and careful collection of observations" (Muchow, 1927, p. 168; Thorun, 1997, p. 88). For Muchow, Fröbel was an early "psychological researcher", in particular with his idea of a "linktotal" ["Gliedganzes"][1] (see Wasmuth, 2024, p. 18), who sees individual human development in "its natural, social and cultural relationships" ["Die Entwicklung, die er als psychologischer Forscher sieht, betrifft dies Gliedganze, betrifft den ganzen Menschen in seiner natürlichen, seiner sozialen und seiner kulturellen Bezogenheit"] (Muchow, 1927, p. 170; also: Konrad, 2022, p. 134). According to another essay by Muchow in an anthology edited by German educational reformer Paul Oestreich (1878-1959), Fröbel's ideas about the importance of the connections between the world and young children for early individual development explicitly influenced her "Hamburg Life Space Studies" ["Hamburger Lebensraumstudien"] (Muchow, 1932, p. 62).

Muchow considers the materials and games Fröbel developed as well as the kindergarten as an institution as a necessary consequence of his findings on psychological development in early childhood: "Fröbel explored the idea that children learn the laws of nature through playful interaction with objects in great detail in his psychological analysis in his instructions for the 'gifts'" [„Dem Gedanken, daß das Kind im spielenden Umgang mit den Dingen ihr Gesetz erfährt, ist Fröbel

1 According to Helge Wasmuth, "linktotal" in Fröbel's writings means: "Humans can only live spherically if they live a conscious life and understand themselves as a part and a unity of a larger whole – as a linktotal. Humans are a link of the total multiplicity of the entire humanity and simultaneously a link of everything that is, including nature and God. Thus, humans can comprehend the entire nature, being, and living of humanity, as well as the creating and working divine life that lives within humanity. When humans 'work' – a term that in Fröbel's thinking goes way beyond the idea of working for a living- humans recognize themselves; they feel in and through their work that they are a link of humanity and a divine being. That is already true for young children, whose 'work' is play" (Wasmuth, 2024, p. 20).

bis in feinste Einzelheiten der psychologischen Analyse nachgegangen in seinen Anleitungen zu den ‚Gaben'"] (Muchow, 1932, p. 67; see also: Muchow, 1927, p. 170; Brodbeck, 2021).
However, she recognizes the practical reception of public early childhood education as a problem, which "took Fröbel's instructions as a binding model for exercises, so that the playthings he suggested were used as obligatory and as the only ones suitable" ["Man hat das Leben des Fröbelschen Kindergartens einst ertötet, dadurch, daß man Fröbels Anleitungen als verbindliches Muster für Übungen nahm, daß man die von ihm vorgeschlagenen Spielzeuge als obligatorisch und allein möglich verwandte"] (Muchow, 1927, p. 173).
In this context, Muchow also draws on the dispute between supporters of Montessori education on the one hand and Fröbel education on the other, which took place in the 1920s in the Weimar Republic, particularly in the German journal "Kindergarten" (Konrad, 2022). She summarized the debate that had previously taken place in 1927 in a book written jointly with the moderate Montessori pedagogue Hilde Hecker: At the center of this book is the discussion about the "methodical design of practice in early childhood education" ["methodische Ausgestaltung der Kleinkindererziehung"] (Hecker & Muchow, 1927, p. 59), around which, according to Muchow, the entire controversy revolved. Muchow, however, sees the essential educational requirements of Fröbel and Montessori not only as similar but even almost identical (Hecker & Muchow, 1927, p. 158). She works out the respective insights into the child's development in early childhood based on the historical sources available at the time for both educational systems. In the case of Fröbel, Muchow again refers especially to the "Menschenerziehung" (Hecker & Muchow, 1927, pp. 161-168), before she concludes, among other things: "The kindergarten [of Fröbel] is initially more than the casa dei bambini [of Montessori] an independent entity developed according to its own inner law" ["Der Kindergarten [Fröbels] ist zunächst mehr als das Kinderhaus [Montessoris] ein in sich selbstständiges, nach eigenem inneren Gesetz entwickeltes Gebilde"] (Hecker & Muchow, 1927, p. 175). Apart from the different materials developed by Montessori and Fröbel, there seem to be some clear differences for Muchow, especially in the facilities themselves: Accordingly, the casa dei bambini focuses its work on the "acquisition of elementary school skills" ["Erwerbung der elementaren Schulfertigkeiten"] (Hecker & Muchow, 1927, p. 176) and presents itself "in its entire work process clearly as a preparation for school" [stellt sich "in seinem gesamten Arbeitsverfahren deutlich als eine Vorbereitung auf die Schule dar"] (Hecker & Muchow, 1927, p. 176; Mey & Günther, 2015, p. 57). Fröbel's kindergarten, on the other hand, sees "its task is to utilize as fully as possible the opportunities offered by the stage of development that is usually referred to as the playing age [...]" ["seine Aufgabe in der möglichst allseitigen Ausschöpfung der Möglichkeiten, die in der Entwicklungsstufe, die man als das Spielalter zu bezeichnen gewohnt ist, beschlossen sind [...]"] (Hecker & Muchow, 1927, p. 176)
In her scientific monograph "Psychological Problems of Early Childhood" ["Psychologische Probleme der frühen Kindheit"] from 1929, Muchow emphasized that

early childhood education "undoubtedly requires a particularly careful psychological and educational foundation" ["bedarf deshalb zweifellos einer besonders sorgfältigen kinder- und bildungspsychologischen Unterbauung"] (Muchow, 1929, p. 12). Modern science and educators' intuitive practice (parents as well as professionals) must merge to improve practical education in early childhood (Muchow, 1929, p. 31). The reason for this is a widespread "popular view" ["populäre Auffassung"] (Muchow, 1929, pp. 18ff) of how to deal with children in early childhood, which was, according to Muchow, often marked by little understanding of child development.

By contrast, at the center of Muchow's reflections is her idea of the "child's world", as the child perceives it, lives in it, and shapes it according to their own ideas. She differentiates between a "world of seriousness" ["Ernstwelt"] (the world of adults) and a "world of play" ["Spielwelt"] (the world of children) (Muchow, 1929, p. 46). And this is where Fröbel enters the picture of Muchow's main argument in this book: She explicitly uses his concept of "life unification" ["Lebenseinigung"] (Muchow, 1929, p. 33) to describe the development of the playing child in connection with their social and material environment. As child development is characterized by play in a world of adults' expectations, the child's activity oscillates back and forth between "the anomic activity of free play, the activity of the inner drive for pure expression and the task- and goal-oriented activity" ["der anomen Tätigkeit des freien Spiels, der Tätigkeit aus reinem Darstellungsdrang des Innern und dem aufgabegemäßen, gesetzbestimmten Tun"] (Muchow, 1929, p. 47). Muchow also describes that the level of "egocentrism" ["Egozentrismus"] in young children, as developed by Piaget and empirically demonstrated by him and other psychologists, was found to be "considerably lower" ["beträchtlich niedriger"] (Muchow, 1929, p. 55) in "a kindergarten in Hamburg organized according to Fröbelian principles" ["in einem nach Fröbelschen Prinzipien organisierten Kindergarten in Hamburg"] (Muchow, 1929, p. 55) compared to other measured results of the 'coefficient' than in Piaget's investigations.

The modern Fröbel kindergarten, as Muchow evidently experienced it, "does not attempt in a one-sided way [...] to initiate the educational process, but instead understands the child from the outset in their personal wholeness and tries to create a living space in which the child finds satisfaction and support in all directions of their needs" ["versucht nicht einseitig [...] den Bildungsprozeß einzuleiten, sondern faßt von vornherein das Kind in seiner personalen Ganzheit und versucht, dem Kinde einen Lebensraum zu schaffen, in dem es nach allen Richtungen seiner Bedürfnisse hin Befriedigung und Förderung findet"] (Muchow, 1929, p. 68).

In several parts of the book, Muchow repeatedly refers to contemporary Fröbel kindergartens, which in the final sentence of her book are highlighted as "a form of early education that has remained inwardly alive" ["innerlich lebendig gebliebene Organisationsgestalt früher Erziehung"] (Muchow, 1929, p. 86).

It is also important to note that Muchow's work is not based solely on Fröbel's articles and books. It also arises from her observed practice of Fröbel kindergartens in the 1920s. The foundation of her account seems to lie in Fröbel's letters to

kindergarten teachers and to "Aunt Schmidt [Muhme Schmidt]" (cf. Wasmuth et al., 2023), in which Fröbel "wrote about depictions of forms of play" ["auf Schilderungen vom Spielgestaltungen schrieb"] that he had successfully devised or had observed" ["die ihm gelungen [waren] oder denen er zugesehen hat"] (Muchow, 1929, p. 77).

3 Discussion and outlook

In the tight frame of this article, I can hardly offer a comprehensive discussion of my research approach regarding the historical sources. It is obvious that I only used four of Martha Muchow's texts for the analysis and was only partially able to consider the contexts in which the documents were written. Nevertheless, several insights for further research and Fröbel-oriented educational practice emerge.

From a scholarly perspective, an investigation into the reception of Fröbel's ideas on children's play by Martha Muchow helps to contextualize the transformation of pedagogical concepts over time. Muchow's engagement with Fröbel's educational philosophy—particularly his emphasis on play and early learning, and the child's interaction with space—reveals how central ideas of 19th-century reform pedagogy were reinterpreted within the framework of early empirical childhood research. Her work represents a crucial link between tradition-oriented educational theory and the emerging empirical study of childhood and child development in the early 20th century. The interplay between Fröbel's play pedagogy and Muchow's space-oriented research can inspire contemporary approaches to designing child-centered learning environments.

Martha Muchow's decisive scientific-historical view of Fröbel's writings (and not predominantly of Fröbel's practical pedagogical work) urges educational science in the 21st century to take a critical and reflective approach to the 'classic' Fröbel. For Muchow, it is not Fröbel's 'child-friendly' work that is the reason for her reception of Fröbel. Rather, it is his ideas and scientific insights about play in early childhood and a 'Spielpflege' (Sauerbrey, 2021; Sauerbrey, 2023) as an early educational approach in the light of psychological findings in Germany in the 1920s. For Muchow, it is not the programmatic practice, but above all the knowledge and insights into the importance of play in early childhood that make a reception of Fröbel worthwhile. She developed her concept of the living space explicitly from him.

Martha Muchow's work thus reveals a predominantly source-oriented authentic reception of Fröbel, as recently called for by Helmut Heiland (2012, p. 155) in particular, but also by Helge Wasmuth (2020; Wasmuth et al., 2023) as a scholarly approach to 'Fröbel's legacy'. This seems to be important, also because Fröbel himself had actually written to Henriette Schrader-Breymann in a letter to which Martha Muchow refers (see Muchow, 1927, p. 166), rejecting the word "Fröbelianer" in 1852:

> "For some time now, the word 'Fröbelian' has been used frequently and repeatedly to initiate our inner and outer unification of life ('Lebenseinigung'). This word, however, is not just against my feelings, not just against my convictions, but also the facts of life speak not for, but against it; [...] I have therefore always avoided giving my work personal names: e.g. not the 'Fröbelian', but the 'allgemeine deutsche Erziehungsanstalt', in Blankenburg not the 'Fröbelian Kinderanstalt', but 'die Anstalt zur Pflege des Thätigkeitstriebes' ('institution of nurturing the activity drive') - the 'Kinderbeschäftigungsanstalt', - the 'Kindergarten', etc."
> ["Es wird seit [Längerem um] unsere innere und äußere Lebenseinigung anzu[bahnen, öfter und] mehrfach das Wort „Fröbelianer" gebraucht. Dieß Wort ist nun aber nicht blos gegen mein Gefühl, nicht blos gegen meine Überzeugung, sondern aber auch das Leben in seinen Thatsachen spricht nicht für, sondern gegen dasselbe; [...] Daher habe ich stets vermieden meinen Wirksamkeiten persönliche Namen zu geben: z.B. nicht die Fröbel'sche, sondern die ‚allgemeine deutsche Erziehungsanstalt' In Blankenburg nicht die Fröbel'sche Kinderanstalt – sondern ‚die Anstalt zur Pflege des Thätigkeitstriebes' u.s.w. – die ‚Kinderbeschäftigungsanstalt', – der ‚Kindergarten' [...]"] (Fröbel, 1852, pp. 16-16R).

This passage from Fröbel's letter shows that at the end of his life, he was concerned about a shift in interest in the development of play in early childhood towards the mere use of his name.

Why do I emphasize this at the end of my article? In my view, it is striking that new developments in educational science and educational practice are somehow referred to as 'Fröbelian'. I often wonder whether—if we simply hadn't heard of Fröbel—such developments might today be described as 'Montessorian' (cf. Grell, 2021) or 'Reggian' (Knauf, 2021), referencing other early childhood education approaches and their founders (Schmidt et al., 2021; Wasmuth et al., 2023). Such approaches, too, offer comprehensive justifications for the importance of play and learning in early childhood. A closer look at Martha Muchow's work reminds us to carefully examine which ideas originated from Fröbel, which (later) ideas were influenced by him, and which ideas are less specific to Fröbel and more general to early childhood education.

Martha Muchow would probably have contributed far more to a modern Fröbel and to psychological research if the circumstances of her life had been different. Shortly after the National Socialists came to power, she was severely defamed, denounced in particular as a 'Jewish sympathizer', and—on her 41st birthday—removed from all her posts and ordered back to school teaching. Two days after her dismissal from the University of Hamburg, she attempted suicide and died on 29 September 1933.

Bibliography

Brodbeck, M. (2021). Das Leben des Kindes ist Spiel. Friedrich Fröbels Spielpädagogik heute für Kindergarten, Schule und Familie. Teil 2. Nordhausen: JugendSozialwerk Nordhausen.

Bruce, T. (2021). Friedrich Froebel. A critical introduction to key themes and debates. London: Bloomsbury. https://www.doi.org/10.5040/9781474250467

Fröbel, F. (1826). Die Menschenerziehung, die Erziehungs-, Unterrichts- und Lehrkunst. Angestrebt in der allgemeinen deutschen Erziehungsanstalt zu Keilhau. Keilhau: Verlag der allgemeinen deutschen Erziehungsanstalt.

Fröbel, F. (1852). Letter to Henriette Breymann in Baden-Baden from 13.02.1852 (Marienthal). https://editionen.bbf.dipf.de/exist/apps/briefedition-friedrich-froebel/briefe/fb1852-02-13-01.xml

Grell, F. (2021). Theoretische Grundlagen und Grundprobleme der Montessoripädagogik. In T. Schmidt, U. Sauerbrey & W. Smidt (Eds.), Frühpädagogische Handlungskonzepte. Eine wissenschaftliche Bestandsaufnahme (pp. 43–64). Münster: Waxmann UTB.

Hecker, H. & Muchow, M. (1927). Friedrich Fröbel und Maria Montessori. Leipzig: Quelle & Meyer.

Heiland, H. (2012). Fröbelforschung aktuell. Aufsätze 2001-2010. Würzburg: Königshausen & Neumann.

Hoffmann, N. (2018). Dokumentenanalyse in der Bildungs- und Sozialforschung. Überblick und Einführung. Weinheim: Beltz.

Knauf, H. (2021). Reggiopädagogik. In T. Schmidt, U. Sauerbrey & W. Smidt (Eds.), Frühpädagogische Handlungskonzepte. Eine wissenschaftliche Bestandsaufnahme (pp. 149–174). Münster: Waxmann UTB.

Konrad, F.-M. (2022). Der Fröbel-Montessori-Streit. In D. Franke-Meyer, D. Kasüschke & R. Braches-Chyrek (Eds.), Geschichte der Pädagogik der frühen Kindheit. Vergessene Zusammenhänge (pp. 131–145). Opladen; Berlin; Toronto: Verlag Barbara Budrich. https://doi.org/10.2307/j.ctv2b07vcm.10

Mey, G. & Günther, H. (Eds.) (2015). The life space of the urban child: Perspectives on Martha Muchow's classic study. London: Taylor & Francis. https://doi.org/10.4324/9781315132938

Muchow, M. & Muchow, H. H. (2012/1935). Der Lebensraum des Großstadtkindes. Ed. by Imbke Behnken and Michael-Sebastian Honig. Weinheim: Beltz Juventa.

Muchow, M. (1927). Friedrich Fröbels kinder- und bildungspsychologische Anschauungen und die moderne Psychologie. Kindergarten 68, 68–72.

Muchow, M. (1929). Psychologische Probleme der frühen Erziehung. Erfurt: Stenger.

Muchow, M. (1932). Friedrich Fröbels Erziehungsgedanken und der modern Kindergarten im Lichte der gegenwärtigen Kinder- und Bildungspsychologie. In P. Oestreich (Ed.), Das Kleinkind. seine Not und seine Erziehung (pp. 59–70). Jena: Zwing.

Prior, L. (2003). Using documents in social research. London: Sage.

Sauerbrey, U. (2021). Fröbelpädagogik. In T. Schmidt, U. Sauerbrey & W. Smidt (Eds.), Frühpädagogische Handlungskonzepte. Eine wissenschaftliche Bestandsaufnahme (pp. 23–41). Münster: Waxmann UTB.

Sauerbrey, U. (2023). Between Theory and Educational Approach: Anthropological Presumptions and Basic Terms of Froebel's Pedagogy of Play. In T. Bruce, Y. Nishida, S. Powell, H. Wasmuth & J. Whinnett (Eds.), Bloomsbury Handbook to Friedrich Froebel (pp. 45–52). London: Bloomsbury. https://www.doi.org/10.5040/9781350323230.0015

Schmidt, T., Sauerbrey, U. & Smidt, W. (2021). Frühpädagogische Handlungskonzepte. Eine wissenschaftliche Bestandsaufnahme. Münster: Waxmann. https://www.doi.org/10.36198/9783838556857

Schoggen, P. (1985). Martha Muchow: Precursor to Ecological Psychology. Human Development, 28(4), 213–216. https://doi.org/10.1159/000272961

Thorun, W. (1997). Martha Muchow – tiefschauende Kinderpsychologin. In W. Thorun (Ed.), Die Fröbelbewegung in Hamburg (pp. 88-90). Kankelau: Richter & Hansen.

Wasmuth, H. (2020). Fröbel's Pedagogy of Kindergarten and Play. Modifications in Germany and the United States. New York: Routledge. https://www.doi.org/10.4324/9780429059278
Wasmuth, H. (2024). An Explanation of My Educational Principles. Friedrich Froebel's Letter to Max Leidesdorf. Global Education Review, 11(4), 9–26.
Wasmuth, H., Sauerbrey, U. & Winkler, M. (2023). Finding Froebel. The man who invented Kindergarten. London: Bloomsbury. https://doi.org/10.5040/9781350269279
Wohlwill, J. (1985). Martha Muchow, 1892-1933: Her Life, Work, and Contribution to Developmental and Ecological Psychology. Human Development, 28(4), 198–200. https://doi.org/10.1159/000272961

Author

Sauerbrey, Ulf, Prof. Dr.
ORCID: 0000-0001-8897-7358
University of Erfurt, Germany
Professor of Childhood and Youth in Digital Educational Environments, Department of Education
Main areas of work and research: early childhood education; history of childhood; media education; media-mediated parenting advice
ulf.sauerbrey@uni-erfurt.de

Marcella Towler

Fuzzy Play? An exploration of how play is portrayed on early childhood education websites.

Abstract

This paper utilizes multimodal critical discourse analysis (MCDA) techniques to explore the play narratives employed in the advertising texts of early childhood education providers in Ireland. The discussion demonstrates the communicative potential of websites to depict play in specific ways. The analysis outlines that there is a propensity to portray play as a means to get to a specific outcome rather than the Froebelian idea that "play is learning" (Wasmuth, Sauerbrey & Winkler, 2024, p. 191). The contradictions of switching play on and off within the discourse leaves a "fuzzy" depiction of the central importance of play in early childhood education, thus reminding Froebelians to reflect on how they characterize play.

Keywords: play, neoliberalism, discourse, Froebel

Zusammenfassung

Der Beitrag nutzt die multimodale Kritische Diskursanalyse (MCDA), um Spielnarrative in Werbetexten frühpädagogischer Einrichtungen in Irland zu untersuchen. Die Analyse zeigt das kommunikative Potenzial von Websites, Spiel in spezifischer Weise darzustellen. Dabei erscheint Spiel überwiegend als Mittel zur Erreichung bestimmter Ergebnisse statt im Sinne der Fröbelpädagogik als Lernen selbst (Wasmuth, Sauerbrey & Winkler, 2024, S. 191). Die diskursive Umschaltung zwischen Spiel und Nicht-Spiel erzeugt ein unscharfes Bild seiner zentralen Bedeutung in der frühen Bildung und verweist auf die Notwendigkeit, Spielbegriffe kritisch zu reflektieren.

Schlüsselwörter: Spiel, Neoliberalismus, Diskurs, Fröbel

1 Introduction

"We cannot tear the present from the past or from the future" (Froebel, 1849, pp. 3-4)

The discussion within this paper represents elements of my Froebelian journey, past and present. This is an interwoven reference to Froebelian education in the past, data from the present, and considerations for the future. Within the Froebelian community and discourse, the central importance of play for young children is accepted and features as an 11th Biennial International Froebel Society Conference subtopic. However, beyond the Froebelian community and scholarship, there are varying and contradictory discussions and portrayals of play, the significance of play, play materials, who should guide the play, and what play should look like. "The field has struggled with how to conceptualize and operationalize "play" (Zosh et al., 2018, p. 1). Additionally, within early childhood education, "there remains a discourse of play that sees it as separate from 'real' work" (Drew, 2018, p. 125). This confusing dualistic depiction of play forms the basis of this paper and my wider doctoral research. The impetus for the study originated in an exploration of the play/ work paradox outlined by Brehony (2017) during a previous Froebelian study. This interest in the paradox between play and work is combined with an interest in how neoliberalism has the potential to subtly penetrate the discourse of play in early childhood education. My positionality in my PhD research and my interpretation of the preliminary findings presented below will hence be influenced by a Froebelian viewpoint.

Neoliberalism in the formal education sector has been the subject of much discussion in the Irish context, with Ball (2016) and Lynch (2021) being notable contributors to the scholarship. However, there has not been a parallel discussion in relation to early childhood education. Moloney et al. (2019) have considered neoliberalism in relation to the professionalization of early childhood education and care, and Gallagher (2012) has considered the impact on the respatialisation of childcare in Ireland. However, there is a dearth of research that focuses specifically on the impact of neoliberalist ideas on early childhood education and play pedagogy in Ireland.

This discussion will firstly provide a synoptic overview of the potential of neoliberalism to impact education and early childhood education. The methodology, ethical considerations, and findings will then be discussed. A consideration of how Froebel promoted play and commentary on Froebel's pedagogy of kindergarten and play being exploited for specific purposes in the past will be noted prior to the conclusion and a reflection for the future.

2 Neoliberalism and education

Beasts, monsters, and zombies may feature in children's play and stories, but these terms have also been used to describe the impact of neoliberalism. The terminology of "slouching beast" (Ball, 2016, p. 1046), "scary monster" (Wilson, 2017, p. 11), and 'zombie doctrine' (Monbiot, 2016, n.p.) refer to the invisibility of neoliberalism and its' potential to coerce people into thinking, acting, and writing in a particular way. This indiscernible force is reflected in a statement by Ball (2020, p.xvi): "Neoliberalism is 'out there', in the form of the structures and processes of the market, and 'in here'- in our heads, hearts and souls". The impact of neoliberalism on compulsory schooling has been researched in more depth than early childhood education (Roberts-Holmes & Moss, 2021). In relation to education, the Global Education Reform Movement (GERM) was a term introduced by Pasi Sahlberg (2012). "GERM can be seen as the manifestation of compulsory education's contamination by neoliberal thinking" (Roberts-Holmes & Moss, 2021, p. 31). GERM "is like an epidemic that spreads and infects education systems through a virus. It travels with pundits, media and politicians. Education systems borrow policies from others and get infected. As a consequence, schools get ill, teachers don't feel well, and kids learn less" (Sahlberg, 2012, p. 3). Five symptoms of GERM infection have been identified by Roberts-Holmes and Moss, (2021, pp. 31-33). The first is the is the "spread of market logic". Parents are viewed as consumers and schools compete with each other for pupils. "The second symptom of GERM is the standardisation of education" which is implicit with the idea that all students should attain the same outcomes. An emphasis on core subjects of literacy, numeracy, and science to the exclusion of other curricular areas and aspects of education is the third symptom of GERM. Applying corporate and business management models to education is the fourth symptom of GERM. Schools are required to become "business-like and like a business" (Ball, 2017, p. 57, cited in Roberts-Holmes & Moss, 2021, p.33). Test Based Accountability (TBA) is the fifth symptom of GERM. External testing demands that schools and teachers are accountable for students' results, with the ranking of schools and teachers based on results becoming more commonplace. Hence, in neoliberalism, education becomes based on economics and marketisation. Children are seen as "human capital" that we need to invest in for future economic output. This view of children has far-reaching consequences for how education is viewed in the present. Sims (2014) notes that the standardization of knowledge has led to "...the push-down curriculum, where academic subjects normally associated with the school years are increasingly being imposed on the early childhood sector". Play is a central pedagogical approach in early childhood curriculum. However, this emphasis on academic subjects will have an impact on the type of play marketed to parents. With the 'spread of market logic' and its inherent view of parents as consumers, play as pedagogy can be a concern for parents, reflecting "play anxiety in marketised times" (Drew, 2019, p. 116). While the wider doctoral research will explore the symptoms of GERM in depth, this paper explores whether the emphasis on core subject areas has permeated

the type of play marketed to parents on the websites of early childhood education settings in Ireland.

3 Methodology

The study utilizes multimodal critical discourse analysis (MCDA) techniques to explore the communicative potential of websites to depict play in specific ways. MCDA is based on a social semiotics approach, which considers the choices of signs used for communicating specific aims (Machin & Mayr, 2023). This approach demonstrates how language and image work together to convey information (Kress & van Leeuwen, 2021). This study draws on analytic tools from a variety of authors of CDA and MCDA as appropriate to the research aim, thus embracing the concept of "methodological hybridity" (Rogers, 2011, p.11).

The websites of multi-service providers' settings were the focus of analysis. Multi-service providers are interpreted as those with more than one type of provision for more than one age group, for example, a toddler room(s) and preschool room(s). These were randomly selected from a database of early childhood education providers. The first examination of the text on the websites noted mentions of the word play and/or the lack thereof, and the connections between play and academic learning. Second and subsequent examinations focused on transitivity and the grammatical positioning of play in relation to academic learning, paying particular attention to mentions of literacy and numeracy as associated with the neoliberal push-down curriculum noted by Sims (2014). Transitivity relates to depictions of "who does what to whom, and how" (Simpson et al., 2019). Grammatical positioning of actions places some actions in the foreground and others in the background (Machin & Mayr, 2023). The investigation of images firstly considered what images were depicting and what children and adults were visually depicted as doing. Following this visual transitivity, the focus of analysis was then the agency of adults and children and whether these social actors were activated or passivated in the images. The actions of participants suggest agency and power (Fairclough, 2003). In addition to agency, emotional processes (facial expression, pose), mental processes (inner thought), and material processes (actions that have a result) were documented. The features of the early childhood education environment, distance or closeness of shot, and typography were also briefly noted. These aspects and others relevant to MCDA will be considered in more depth as the study continues.

4 Ethical considerations

Ethical approval for the research was sought from and granted by the University College Cork (UCC) Social Research Ethics Committee. Stommel and Rijk (2021), in a review of discourse analysis journals, noted that two-thirds of the articles reviewed did not discuss ethical considerations relating to online data. The rationale given in many of these cases was that the data was publicly available online.

However, the British Psychological Association (2013, p. 6) and British Sociological Association (2016, p. 6) note that in internet-mediated research, the boundaries between public and private space are "blurred". Although the websites analyzed in this study are publicly accessible, the researcher has a duty to protect research participants, even when their participation is indirect through information contained on websites.

The potential ethical issues in this study relate to perceived privacy, informed consent, confidentiality, and traceability. As the information on play is chosen by the participants for websites and published in the public sphere, there is no expectation of privacy. Therefore, informed consent was waived in line with institutional guidance and approval. All identifying information was anonymized. However, the researcher is aware of the risks of traceability. To minimize the possibility of traceability, the use of large verbatim quotations from websites is not used, quotations are paraphrased where possible. Removing words or details from quotations and combining quotations can also address this issue (The British Psychological Society, 2013).

5 Findings

The preliminary findings discussed below relate to text and images relating to play, play materials, and curriculum on the homepages and subpages of the randomly chosen early childhood education websites. Of the websites analyzed to date, all have either been designed by a web design company or designed through web design software. Nevertheless, settings will make choices about what will be communicated and why through the content provided to designers or during the design process respectively.

5.1 Where is Play?

Froebel enthusiasts may have an expectation that play would be prominent in the discourse relating to early childhood education, but the analysis of websites to date suggests otherwise. A commonality between the websites is a scarcity of the word play on homepages and overall. Words such as "fun", "stimulating", "enjoyment", "discovery", "engaging experiences", "activities", "educational activities", and "curriculum" appear frequently. While these could be considered aspects of play, the word play itself is rarely used in isolation from its outcome-focused potential. In some examples, play is more likely to be mentioned for younger age groups such as babies, wobblers, and toddlers, with learning becoming evident in the older age groups. For example, in one case, play is mentioned for the younger age groups, but the description of the preschool room refers to their "first experience of early learning". It is therefore implied that play for younger age groups does not include learning.

When play is mentioned on websites, it is typical for it to be preceded by a mention of learning. It appears that play needs to be justified by a mention of learning,

for example, "learning through play", "learning with fun and play". Play is also represented as a conduit for the acquisition of skills and/or meeting developmental milestones "through play". The need to justify play with reference to learning and the acquisition of skills suggests the infiltration of academic components in early childhood education, demonstrating the push-down curriculum with the potential for academic school subjects to feature in the early education sphere, noted by Sims (2014; 2017). However, some of the settings in the study do not just allude to academic components but refer specifically to them. The homepage of one setting includes a testimonial from a school Principal referring to the children from that particular early education setting being "well prepared" for primary school. The children's abilities for academic subjects upon school entry are also noted. The mention of a school Principal is more effective than just stating that the children are well prepared, and makes the statement seem more authoritative and important. This is what Machin and Mayr (2023, p. 118) refer to as the use of "functional honorifics". Children being "completely" ready for school and a setting "pursuing excellence" were also apparent. Preparation for "success" in school and life is referred to in another instance, with numeracy and literacy specifically mentioned. However, the emphasis on academic outcomes is contradicted by a spelling mistake on the webpage. One early education pre-school room refers to children in that setting being "at school". While the association between the learning potential of play is noted above, there is also evidence of the separation of play and learning in another example. The commentary notes that while a particular age group is a significant period for learning, there is also time to "play free". This implies that learning does not occur when children play freely. It also positions the significant period of learning before the actions of playing freely in the sentence. This devalues the importance of play as actions placed earlier in a sentence are given prominence (van Dijk, 1991).

The images on websites strengthen the discourse of preparation for primary school. The emphasis on children sitting around tables during activities is particularly salient. Writing about literacy and the schooled body, Dixon (2011, p. 4) notes "there is a close association with the desk and schooling in our cultural schemata," and the "docility" needed to learn to write is "achieved through techniques which affect how space, time, and movement are regulated". One striking image combines both desk-based activity and literacy achievement. The image is of a child sitting alone at a desk. There is a page on the desk with a child's drawing on it. The child is holding a pencil that is touching the page. There are recognizable words describing the picture that is drawn on the page. Such imagery suggests that the child has written the words on the page. The image featured on the part of the website relating to a pre-school room. Writing in an early education setting is subtly suggested elsewhere through typography, which "can be used to express attitudes such as serious, official or fun" (Ledin & Machin, 2020, p. 120). Although analysis of typography is in its early stages in this study, it is of note that one of the sites uses a childlike font and typeface in its headings, and the headings are in

color writing rather than in black. This is an example of typography being coded to imply writing in an early education setting.
The examples from the text and images above echo the neoliberalist view of early childhood education early childhood settings outlined by Roberts-Holmes and Moss (2021, p. 102).

> "...as a factory or processing plant, applying effective 'human technologies' to produce standardised and predetermined outcomes for young children, outcomes expressed in terms of developmental or learning goals, and embodying the acquisition of competencies and skills that represent the initial building blocks of human capital and ensure the young child is ready or prepared for the next stage of human capital formation – compulsory primary schooling".

The connotation of academic learning and play noted in the text of websites above is further evident in images through the indexical signs of emotional, mental, and material processes of expression, gesture, posture, and action, respectively (Ledin & Machin, 2020). Images of a child pouring water without the presence of an adult suggest agency, but the emotional process of the child looking in the direction of the water being poured suggests the mental process of concentration and learning. The child may indeed be concentrating while enjoying the activity, but the choice was made to use the photograph indicating concentration rather than, for example, a photograph of the child smiling during their actions. A group of children looking in the direction of a picture that an adult is drawing similarly alludes to the concentration of the children. Although the adult is at the same level as the children, suggesting a partnership in the play, the children are not holding drawing tools, so they do not have agency. The adult is the agent in this material process. However, this is balanced by a photograph of other children drawing without an adult present, thus portraying agency. Nevertheless, with all the children's heads down towards their drawings, the mental process of concentration is again implied. Without seeing the children's faces, we cannot infer the emotional process; the mental process is foregrounded. Conversely, where children's faces are visible, emotional processes can be used to encourage thoughts about mental processes. For instance, one image of a group of children sitting at a table shows one child looking directly at the camera while holding malleable material, and their facial expression implies thinking and exploration. Looking directly at the camera creates a social interaction with the viewer inviting them to consider the person's mental processes (Ledin & Machin, 2020).

5.2 Actors and Agency

Social actors engaged in actions influence representations of power (Fairclough, 2003). On early education websites, there is a tendency for play to be portrayed as being done to children or that the play would not occur without adults. For example, there is mention of children being "encouraged" to participate in free play. It would appear here that the children are passivated with the adults play-

ing an active role. However, there is some contradiction in the same setting with the environment and play materials/resources negating the role of the adult, as these are mentioned in relation to the acquisition of skills and/or learning. Lists of equipment and toys encourage "learning through play" and using different types of resources to "stimulate" the children. There is an emphasis on the resources used in play rather than on the adults' actions or involvement in the play. This not only highlights the indirect role of the adult in play, but it also suggests that without these resources, play would not occur. This echoes the prominence or playing down of the actions of play noted above (van Dijk, 1991) and the grammatical positioning of actions (Machin & Mayr, 2023). Encouragement/stimulation from the adult and/or resources locate play in a subordinate role to the actions of adults and the essential need for these specific resources in play. The child does not have agency in their play but is reliant on the adult, the resources, or the specific environment in a particular setting. Moreover, there is a suggestion that without adults, learning through play would not occur. This implies that children need this setting to learn, their agency in play and learning is not recognized.

Images reveal mixed messages in relation to the agency of the social actors in play, while the learning aspect of play is reinforced. The images of children engaging with various commercially produced resources without an adult in the picture hint at agency and freedom in play. However, the type of resources the children are using can diminish such agency. When all children are using the same type of materials, it increases the likelihood of adult involvement at the outset. This collectivization can occur when groups are performing the same actions (Ledin & Machin, 2020). This presents a homogenous view of play with the absence of images of children who are not participating in this specific activity.

The findings outlined above demonstrate that there appears to be a fear of mentioning the word play, and when it is mentioned, it is grammatically positioned as subordinate to learning or as separate to learning. The emphasis on the core subjects of literacy and numeracy is also demonstrated. This schoolification of early childhood education is replicated in the images on websites through the emphasis on desk-based environments and the suggestion of literacy practices. The role of adults represented further complicates the ambiguous online communication. Adults are presented as partners in play, but there is an overwhelming depiction of the adult as the central agent in the play. There is a propensity to switch play on and off within the discourse. This leaves a "fuzzy" depiction of the central importance of play in early childhood education on the websites of the settings analyzed.

5.3 Froebel promoting play!

Flannery Quinn (2017, p. 29) have noted that "For Froebel, play was not located in discourses of outcomes or accountability". Froebel was, however, promoting the product of the General German Kindergarten and became "a kind of business traveler" (Wasmuth, Sauerbrey, & Winkler, 2024, p. 198) to do so. Although the

main elements of his pedagogy of kindergarten and play stayed consistent, "Froebel changed or emphasized certain aspects based on his audience" (Wasmuth, Sauerbrey & Winkler, 2024, p. 189). Yet, this is not widely noted in the Froebelian scholarship or in the stories we tell about Froebel. Maybe it does not suit the narrative around Froebel and play. Froebel wrote his letter to Max Leidesdorf in the hope that he would support the kindergarten movement and "help to spread the word" (Wasmuth, 2024, p. 14) amongst influential people who would open kindergartens. These examples from Froebel's life are not dissimilar to early childhood educators choosing to portray and promote play in certain ways to suit their audience.

Historically, the introduction of Kindergarten to the National Schools in Ireland related to an attempt to reform the social and economic problems by investment in education (Towler, 2009). In reports of the Commissioners of National Education, Kindergarten was discussed under the heading of technical and industrial education. The introduction of Kindergarten seemed to have '...an undercurrent of manual and practical instruction' (Fitzgerald, 1983, p. 13). Similar to the Irish situation, infant schools and babies classes in London in the late nineteenth and early twentieth century utilized the Gifts and Occupations "...as a device to teach the basics of handwork as preparation for the manual training appropriate for working-class children" (Read, 2006, p. 322). Perhaps these examples were the human capital theory equivalent at that time, preparing children for future economic output.

In relation to the role of the adult in children's play, Froebel wrote three different versions of activities with the third gift (Liebschner, 2001). This illustrates his struggles to provide directions relating to the exact amount of freedom to be given to the child.

The promotion and portrayal of play in certain ways for certain aims and confusion about the role of the adult in children's play is therefore not new, although the format of such promotion and representation of the adult in play has changed. Lessons from the past demonstrate that narratives around Froebel's pedagogy of kindergarten and play also focused on specific aims and outcomes. As we move forward, we need to keep the words of Tina Bruce at the forefront of our dialogue: "play cannot be pinned down and turned into a product of measurable learning" (Bruce in Brehony, 2017, p. 27)

6 Conclusion

The evidence in this study to date suggests that the discourses surrounding play are still a significant challenge in early childhood care and education. The author does not deny the learning potential inherent in play. It is the utilitarian outcome-focused representation of play that is of concern. This reinforces the neoliberal GERM agenda of focusing on core subjects, which in turn infiltrate early childhood education pedagogy. It also neglects children's natural desire and need to play, their play drive in a Froebelian sense. Such narratives have the potential to influence how we think and talk about play. Perhaps the "fuzzy" representation

of play with neoliberal propensities presents a continuing play/work paradox. As Froebelians, we need to reflect on the way that we characterize play in the future by learning from the past and present. Roberts-Holmes and Moss (2021, p. 163) remind us:

"Being choosey about words is not being faddy: language matters, the words we use are essential to the discourses that govern us or the stories we choose to tell"

Acknowledgement

Thank you to my Supervisors, Dr. Kevin Cahill and Professor Kathy Hall for their continuing patience, encouragement and inspiration.

Bibliography

Ball, S. J. (2016). Neoliberal education? Confronting the slouching beast. Policy Futures in Education, 14(8), 1046–1059, https://doi.org/10.1177/1478210316664259.

Ball, S. (2020). Preface. In G. Roberts-Holmes & P. Moss (2021), Neoliberalism and Early Childhood Education: Markets, Imaginaries and Governance (pp. xv-xviii). Oxon: Routledge.

Brehony, K. J. (2017). Working at Play or Playing at Work? A Froebelian Paradox Re-examined. In H. May, K. Nawrotzki & L. Prochner (Eds.), Kindergarten Narratives on Froebelian Education: Transnational Investigations (pp. 14–31). UK: Bloomsbury.

British Psychological Society (2013). Ethics Guidelines for Internet-mediated Research. INF206/1.2013. Leicester: Author. www.bps.org.uk/publications/policy-andguidelines/research-guidelines-policydocuments/research-guidelines-poli

British Sociological Association (2016). Ethics Guidelines and Collated Resources for Digital Research: Statement of Ethical Practice Annexe. https://www.britsoc.co.uk/media/24309/bsa_statement_of_ethical_practice_annexe.pdf

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

Dixon, K. (2011). Literacy, Power, and the Schooled Body: Learning in time and space. New York: Routledge.

Drew, C. (2019). 'We call this "play", however…': Navigating 'play anxiety' in early childhood education and care markets. Journal of Early Childhood Research, 17(2), 116–128, https://doi.org/10.1177/1476718X18809385.

Fairclough, N. (2003). Critical discourse analysis: The critical study of language. London: Longman.

Fitzgerald, M. E. (1983). The influence of Froebel's Kindergarten on the Belmore Commission 1897-98. Maynooth Review, 60, 3–30.

Flannery Quinn, S. (2017). Locating play today. In T. Bruce, P. Hakkarainen & M. Bredikyte (Eds.), The Routledge International Handbook of Early Childhood Play (pp. 22-32). Abingdon: Routledge

Gallagher, A. (2012). Neoliberal governmentality and the respatialisation of childcare in Ireland. Geoforum, 43(5), 464–471, https://doi.org/10.1016/j.geoforum.2011.10.004.

Kress, G. & van Leeuwen, T. (2021). Reading Images: The Grammar of Visual Design (3rd ed.). Oxon: Routledge.

Ledin, P. & Machin, D. (2020). Introduction to Multimodal Analysis (2nd ed.). London: Bloomsbury.

Liebschner, J. (2001). A Child's Work: Freedom and Guidance in Froebel's Educational Theory and Practice. Cambridge: The Lutterworth Press.

Lynch, K. (2021). Care and Capitalism. Cambridge: Polity Press.

Machin, M. & Mayr, A. (2023). How to do Critical Discourse Analysis: A Multimodal Introduction (2nd ed.). London: Sage.
Moloney, M., Sims, M., Rothe, A., Buettner, C., Sonter, L., Waniganayake, M., Opazo, M.J., Calder, P. & Girlich, S. (2019). Resisting Neoliberalism: Professionalisation of Early Childhood Education and Care. lnternational Electronic Journal of Elementary Education, 8(1), 1–10. http://dx.doi.org/10.11648/j.ijeedu.20190801.11.
Monbiot, G. (2016). 'Neoliberalism- the ideology at the root of all our problems'. The Guardian, 15 April. https://www.theguardian.com/books/2016/apr/15/neoliberalism-ideology-problem-george-monbiot.
Read, J. (2006). Free Play with Froebel: Use and Abuse of Progressive Pedagogy in London's Infant Schools, 1870-c.1904. Paedagogica Historica, 42(3), 299–323.
Roberts-Holmes, G. & Moss, P. (2021). Neoliberalism and Early Childhood Education: Markets, Imaginaries and Governance. Oxon: Routledge.
Rogers, R. (Ed.). (2011). An Introduction to Critical Discourse Analysis in Education. New York: Routledge.
Sahlberg, P. (2012). How GERM is infecting schools around the world? https://pasisahlberg.com/text-test/(open in a new window)
Sims, M. (2014). Is the care-education dichotomy behind us? Should it be? Australasian Journal of Early Childhood, 39, 3–11, https://doi.org/10.1177/183693911403900402
Sims, M. (2017). Neoliberalism and early childhood. Cogent Education, 4(1), 1–10, https://doi.org/10.1080/2331186X.2017.1365411
Simpson, P., Mayr, A. & Statham, S. (2018). Language and Power; A resource book for students (2nd ed.). London: Routledge.
Stommel, W. & de Rijk, L. (2021). Ethical approval: none sought. How discourse analysts report ethical issues around publicly available online data. Research Ethics, 17(3), 275–297. https://doi.org/10.1177/1747016120988767
Towler, M. (2009). Friedrich Froebel: A Relic From the Past, A Vision for the Future. An Leanbh Óg: The OMEP. Ireland Journal of Early Childhood Studies, 3(1), 127–145.
van Dijk, T. (1991). Racism and the press. London: Routledge.
Wasmuth, H., Sauerbrey, U. & Winkler, M. (2023). Finding Froebel: The man who invented Kindergarten. London: Bloomsbury.
Wasmuth, H. (2024). An Explanation of My Educational Principles: Friedrich Fröbel's Letter to Max Leidesdorf. Global Education Review, 11 (4), 9-26.
Wilson, J. (2017). Neoliberalism. New York: Routledge.
Zosh, J. M., Hirssh-Pasek, K., Hopkins, E.J., Jensen, H., Liu, C., Neale, D., Lynneth Solis, S. & Whitebread, D. (2018). Accessing the Inaccessible: Redefining Play as a Spectrum. Frontiers in Psychology, (9), 1-12.

Author

Towler, Marcella
University College Cork, Ireland
Lecturer, Early Years and Childhood Studies, School of Education
Main areas of work and research: early years and childhood studies; play; Froebel; neoliberalism; outdoor education
m.towler@ucc.ie

Andrea C. Schmid and Nikolas A. Rathert

Froebel pedagogy – The authentic Froebel gifts as nexus between then and now

Abstract

This article advocates the use of authentic Froebel gifts within Froebel's gift "system" (Rockstein, 2013). Although the term "system" is viewed critically, because Froebel "in the strict sense ... has simply not managed to combine his materials into a 'system'" (Heiland, 2004, p. 37, transl. NAR), this term is to be used when talking about the whole of the means of play and the Whole of Gifts and Occupations. Unlike, e.g., Maria Montessori's materials, Froebel's materials allow for a wide range of different activities and, above all, are open to change and expansion, which is one of their key advantages over other systems. However, to be compatible with the existing gifts, these should comply with the specific design, aesthetic, and mathematical principles specified for the material initially conceived by Froebel. Therefore, our advice is to use Froebel material, expand it, but stay within the specified limits.

Keywords: authentic Froebel, Froebel gifts and occupations, specific design

Zusammenfassung

Dieser Artikel plädiert für den Einsatz authentischer Fröbel-Gaben innerhalb von Fröbels „Gabensystem" (Rockstein, 2013). Obwohl der Begriff „System" kritisch betrachtet wird, da Fröbel „im strengen Sinne ... es einfach nicht geschafft hat, seine Materialien zu einem ‚System' zu verbinden" (Heiland, 2004, S. 37), soll dieser Begriff verwendet werden, wenn von der Gesamtheit der Spielmittel sowie der Gesamtheit der Gaben und Beschäftigungen die Rede ist. Im Gegensatz zu beispielsweise Maria Montessoris Materialien ermöglichen Fröbels Materialien eine Vielzahl unterschiedlicher Aktivitäten und sind vor allem offen für Veränderungen und Erweiterungen, was einen ihrer wesentlichen Vorteile gegenüber anderen Systemen darstellt. Um jedoch mit den bereits vorhandenen Materialien kompatibel zu sein, sollten diese den spezifischen gestalterischen, ästhetischen und mathematischen Prinzipien entsprechen, die für das ursprünglich von Fröbel konzipierte Material festgelegt wurden. Daher lautet unser Rat: Verwenden Sie Fröbel-Material, erweitern Sie es, bleiben Sie dabei jedoch innerhalb der vorgegebenen Grenzen.

Schlüsselwörter: Der authentische Froebel, Froebel-Gaben, anschlussfähiges Design

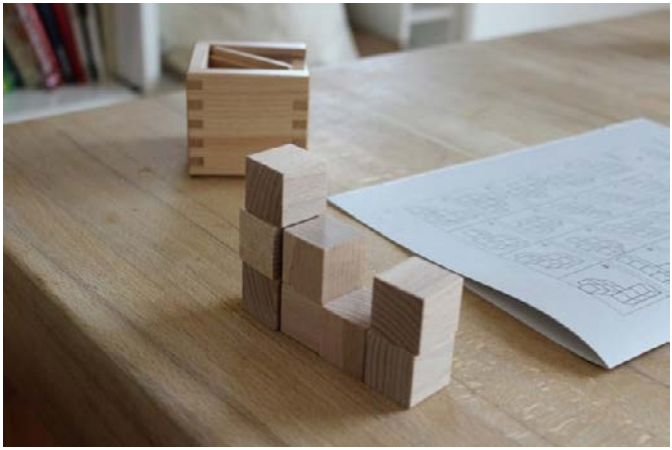


Fig. 1: Building with the third Froebel gift (own illustration)

1 Authentic Froebel gifts as a connection between the past, present, and future

Currently, Froebel materials are not widely available in nurseries and other early childhood education settings, limiting opportunities for meaningful self-directed learning. This suggests that many kindergartens may lack a clear understanding of what "Froebel" truly means. However, these gifts, which adhere to the original dimensions, serve as a link among yesterday, today, and tomorrow. The original Froebel gifts originate from the system of gifts and activities that Friedrich Froebel developed in Bad Blankenburg beginning in 1837 (Kuntze, 1952, p. 93). It is widely recognised among experts in the field that these gifts are significant in the education of young children. However, there are relatively few empirical studies on the topic; an exception is Rathert (2022). Heiland emphasises the inherent power in the gifts and their call to action:

> "Froebel's play gifts encourage concentration and participation. They require an adult's involvement and offer a representation of reality. They call for respect for nature and the development of human consciousness and freedom" (Heiland, 1999, p. 59, transl. NAR).

Since their invention, educators have used Froebel materials in activities and free play in kindergartens worldwide (1982; Boldt et al., 1982, Heiland, 1982; Hebenstreit, 2003) for various purposes. Froebel materials were and are open to free, imaginative activity, serving as a basis for externalising the inner self and internalising the outer world, thus facilitating understanding and communication with oneself as well as with others (Heiland, 2017a). Friedrich Froebel developed his

educational materials and concepts in the 1830s and 1840s. The main period of use was therefore in the mid-19th century. Also in 1837, Blankenburg, Thuringia, opened the first kindergarten, where educators trained by Froebel utilised his materials. Following this development, the kindergarten concept began to spread globally. Researchers have documented this phenomenon (e.g. Vroede, 1983; Lee, 1998; Sakai, 2009; Heiland, 2017a; Wasmuth, 2020). These early kindergartens also systematically used Froebel's materials. These institutions served not only as educational and upbringing facilities for children aged three to six but also as training centres for prospective play leaders, such as kindergarten teachers. This combination created an entirely new and distinctive type of educational institution. Froebel's instructions for using his gifts are well known. Back then, his concept of kindergarten gained worldwide popularity, though not every institution adopted Froebel's specific approach. To provide theoretical support for these ideas in newly established kindergartens in other countries, Froebel's successors produced numerous didactic writings. German and international literature contain many instructions on how to use the gifts and activity materials (e.g. Goldammer, 1869; Kraus-Boelté & Kraus, 1877; Marenholtz-Bülow, 1886). Today, practitioners should use these guidelines when working with Froebel materials in everyday kindergarten life. However, it is important to avoid the misstep of Froebel's successors in teaching children to utilise these gifts in a preschool context. This would be an erroneous conclusion. Heiland employs the term "cultural-historical and technical reinterpretation" (Heiland, 2017a, p. 139, transl. NAR) to describe the process by which the original "sphere-philosophically based play materials" (Heiland, 2017a, p. 139, transl. NAR) were transformed. He observes that "the play materials ... are no longer experienced by the individual child through play, but are presented to a group of children in a frontal teaching manner and replicated by them" (Heiland, 2017a, p. 139, transl. NAR). As Heiland accurately observes, this approach contravenes the fundamental principle of play cultivation. The primary challenge confronting practitioners in nursery schools is to acquire a comprehensive understanding of the gifts, thereby enabling them to interact effectively with the children. This involves recognising the potential for insights within the Froebel gift system. Such insights can only be fully realised when the materials provided in the kindergarten are systematically compatible with one another, as they are all derived from the same fundamental measurement. From this point of view, there is a necessity for action-oriented fundamental mathematical instruction that facilitates the identification of connections within the curriculum. Nevertheless, there is a shortage of suitable practical material available for this type of engagement with the gifts. The creation of such material and its subsequent incorporation into the training of nursery school teachers has been shown to enhance the quality of education and to establish the fundamental principles of mathematics and technology (Rathert, 2022).

2 The Nexus as the transition with links to past – The authentic Froebel material

> "What does 'authentic' mean?" "... once we start asking this question, we find ourselves caught up in a whirlwind of problems, but we also quickly find ourselves at the centre of research, in this case Froebel research, with all its difficulties, missteps, controversies, but also advances" (Heiland, 2004, p. 9, transl. NAR).

It is undeniable that any research into Froebel's educational theory must begin with a thorough examination of existing sources. In this regard, Heiland's path should be followed with unwavering dedication. To ensure a comprehensive approach, we should also consider one additional point: the goal is to build upon Heiland's foundational work by expanding the focus to include non-written materials, particularly the gift system. This system demonstrates how Froebel's gifts act as a link connecting the past, present, and future.

Although Heiland is only referring to written sources, Froebel's pedagogy also includes the materials he created. In his 2004 essay, Heiland shows that the question of authenticity leads directly to the core of any research on Froebel. The concept of authenticity is central to understanding Friedrich Froebel's contributions to education, particularly to his original writings and the innovative pedagogical materials he developed for the kindergarten movement. Echoing the ancient Greek term "αὐθεντικός" (authentikos), meaning "genuine" or "authoritative" (Digitales Wörterbuch der deutschen Sprache 2026, transl. NAR), Froebel's ideas emphasise the necessity of engaging with primary sources to grasp the full depth and implications of his educational philosophy. Froebel's original writings form the bedrock of his educational principles, providing invaluable insights into his thoughts on play, learning, and the importance of nurturing children's interests and creativity. His seminal work, *The Education of Man* (Fröbel, 1826), articulates a vision of education that honours children's innate abilities and the significance of their learning environments. Engaging directly with Froebel's texts enables educators and scholars to appreciate the historical context in which he developed his theories, which are rooted in a holistic understanding of child development. In his 2004 essay, Heiland also emphasises the importance of situating the 'authentic' Froebel within the scholarly discourse, urging the Froebelian academic community to address the neglected issues and challenges associated with this topic. This approach is also considered helpful and groundbreaking by the international community of Froebel researchers. Kiuchi expressed this view at the end of his 2009 essay: *"I would also like to take this opportunity to express my support, as an educational scientist, for rigorous academic research on Froebel in the spirit of Professor Helmut Heiland. Froebel research must be continued according to his example"* (Kiuchi, 2009, p. 208). In addition to Heiland, other authors have recently examined the theme of the authentic Froebel and have advocated for preserving the core concepts of

his educational philosophy in their original form (e.g., Wasmuth, 2020; Wasmuth et al., 2023; Bruce et al., 2023).
These materials – comprised of blocks, balls, and various manipulative objects – are intentionally designed to promote exploration, creativity, and learning through hands-on experiences and to gain an initial understanding of the "sphere". Each gift serves a specific educational purpose, facilitating imaginative play while supporting the development of children's cognitive and social skills. By integrating these original materials into the kindergarten framework, educators can maintain the integrity of Froebel's vision, ensuring that their teaching methods remain aligned with his foundational principles (Fröbel & Jarvis, 1895). The authenticity of these gifts lies not only in their design but also in their methodological application. Froebel's approach was grounded in the belief that learning should emerge from children's natural interactions with their environment – "philosophically grounded in the sphere" (Heiland, 2017a, p. 139). By employing his original teaching aids, educators create an environment where children can express themselves and construct knowledge in a meaningful way. Interacting with authentic pedagogical materials allows children to experience the principles Froebel espoused, bridging the gap between theory and practice.
In modern education, it is essential for educators to engage with Froebel's original writings and pedagogical materials to create a learning environment that is both authentic and transformative. This exploration empowers teachers to establish a classroom culture that values creativity, critical thinking, and social responsibility-principles that are central to Froebel's philosophy. By honouring the authenticity of his sources and the integrity of his inventions, educators can provide a transformative and enriching educational experience, inspiring the next generation of learners to embrace the joy of discovery. His approach—centred on creativity, critical thinking, and social responsibility—empowers children to discover and create through hands-on, social experiences. By using his authentic sources, educators ensure fidelity to his philosophy, fostering environments that inspire intrinsic motivation and holistic development. Froebel's ideas remain foundational for innovative, child-centred education. In recent years, people have introduced new components to the "gift system," and Rathert (2022, p. 42ff.) provides an overview of these additions, but there is a lack of new or newly compiled instructions or patterns for replication.

2.1 The system of play gifts

The so-called 'system of play gifts' has been described in sufficient detail (e.g. Hebenstreit, 2003; Heimlich, 2015), although controversy surrounds the term 'system'. The diagram drawn by Froebel himself (Fröbel, n.d.) and transcribed by Erika Knechtel (Knechtel, 1978) has often served as the basis for more recent overviews of the system. Rathert and Schmidt published a new version of the system (Rathert & Schmid, 2022).



Fig. 2: Overview of Froebel's system of play gifts (Rathert & Schmid, 2022, transl. NAR)

2.2 Bridging tradition and innovation: The enduring relevance of Froebel's materials in modern early education

The question of the connection between the past and the future of Froebel pedagogy can also be posed differently in our present day: Why should we use Froebel materials today? On the one hand, there is a 19th-century pedagogical-philosophical concept whose material, tangible legacy includes the gifts. These were previously used and have influenced the daycare facilities operating today. This phenomenon is evident when observing the interiors and exteriors of these facilities: many kindergartens have a stock of materials that almost always includes building blocks. Although there are as yet no empirically verified figures on the use of wooden building blocks in nurseries, it is generally assumed that in many cultural contexts where nurseries form part of early childhood education and care, wooden building blocks are available for creative play. However, this would need to be verified through a scientific study. While there are currently no empirically verified statistics on the prevalence of wooden building blocks in nurseries, it is widely believed that these blocks are readily accessible for creative play across various cultural contexts where nurseries play a role in early childhood education and care. However, this assumption requires validation through scientific research. Wooden building blocks are a primary material that children in kindergartens around the world play with and use to construct buildings.



Fig. 3: The construction of a tower by children is facilitated by the use of cubes from the third gift (own illustration)

Contemporary Froebel pedagogy must prioritize the effective support of early childhood development and learning. It is imperative that authentic Froebel materials, along with any supplementary or extended resources, adhere to the original system's specifications regarding dimensions and material composition. This adherence should persist in both the present context and future applications, ensuring the integrity and efficacy of the pedagogical approach. Children can achieve learning outcomes and gain mathematical insights simply by playing with these materials (Rathert, 2022).

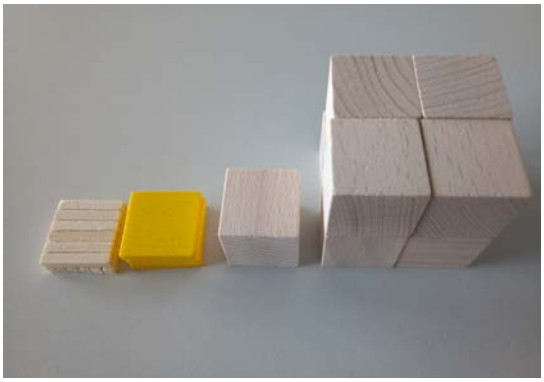


Fig. 4: The Illustration depicts the components of the gift system (own illustration)

The illustration shows possible connections between individual elements of the gift system. Begin with the lines (laying sticks, far left), which group together into square laying tiles (second from left). These tiles can then stack to form a cube (the third from the left). Ultimately, children can combine eight individual cubes to form a larger, cohesive cube. The question of the point ("Where is the point?", as Jane Whinett asked at the 11th Biennial Conference 2025 in Erfurt) at which the system correctly starts and which would have to exist before the lines, i.e., the laying sticks according to the system overview above, is justified but not productive: The laying sticks have dimensions of 25 mm by 4.16 mm by 4.16 mm. To convert a point into a stick, it must measure 4.16 mm on all sides, resulting in a cube. Although creating this out of wood is challenging, the system remains open to this possibility. The same applies to any further miniaturisation. In the absence of even smaller miniature gifts that someone has yet to create, the example in the picture clearly illustrates the mathematical content of the gifts available so far. It highlights the usefulness of sticking to a basic size.

Unfortunately, kindergartens often have random wooden blocks that prevent children from engaging with mathematical concepts beyond simple counting or sorting. This approach may be considered a disservice to children. The materials offered to children in educational institutions should be interoperable, enabling insights that random materials do not allow. We reiterate the call to use the original Froebel materials and to observe the authentic basic form of 25 mm when expanding the system! Therefore, in a kindergarten where Froebel materials are used, e.g., Kapla blocks should not be used. Instead, Kapla-like blocks should be used with dimensions that are compatible with the basic dimensions of the Froebel gift system, e.g., 10 cm in length, 2.5 cm in width, and 0.416 cm in height.

3 The future – What is next?

We are at a pivotal moment to bridge the past and the future in education. Traditionally, early childhood education has focused on concrete, tangible materials; however, as we shift toward a more virtual realm, the way we utilise Froebel gifts can also evolve. Ideally, this transition should be approached carefully, especially for kindergarten children who have already gained some experience and can explore their understanding of themselves and the world through all their senses and hands.



Fig. 5: AI-generated picture of a kindergarten in the future (AI: DALL-E3)

What might a kindergarten look like in the future? The environment could change significantly. An app designed to generate construction templates for Froebel gifts could open up numerous possibilities in everyday kindergarten life:

1. **Customisation**: The app could allow teachers to tailor templates based on the individual needs and skill levels of the children. Variations in complexity, size, and shape could provide personalised learning experiences.
2. **Interactive Learning**: By incorporating digital tools, the app could create an engaging platform for children to interact with the templates. They could visualise completed projects or participate in gamified learning sessions to enhance their motivation and understanding.
3. **Resource Management**: Teachers could efficiently manage resources through the app by accessing a library of templates, selecting materials, and planning projects. This would streamline preparation time and ensure that all necessary materials are readily available.
4. **Collaboration**: The app could facilitate collaborative projects by allowing multiple users to work on a single template simultaneously. This would encourage children to share ideas and create together, thereby fostering teamwork and communication skills.

5. **Progress Tracking**: An integrated tracking system could monitor children's progress as they complete various projects. Teachers and parents could receive updates to help them assess developmental milestones and plan future learning objectives.
6. **Integration of Learning Objectives**: The app could align projects with educational goals, incorporating elements of art, science, and mathematics. This would enhance the curriculum by connecting hands-on activities with theoretical concepts, thereby providing a more comprehensive learning experience.
7. **Parental Involvement**: The app could include features that engage parents, such as templates for working on projects with their children at home. This would strengthen community ties and reinforce learning outside the classroom.
8. **Sustainability Focus**: The app could promote eco-friendly practices by suggesting materials that are recycled or easily sourced, raising awareness about sustainability, and encouraging responsible crafting habits.

We can imagine a kindergarten routine that integrates both the analogue and digital worlds. There is currently no app specifically designed for Froebel materials. Such an app should cover various aspects of Froebel pedagogy, particularly those related to the building gifts. For instance, if children wish to work with the third gift, they can use the app to create a structure using the eight cubes associated with that gift with just the touch of a button. The app would then provide an image or animated instructions for the child to follow while constructing the structure. Furthermore, children could verify their creations by taking photographs, allowing the app to confirm whether they built it correctly. Using an app alone will not provide a deeper understanding of Froebel's educational philosophy. It is essential to teach the principles of this philosophy both during initial training and in ongoing professional development. Additionally, enabling individuals to experience these principles in person is crucial.

This integration of technology and traditional learning represents a progressive approach, as ongoing digitalisation can serve as a valuable resource for both children and educators in kindergarten. Currently, no such application has been developed. This presents an opportunity to adapt aspects of Froebel's educational philosophy to the digital age, creating a connection between the past, present, and future.

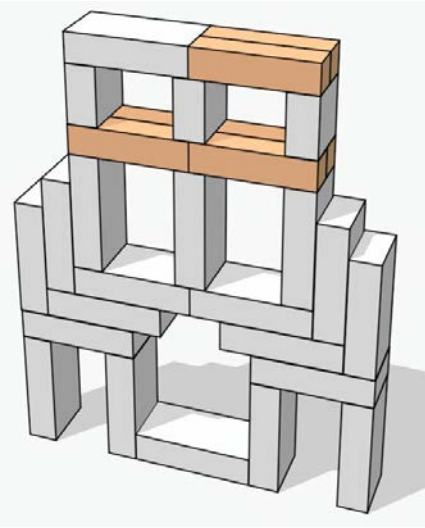


Fig. 6: Illustrated instructions for the sixth gift (own illustration)

Bibliography

Digitales Wörterbuch der deutschen Sprache (DWDS). (2026). Authentisch. https://www.dwds.de/wb/authentisch

Boldt, R., Knechtel, E., & König, H. (1982). 'Kommt, lasst uns unseren Kindern leben!' Aus dem pädagogischen Werk eines Menschenerziehers (2nd ed., Vol. 1). Volk und Wissen.

Bruce, T., Nishida, Y., Powell, S., Wasmuth, H., & Whinnett, J. (2023). The Bloomsbury Handbook to Friedrich Froebel. Bloomsbury Publishing.

Fröbel, F. (n.d.). Allgemeine Übersicht der bis jetzt zum größten Teile ausgearbeiteten Spiel- und Beschäftigungskästen und Mittel von Friedrich Fröbel (BN 57, Blatt 4). Bibliothek für Bildungsgeschichtliche Forschung Berlin.

Fröbel, F. (1826). Die Menschenerziehung, die Erziehungs-, Unterrichts- und Lehrkunst, angestrebt in der allgemeinen deutschen Erziehungsanstalt zu Keilhau; dargestellt von dem Stifter, Begründer und Vorsteher derselben, Friedrich Wilhelm August Fröbel. Keilhau.

Fröbel, F., & Jarvis, J. (1895). Friedrich Froebel's pedagogics of the kindergarten. D. Appleton & Company. https://www.loc.gov/item/03002628/

Goldammer, H. (1869). Fr. Fröbels Spielgaben für das vorschulpflichtige Alter. C. Habel.

Hebenstreit, S. (2003). Friedrich Fröbel: Menschenbild, Kindergartenpädagogik, Spielförderung. Garamond.

Heiland, H. (1982). Friedrich Fröbel in Selbstzeugnissen und Bilddokumenten (3rd ed.). Rowohlt.

Heiland, H. (1999). Die aktuelle Bedeutung der Spielmaterialien Friedrich Fröbels. In Thüringer Landesmuseum Heidecksburg (Ed.), Anfänge des Kindergartens (Vol. 1, pp. 53–69). Thüringer Landesmuseum Heidecksburg in Rudolstadt.

Heiland, H. (2004). Der „authentische" Fröbel. In Thüringer Landesmuseum Heidecksburg (Ed.), Der authentische Fröbel (pp. 7–43). Thüringer Landesmuseum Heidecksburg in Rudolstadt.

Heiland, H. (2017a). Der Kindergarten – Die Erfolgsgeschichte der Spielpädagogik Friedrich Fröbels. In H. Heiland (Ed.), Neue Beiträge zur Fröbelforschung (pp. 129–150). Königshausen & Neumann.
Heiland, H. (Ed.). (2017b). Neue Beiträge zur Fröbelforschung. Königshausen & Neumann.
Heimlich, U. (2015). Einführung in die Spielpädagogik (3rd ed.). Klinkhardt.
Kiuchi, Y. (2009). Die Bedeutung des Friedrich-Fröbel-Museums Bad Blankenburg und seiner Archivalien für die japanische Fröbelforschung. In Thüringer Landesmuseum Heidecksburg (Ed.), Fröbels Erbe (Vol. 6, pp. 198–209). Thüringer Landesmuseum Heidecksburg in Rudolstadt.
Knechtel, E. (1978). Theorie und Praxis des Spiels bei F.W.A. Fröbel [Doctoral dissertation]. Akademie der Pädagogischen Wissenschaften.
Kraus-Boelté, M., & Kraus, J. (1877). The Kindergarten Guide. An illustrated Hand-Book, designed for the Self-Instruction of Kindergartners, Mothers, and Nurses (Vol. 1). E. Steiger.
Kuntze, M.-A. (1952). Friedrich Fröbel. Sein Weg und sein Werk (2nd ed.). Quelle & Meyer.
Lee, S. (1998). Froebelian developments in the Republic of Korea. Early Child Development and Care, 146(1), 87–104. https://doi.org/10.1080/0300443981460108
Marenholtz-Bülow, B. von (1886). Theoretisches und praktisches Handbuch der Fröbelschen Erziehungslehre. G. H. Wigand.
Rathert, N. A. (2022). Friedrich Fröbels dritte Gabe als Fördermaterial zur Verbesserung des räumlich-visuellen Vorstellungsvermögens. Eine empirische Studie im Rahmen des Förderunterrichts Mathematik im Übergangssystem an der beruflichen Förderschule [Doctoral dissertation, Carl-von-Ossietzky-Universität]. http://oops.uni-oldenburg.de/5479/
Rathert, N. A., & Schmid, A. C. (2022). Friedrich Fröbel – Vom ersten Menschenerzieher. Zeitschrift für Heilpädagogik, 73(6), 284–295.
Rockstein, M. (2013). Kindergarten (2nd ed.). In Thüringer Landesmuseum Heidecksburg (Ed.), Kindergarten (Vol. 1). Thüringer Landesmuseum Heidecksburg in Rudolstadt.
Sakai, R. (2009). Fröbel-Tradition im Kindergarten des heutigen Japan. In Thüringer Landesmuseum Heidecksburg (Ed.), Fröbels Erbe (Vol. 6, pp. 185–197). Thüringer Landesmuseum Heidecksburg in Rudolstadt.
Vroede, M. de (1983). Der Kindergarten in Belgien. Eine liberale Erneuerung. Wissenschaftliche Zeitschrift der Friedrich-Schiller-Universität, 32(4/5), 511–514.
Wasmuth, H. (2020). Wie der Kindergarten in die USA kam – „Ich denke oft, dass sich Fröbels Geist im Himmel über Ihre Arbeit in Amerika freut". In Thüringer Landesmuseum Heidecksburg (Ed.), Beiträge zu 180 Jahre Bildungsort Kindergarten (pp. 43–70). Thüringer Landesmuseum Heidecksburg in Rudolstadt.
Wasmuth, H. (2020). Fröbel's Pedagogy of Kindergarten and Play: Modifications in Germany and the United States. Routledge.
Wasmuth, H., Sauerbrey, U., & Winkler, M. (2023). Finding Froebel: The Man Who Invented Kindergarten. Bloomsbury Academic.

Authors

Schmid, Andrea C., Prof. Dr.
ORCID: 0000-0002-3854-8165
University of Erfurt, Germany
Professor of Inclusive Educational Research with a Focus on Learning Disabilities, Department of Education
Main areas of work and research: inclusive school and teaching development; reform- and Froebel pedagogy in an inclusive setting
andrea.schmid@uni-erfurt.de

Rathert, Nikolas A., Dr.
ORCID: 0000-0001-5270-1392
Ludwig-Maximilians-Universität München, Germany
Research Associate and Seconded Teacher, Faculty of Psychology and Educational Sciences, Department of Educational Sciences and Rehabilitation
Main areas of work and research: Froebel pedagogy, Froebel gifts
n.rathert@lmu.de

Andrea C. Schmid and Nikolas A. Rathert

Thoughts on Froebel pedagogy: Pasts, present, futures

Abstract

This reflection on participants' responses from the 11th Froebel Conference 2025 workshop in Erfurt summarizes key Froebel educational concepts. It highlights three points: 1. Understanding the historical context by identifying themes like theory, life, beauty, knowledge, and teachers, which deepen appreciation for Froebel's pedagogy. 2. Connecting past ideas to current practices, demonstrating their ongoing relevance. 3. Highlighting the importance of qualified early childhood educators, a central Froebel theme. This overview aims to lay a foundation for discussing Froebel pedagogy's history, relevance, and future

Keywords: Froebel conference, historical roots, contemporary relevance, future impact

Zusammenfassung:

Diese Reflexion über die Antworten der Teilnehmer*innen des Workshops auf der 11. Fröbel-Konferenz 2025 in Erfurt fasst zentrale Konzepte der Fröbel-Pädagogik zusammen. Sie hebt drei Punkte hervor: 1. Das Verständnis des historischen Kontexts durch die Identifikation von Themen wie Theorie, Leben, Schönheit, Wissen und Lehrpersonen, was die Wertschätzung für Fröbels Pädagogik vertieft. 2. Die Verbindung vergangener Ideen mit aktuellen Praktiken, um ihre anhaltende Relevanz zu demonstrieren. 3. Die Bedeutung qualifizierter frühpädagogischer Fachkräfte, ein zentrales Thema Fröbels. Dieser Überblick soll eine Grundlage für die Diskussion über die Geschichte, Relevanz und Zukunft der Fröbel-Pädagogik schaffen.

Schlüsselwörter: Fröbel-Konferenz, historische Wurzeln, zeitgenössische Relevanz, zukünftige Auswirkungen



Fig. 1: At the 11th Biennial Froebel Conference 2026 in Erfurt (own illustration)

1 Question – historical Froebel pedagogy

At the beginning of the workshop titled "The Authentic Froebel Gifts as a Link Between Yesterday and Today," held during the 11th Biennial Froebel Conference 2025 in Erfurt, participants were invited to share their thoughts on the past, present, and future role of Froebel pedagogy. This informal survey yielded a variety of responses, which are represented as word clouds. The larger and bolder the words, the more frequently they were mentioned. Let us first explore the first question: What comes to mind when thinking about historical Froebel pedagogy?



Fig. 2: What comes to mind when you think of historical Froebel pedagogy? Answers of participants in Erfurt 2025 (own illustration)

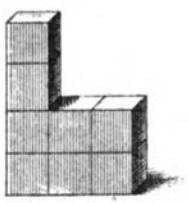
From the participants' responses in Erfurt 2025, three prominent concepts associated with historical Froebel pedagogy can be highlighted. The most common associations include forms of life, knowledge, and beauty, with additional mentions of female teachers and theoretical foundations. These concepts highlight central elements of Froebel's pedagogical approach, including a holistic perspective, the idea of independence, the role of play as a foundation for learning, community engagement, individuality, bonding with parents, and the importance of nature and craftsmanship. Let us delve deeper into the three key associations of historical Froebel pedagogy that participants found especially significant.

1.1 Theory

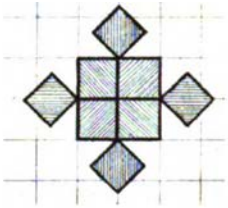
Unlike other contemporary or later educational methods for early childhood and school-aged students, Froebel's educational philosophy is grounded in the sphere philosophy of the law of the sphere. This philosophy was developed in Göttingen/Germany, during July and September of 1811 and subsequently adapted and refined in the following years (Wasmuth et al., 2024). This development culminated in his primary work, *The Education of Man*, published in 1826. It emphasises his pedagogical concepts, focusing on early childhood education for children up to six years old, as reflected in Keilhau's curriculum and educational practices (Heiland, 2004). Workshop participants identified this theoretical foundation as one of the most notable aspects of Froebel's pedagogical legacy, which distinguishes his approach from others.

1.2 Forms of life, beauty, and knowledge

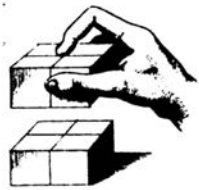
The concepts of forms of life, beauty, and knowledge lie at the heart of Froebel's pedagogy. Participants rightly recognised these elements as among Froebel's most significant contributions to educational philosophy. These concepts have often been described in the literature (Goldammer, 1869; Marenholtz-Bülow, 1886; Winter, 2011; Rathert, 2022), and it is doubtful that they are widely used as foundational materials in today's nurseries. Winter (2011) describes three equal levels of classification of products related to mathematics, such as a building or laying process using building blocks or tiles:



(Marenholtz-Bülow, 1887, Tafel VI)



(Marenholtz-Bülow, 1887, Tafel VII)



(Marenholtz-Bülow, 1887, Tafel V)

Fig. 3: I. Forms of life – from naive perception to insight
II. Forms of beauty – from sensual encounter to creative design
III. Forms of knowledge – from intuition to justifiable insights

Froebel's legacy includes the play and activity materials essential to the development of forms of life, beauty, and knowledge. While Froebel believed in individuals' ability for self-development and linked educational capacity with the need for education, he recognised the necessity of adult support and stimulation in children's learning processes (Fröbel, 1826). This insight contributed to the establishment of one of the first professions predominantly populated by women, although it was initially intended for men (Fröbel, 1826).

1.3 Occupation: kindergarten teacher

The third aspect frequently mentioned by participants is the figure of the kindergarten teacher (traditionally female). Froebel incorporated adult training into his pedagogy (Fröbel, 1840), initially designating these individuals as play leaders (*Spielführer*), who eventually became known as kindergarten teachers. He originally envisioned that three roles would work together in a kindergarten (Fröbel, 1840):

Leading (*leitend*)	Leader of the kindergarten (*Vorsteher, Vorsteherin, Führer, Führerin*)
Helping (*helfend*)	Assistant to the leader of the kindergarten (*Gehilfe, Gehilfin*)
Serving (*dienend*)	Nurserymaid (*Kindermädchen*)

He later refined these roles to include 'nurses' and 'kindergarten teachers' (Lehnemann, 2004) and spoke out against the role of the nanny. At that time, Froebel could not have foreseen that he was laying the groundwork for a profession that remains largely female-dominated today. His insights into early childhood education were logical: effective education can occur only if educators are compe-

tent. Froebel aimed to empower educators to fulfil this role, which he supported through initiatives such as the founding of the Marienthal institution in 1849.

2 Question – contemporary Froebel pedagogy

The second question explored the thoughts and associations related to contemporary Froebel pedagogy: What comes to mind when you think of it?



Fig 4: What comes to mind when you think of contemporary Froebel pedagogy? Answers of participants in Erfurt 2025 (own illustration)

The evaluation of the second question reveals that the ideas surrounding contemporary Froebel pedagogy are pretty diverse. Several aspects stand out, foremost among them new approaches and innovative practices in Froebel pedagogy. The terms depicted in the image reflect the core principles and innovative practices of this pedagogy, highlighting what the audience considers particularly important.

2.1 Engagement with nature

A central aspect of Froebel's pedagogy is the importance of engaging with nature. Children should learn in and through nature, gaining real-life experiences that benefit them. Activities such as gardening and observing natural phenomena are essential to this approach. These experiences not only foster an understanding of ecological relationships but also help children develop a deep connection with nature.

2.2 Community and social interaction

Another significant element of Froebel's philosophy is the emphasis on community and social interaction. Children should learn in a supportive environment surrounded by like-minded individuals. This fosters social skills and promotes a sense of belonging and cohesion within the community.

2.3 Free play and creative learning

Free play and creativity are also fundamental to Froebel's educational approach. Children should have the freedom to play and explore, which nurtures their creativity and imagination. Learning through play is a key principle of this philosophy and can be implemented through both guided play and child-led activities. This allows children to pursue their interests while simultaneously acquiring important knowledge and skills.

2.4 Principled pedagogy

Froebel's pedagogical approach is based on core principles that emphasise unity and connection within the community. Key principles, such as togetherness and interconnectedness, play a vital role in his educational philosophy. This approach includes hands-on learning through engaging with "gifts," which are materials that allow children to build, construct, and work with clay and other creative resources that enhance their imaginative abilities.

2.5 Cultural and family integration

The incorporation of family songs and traditions is another essential aspect of this pedagogy. These elements help children foster a sense of belonging and connectedness. Additionally, the pedagogical framework encourages critical thinking and supports children's individual development.

The current implementation of Froebel's educational approach varies widely among different institutions. As this is a philosophy-driven method, each institution is encouraged to discuss and adapt its principles to contemporary contexts. To achieve this, it is crucial to delve into the authentic teachings of Froebel through his original writings. For instance, Froebel asserts: "Therefore, education, teaching, and instruction should be original and, in their initial stages, necessarily patient, responsive (only protective, sheltering), not prescriptive, determinative, or interventionist" (Froebel, 1826, p. 9). This statement reflects Froebel's view of humanity and can be adapted to modern-day educational practices.

3 Question – future Froebel pedagogy

The intriguing third question is how Froebel's educational philosophy and its implementation can evolve in the future. Considering the current state of the world, with an overwhelming amount of information and various challenges (e.g., war in Europe, climate change, rise of the far right) that society and individuals are facing, we must ask: What do you envision for the future of Froebel's educational philosophy? What thoughts come to mind regarding the future of Froebel pedagogy?



Fig. 5: What comes to mind when you think of the future of Froebel pedagogy? Answers of participants in Erfurt 2025 (own illustration)

The responses from the workshop participants offer a rich, diverse perspective on the future development of Froebel Pedagogy. They indicate that this pedagogy will continue to build on its traditional principles while also incorporating new approaches and methods to meet the evolving needs and challenges. These responses can be categorised into several key areas that reflect both traditional Froebel principles and contemporary pedagogical approaches:

3.1 Play and action

Emphasising play and action is a central element of Froebel's educational philosophy. Play is seen as fundamental to child development because it fosters creativity, problem-solving skills, and social interaction. In future developments, this may mean that play becomes even more central to educational practices, potentially incorporating new forms of play and materials tailored to children's changing needs and interests.

3.2 Holistic education

Educating the whole child is another core aspect of Froebel's philosophy. This includes nurturing the child's cognitive, emotional, social, and physical development. Future developments may lead pedagogy to respond more strongly to each child's individual needs and abilities, possibly through differentiated and personalised learning approaches.

3.3 Children's control of the curriculum

The emphasis on allowing children to have control over their curriculum reflects a modern approach that promotes autonomy and participation in the learning

process. In future developments, this could result in children being even more involved in shaping their learning environment and content, potentially through participatory and democratic methods.

3.4 Connection and understanding

The focus on connection and understanding highlights the importance of relationships and social interaction in Froebel pedagogy. In future developments, this may lead to a stronger emphasis on promoting relationships and communities, possibly utilising cooperative and collaborative learning methods.

3.5 Resistance and new layers of interpretation

The mention of resistance and new layers of interpretation suggests that Froebel's pedagogy is facing challenges and undergoing change (e.g., regarding the influence of digital media in early childhood education). This suggests that in the future, Froebel pedagogy may need to focus even more on reflecting upon and adapting its principles and methods to respond to evolving social and cultural conditions.

3.6 Liberal practice and relational approaches

The emphasis on liberal practice and relational approaches highlights the significance of freedom, autonomy, and relationships in Froebel pedagogy. As it develops, this could lead to a stronger focus on promoting freedom and self-determination, possibly through the creation of open, flexible learning environments.

3.7 Shared vision and embedded Froebelian principles

The focus on a shared vision and the integration of Froebelian principles suggests that Froebel pedagogy will continue to build on its fundamental tenets. This implies that the pedagogy may increasingly aim to develop and adapt its principles to meet changing needs and challenges.

While no one can predict the future with certainty, Froebel's educational philosophy – with its philosophical foundation and perspective on humanity – will continue to play a significant role in both academic discourse and practical application. Froebel's pedagogy remains relevant due to its scientific backing, adaptability, practical applications, and timeless philosophical values. Research confirms the benefits of play-based learning, nature connection, and creativity in child development. The approach flexibly integrates modern technologies while addressing societal challenges like climate change and social inequality. It is successfully implemented in various educational settings, from kindergartens to universities, and enjoys support from parents, policymakers, and businesses. Froebel's emphasis on humanity, community, and holistic development ensures its enduring relevance in shaping sustainable and just education systems.

Bibliography

Fröbel, F. (1826). Die Menschenerziehung, die Erziehungs-, Unterrichts- und Lehrkunst, angestrebt in der allgemeinen deutschen Erziehungsanstalt zu Keilhau; dargestellt von dem Stifter, Begründer und Vorsteher derselben, Friedrich Wilhelm August Fröbel. Verlag A. Wienbrack.

Fröbel, F. (1840, January 20). [Letter to Nanette Pivany in Kun St. Marton]. Blankenburg.

Goldammer, H. (1869). Der Kindergarten: Handbuch der Fröbel'schen Erziehungsmethode, Spielgaben und Beschäftigungen. Habel.

Heiland, H. (1982). Friedrich Fröbel in Selbstzeugnissen und Bilddokumenten. Rowohlt.

Heiland, H. (2004). Der „authentische" Fröbel. In Thüringer Landesmuseum Heidecksburg (Ed.), Der authentische Fröbel (pp. 7–43). Bad Blankenburg.

Lehnemann, W. (2004). Kinderbeaufsichtigung im späten 18. und frühen 19. Jahrhundert. In Thüringer Landesmuseum Heidecksburg (Ed.), Der authentische Fröbel (Vol. 5, p. 152). Bad Blankenburg.

Marenholtz-Bülow, B. von (1886). Theoretisches und praktisches Handbuch der Fröbelschen Erziehungslehre. G. H. Wigand.

Marenholtz-Bülow, B. von (1887). 115 Tafeln zum zweiten, praktischen Teil des Handbuchs der Fröbelschen Erziehungslehre. Kassel.

Rathert, N. A. (2022). Friedrich Fröbels dritte Gabe als Fördermaterial zur Verbesserung des räumlich-visuellen Vorstellungsvermögens. Eine empirische Studie im Rahmen des Förderunterrichts Mathematik im Übergangssystem an der beruflichen Förderschule [Doctoral dissertation, Carl-von-Ossietzky-Universität Oldenburg]. http://oops.uni-oldenburg.de/5479/

Wasmuth, H., Sauerbrey, U., & Winkler, M. (2024). Finding Froebel: The man who invented Kindergarten. Bloomsbury Academic. https://doi.org/10.5040/9781350269279

Winter, H. W. (2011). Mathematikunterricht in der Grundschule im Geiste Fröbels. IPN – Leibniz-Institut für die Pädagogik der Naturwissenschaften und Mathematik.

Authors

Schmid, Andrea C., Prof. Dr.
ORCID: 0000-0002-3854-8165
University of Erfurt, Germany
Professor of Inclusive Educational Research with a Focus on Learning Disabilities, Department of Education
Main areas of work and research: inclusive school and teaching development; reform- and Froebel pedagogy in an inclusive setting
andrea.schmid@uni-erfurt.de

Rathert, Nikolas A., Dr.
ORCID: 0000-0001-5270-1392
Ludwig-Maximilians-Universität München, Germany
Research Associate and Seconded Teacher, Faculty of Psychology and Educational Sciences, Department of Educational Sciences and Rehabilitation
Main areas of work and research: Froebel pedagogy, Froebel gifts
n.rathert@lmu.de

Helge Wasmuth

Friedrich Fröbel: The past, the present, and the future

Abstract

This article takes the conference theme "Froebelian Pasts, Present & Futures" as its point of departure and considers how Fröbel's educational ideas can be approached not merely as a historical legacy, but as a continuing resource for contemporary and future-oriented pedagogical thought. The article first addresses the challenges of the past, such as accessing, interpreting, and translating primary sources. Then it explores the continued relevance of Froebelian pedagogy in present-day educational contexts, and why Fröbel is so meaningful for many practitioners today. Finally, the article asks how thinking with Fröbel may help educators and scholars respond to pressing (educational) questions of the present and future.

Keywords: "Authentic Fröbel", identity & belonging, early childhood education and care, democracy

Zusammenfassung

Vom Konferenzthema „Fröbel'sche Vergangenheit, Gegenwart und Zukunft" ausgehend, betrachtet dieser Artikel, wie Fröbels pädagogische Ideen nicht nur als historisches Erbe, sondern als fortdauernde Quelle für zeitgenössisches und zukunftsorientiertes pädagogisches Denken benutzt werden können. Der Artikel befasst sich zunächst mit den Herausforderungen der Vergangenheit, wie dem Zugang, der Interpretation und der Übersetzung von Primärquellen. Anschließend untersucht er die anhaltende Relevanz der Fröbel'schen Pädagogik im heutigen Bildungskontext und warum Fröbel für viele Praktiker heute so bedeutsam ist. Abschließend geht der Artikel der Frage nach, wie das Denken mit Fröbel Pädagogen und Wissenschaftlern helfen kann, auf drängende (Erziehungs-)fragen der Gegenwart und Zukunft zu reagieren.

Schlüsselwörter: "authentische Fröbel", Identität & Zugehörigkeit, Frühkindliche Betreuung, Bildung und Erziehung, Demokratie

Introduction

"Froebelian Pasts, Present & Futures" – the theme of the International Froebel Society's (IFS) 11th Biennial Conference offers a vast landscape of possible topics. The theme excited me, not only because the past and the present have been the focus of my previous scholarly work, but because it included the future. Instead of focusing solely on Fröbel's historical legacy, the conference's theme encouraged me to ask slightly different questions: Why is there such interest in Fröbel today, and how can his pedagogy and the insights we gain from reading Fröbel remain relevant in and for the future?

In the following, I will discuss all three: the past, the present, and the future. Regarding the past, I address the challenge of accessing and translating primary sources. Reflecting on the present, I discuss why and how Froebelian pedagogy remains relevant today. And finally, how can we think "with Fröbel" about the pressing issues of today and the future? While many of the following thoughts are only preliminary, and I often won't be able to answer the questions I will ask, that is precisely why Fröbel is still relevant: not by telling us what to do, but by challenging us to think differently and ask new questions.

1 The past

Let's start with the past. Why should we still read Fröbel? Which texts are essential? And when one can't read Fröbel in German, which translations are accurate and good?

Reading Fröbel isn't a pleasure. He is a difficult-to-understand, ambiguous thinker. His incomprehensible writing style, the non-systematic nature of his writing, the fragmentary character, and the foreign terminology make him difficult to access. This is especially true regarding his kindergarten pedagogy, as he never created a coherent concept of kindergarten and play. Instead, he preferred essays and letters, slightly altering his ideas depending on with whom he was corresponding. Thus, one can find and, at least to a certain degree, pick what one prefers. That can result in one-sided interpretations, as in the view of Fröbel as the "blossom of the Romantic pedagogy" (Bollnow, 1977). And lastly, Fröbel's thinking, especially his episteme, the law of the sphere, is foreign today. One must try to free oneself of familiar figures of thought to abstain from translating Fröbel into modern language. Thus, what is to be done? The goal is to aim for what Helmut Heiland (2010) has coined as the "authentic" Fröbel.

The "Authentic Fröbel"

What does that mean, though? It might be easier to start by saying what it doesn't mean. It doesn't mean that only one 'true' Fröbel, one 'correct' idea of kindergarten pedagogy exists. Instead, it demands that analyses be based on as many of the relevant source-critical primary sources as possible. Otherwise, analyses can be one-sided and lack context and depth. For example, when discussing early child-

hood education and care (ECEC), one should refer to writings from the kindergarten period. Referring to *The Education of Men,* when discussing kindergarten pedagogy, is insufficient. While many core ideas of Fröbel's (educational) thinking remained relatively consistent throughout his life, he adapted them according to new pedagogical interests. While subjective selections are necessary, such choices should be based on a variety of primary sources — the "authentic" Fröbel (Heiland, 2010).
However, access to the "authentic Fröbel" is a challenge for both the German-speaking and, even more so, the non-German-speaking Fröbel community.

The German editions
It's a mess! Until today, no annotated complete edition exists.[1] There is also no agreement on essential texts regarding his kindergarten pedagogy. Among the most important editions are the ones by Wichard Lange (1861-63), Friedrich Seidel (1883), Hermann Pösche (1887), Bruno Gumlich (1935), Erika Hoffmann (1951, 1982-86 with Reinhold Wächter), Rosemarie Boldt/Erika Knechtel/Helmut König (1982, 3 volumes), and various editions by Helmut Heiland (for example, 2002 or 2004 with Michael Gebel) and Ulf Sauerbrey. These editions provide access to a wide range of Fröbel's writings; however, older editions are often problematic because they aren't source-critical. Furthermore, one needs to know which writings are essential, another challenge to every new reader. Still, access to the authentic Fröbel is possible in German, but it is tedious and requires expertise!

The English editions
Which are an absolute mess! Among the most important editions are Josephine Jarvis's *Pedagogics of the Kindergarten* from 1895, *Fröbel's Letters on the Kindergarten* (1891), edited and annotated by Emilie Michaelis and H. Keatley Moore, and Irene M. Lilley's *Friedrich Fröbel. A selection from his writings* (1967). Unfortunately, all editions are problematic. Jarvis's edition is based on Lange's (1861-63) edition, but references, including a text's year of origin, are lacking. *Fröbel's Letters on the Kindergarten* is based on the editions by Lange and Pösche (1887) and includes references. However, Lange and Pösche didn't work source-critically; instead, they modified Fröbel's writings, adapting them orthographically and syntactically to the spirit of the time. Thereby, both altered and simplified Fröbel's thinking without revealing these modifications (Heiland, 2010).
The most troublesome edition, though, is Lilley's. It is based on the editions by Lange, Seidel (1883), Gumlich (1935), and Hoffmann (1951) and includes basic references, even if the texts' years of origin are not provided. However, the writings presented are only Lilley's interpretation. Lilley is open about it in the preface (1967, p. viii):

1 The exemption is the online edition of Fröbel's letters at the Library of Research on Education History (BBF). This excellent resource allows easy and informative access to Fröbel's letters, at least if one can read in German.

> "In making this selection of extracts from Fröbel's writings and presenting an English version the greatest problem has been the form and length of the texts. Their meaning is locked up in a dense and difficult style, which resists translation in the sense of a full rendering of the original. I have therefore compressed statements and eliminated repetitions and digressions in an attempt to establish the main lines of thought and indicate those elements in his work which account for Fröbel's enduring influence."

Thus, the texts in this edition are not translations of Fröbel's original writings. Instead, it is Lilley's interpretation, selections from Fröbel's writings, without explaining any of these modifications.
Why does it matter? I will illustrate with two examples: one regarding Fröbel's pedagogy and one regarding his biography.

A key text of Fröbel's educational thinking at the time of the development of kindergarten is *Darlegung des Planes der Anstalt zur Pflege des schaffenden Tätigkeitstriebes und des Selbsttuns der Kindheit und Jugend durch Ausführung von Spielen, von Selbstbeschäftigungs- und so Selbstbelehrungsmitteln für Familien und Kleinkinderpflegeschulen, für Begründungs- und Volksschulen etc.* (1838). Today, it can be found in Hoffmann (1982). The text, though, was first published by Lange (1861-1874) as *Plan einer Anstalt zur Pflege des schaffenden Thätigkeitstriebes* (*Plan of an institution for the care of the creative drive for activity*).

Lange published the following preface.[2]

> "Whoever wants to act benevolently and fruitfully, benedictive and lasting, developing further towards lasting perfection, must - because of the resting of all life in One Unity and because of the welling up of all appearing life from that - be in exact and intimate united connection with the development of nature and man, with the as of yet achieved stage of the formation of the intellect and the use of reason, thus - as in full harmony with the present stage of development of nature and mankind, i.e. of the whole All, so must they seek to act and live in pure consensus with the inner demands and the stage of development of the individual or the whole" (Lange, 1874, p. 11).

The preface in Lange's edition is identical to that in Hoffmann's source-critical edition (1982). The text is also included in both Jarvis's and Liley's editions. In Jarvis, the text is titled *Plan of an institution for fostering the impulse to creative activity*. Jarvis translated the preface as follows:

> "Because all life rests in one unity, and because all existing life wells forth from this unity, he who will work benevolently and fruitfully, blissfully and constantly, progressively developing to increasing perfection, must try to act and to live in inner united coherence with the development of Nature and man, with the stage of cultivation of the understanding and the use of the reason now attained, thus in full accord with the present stage of development if Nature and humanity (that is, of the whole universe),

2 If not otherwise indicated, all translations are by me.

> as well as in pure harmony with the inner demands and the stage of development of the individual or whole" (Jarvis, 1895, p, 14).

Although she made changes, Jarvis' translation remains close to the primary source.
In Lilley's edition, the text is titled *Plan of an institution which will educate children by fostering their impulse to creative activity*. Her translation of the preface reads as follows:

> "If our venture is to be worthwhile, it must be consistent with the stage of general development now attained and with the level at present reached by human reason. We must connect our endeavour with an all-embracing, fundamental idea. We must perceive the meaning of life and make this our starting point. Here, therefore, it must be our concern to explain the principle which underlies the institution" (Lilley, 1967, p. 160)

Lilley's modifications are extensive and drastic. It is not, I would argue, an original Fröbel text but rather her interpretation. Unfortunately, Lilley leaves the reader unaware of the changes she made and why. Compared to the primary source and even Jarvis, it is almost like reading another text.

Another interesting example is the infamous *Letter to the Women in Keilhau*, written in 1831. Fröbel wrote this letter to all the women in Keilhau to explain and justify his behavior over the past few years, particularly surrounding the marriage of his niece, Emilie, in 1831 (Wasmuth, Sauerbrey, and Winkler, 2023). In Lilley's edition, the 150-page letter is reduced to 4 pages! The letter's context is not explained, and the editorial work and changes are almost impossible to comprehend, even for someone with extensive expertise in Fröbel's work. Furthermore, her 'translation' is more than questionable. It presents a misleading picture of this important autobiographical letter.

And finally: What is missing and why is it important?
Translating Fröbel is a challenge, as it requires translating thinking that downright refuses to be translated. It is a daunting task, which has been discussed elsewhere (Engelmann, 2023; Wasmuth, 2023, 2024). Fröbel invented terms to express his unique thinking, often changing verbs into nouns or using pairs of terms that were in contrast and seemed to express the opposite. In addition, he gave terms meanings that go beyond their original use in German.
However, another issue is problematic: Many essential primary sources have never been translated. That, of course, impacts the understanding of Fröbel's pedagogy drastically. Missing, for example, are the letters to the Duchess Brunzvik and Nanette Pivany (1842), Max Leidesdorf (1846),[3] and Bertha von Mareentholtz-Bülow (1851). These are essential for understanding the development of Fröbel's kinder-

3 Parts of this letter has been translated by me, see Wasmuth, 2024

garten pedagogy and its connection to the law of the sphere (Wasmuth, 2024). Furthermore, crucial texts such as *Die Kindergärten als um- und erfassende Pflege- und Erziehungsanstalten der Kindheit, der Kinder bis zum schulfähigen Alter und der deutsche Kindergarten als eine Musteranstalt dafür insbesondere* (1841) and *Über die Bedeutung und das Wesen des Kindergartens überhaupt und das Wesen und die Bedeutung des deutschen Kindergartens insbesondere* (1842) have, to my knowledge, not been translated. The same is true for essential autobiographical letters, such as the one to the women in Keilhau (1831), the one to the confirmands in Keilhau (1832), various letters to his nieces and the Keilhau community, as well as his diaries.

Hence, one can't help but conclude that access to the authentic Fröbel is impossible for non-German readers. The editorial work in Germany since the 1980s, undoubtedly the most important one, hasn't been adopted. The existing English editions are outdated; it isn't clear whether a text is essential, when it was written, which primary source it is based on, or whether changes have been made and why. The translations are inadequate, and one might even question whether some should be treated as primary sources, especially Lilley.

Thus, a critical analysis of the "authentic" Fröbel remains a challenge for the non-German-speaking community. One might even wonder whether we speak about the same Fröbel. A source-critical and annotated edition is needed. Perhaps not a complete edition, but smaller editions focusing on various aspects, such as the spherical law, kindergarten pedagogy, school pedagogy, or biography. It is a desideratum that waits to be assailed.

2 The present

Secondly, let's think about the present. Without question, the current interest in Fröbel is stunning.[4] What makes Fröbel interesting and still relevant, though? Why should we read and get inspired by Fröbel? What makes his ideas so compelling that some even call themselves Froebelians – "early years teachers/practitioners who adopt Froebelian approaches in their ongoing practice with children" (Aksoy-Kumru, 2023, p. 61)?

Such questions have been discussed recently (Froebel Trust, 2022; Aksoy-Kumru, 2023, 2024; Sakr & Kaur, 2024; Wasmuth, 2022). Thus, the following remarks are only a continuation of these conversations. I am incredibly grateful to Fatma Büşra Aksoy-Kumru, Sacha Powell, and Marcella Towler, who met with me in the summer of 2024 to discuss these questions.

4 For examples, see the articles in *The Bloomsbury Handbook to Friedrich Fröbel*, edited by Bruce et al 2023, or the double issue *Finding Fröbel: National and Cross-National Pedagogical Paths in Froebelian Early Childhood Education* (2022), edited by Teresa Aslanian, Lynn McNair, & Sacha Powell.

Thinking with Fröbel

What can be expected from reading Fröbel? One shouldn't expect practical guidance or easy solutions to today's pressing issues. To that effect, Fröbel is rather useless, or to quote Marcella Towler: "He certainly won't take us the direct route. He takes the scenic route" (2024, personal communication, June 25, 2024). His thinking can't be reduced to a "practical method" (Tesar, 2020). It rather serves as guidance: "The principles and activities developed by Fröbel are not meant to be used as a formula or blueprint for early childhood education. Instead, these principles should be interpreted and incorporated into authentic practices with children" (Aksoy-Kumru, 2023, p. 63).

Thereby, what can we expect? I believe that reading Fröbel supports the development of a certain mindset, an "ethical relationship with a thought" (Tesar, 2020, p. 544). By developing such a relationship, one begins to "think with Fröbel." It means a deep reading and careful thinking about what his ideas offer. What is unique, what does it say about young children's learning and education, and how does it differ from what we take for granted? In the next step, what and how we apply when reflecting on current issues. And how might that help us to think differently, ask new questions, maybe resist the status quo? When one thinks with Fröbel, one establishes an intellectual relationship, drawing on insights from the readings to envision different ways of doing ECEC. As said, it's not about practical guidance. Instead, thinking with Fröbel might prompt one to critically question the status of ECEC and the taken-for-granted assumptions shaped by the current neo-liberal landscape. Thereby, it helps to reimagine alternatives, a real "utopia" (Moss, 2014). Reading and thinking with Fröbel might not provide simple answers. But it encourages asking new and different questions. It "leads us to formulate questions, rather than articulate clear answers to the problems that we study" (Tesar, 2021, p. 545). That is essential. Thinking with Fröbel reveals problems while simultaneously working towards their solution.

A shared vision

Referring to Fröbel furthermore provides a shared vision and framework. ECEC, as a profession and discipline, has never been a stronghold of autonomous philosophical thought, and to this day, ECEC struggles to "think and speak for itself" (Urban, 2018, p. 314). Too often, terms and ways of thinking are borrowed from other fields, especially psychology, psychoanalysis, and neuroscience, as well as from neoliberalism. What is lacking, though, is a language of ECEC, a genuine pedagogical voice that embodies what our field stands for.

And maybe Fröbel can play such a role. "Being Froebelian meant questioning conventional ideas about childhood and early years practice through coming together with like-minded 'Froebelians'" (Aksoy-Kumru, 2023, p. 68). The shared language, which, for example, the Froebelian principles developed by the Froebel Trust offer, allows not only for clearly expressing what ECEC stands for, but also for asking new questions, thinking differently about the purpose of ECEC, and resisting current practices. As Castner argues: "Froebelian ideas provide early

childhood educators with a powerful antidote to many of the most persistent and pressing curriculum problems facing early childhood education" (2023, p. 436). Fröbel provides a shared vision and a shared language that help emphasize what ECEC stands for and what the profession needs to resist.

Creating identity and community

Moreover, the shared vision and language give a sense of solidarity, identity, and belonging. Many practitioners are isolated, a feeling that Marcella Towler describes as follows: "But we're all here in our own little silos of practice, different countries, different cultures, different contexts. As if being in one's own silos" (2024, personal communication, June 25, 2024). What even are ECEC professionals? Preschool teachers, kindergartners, or educators? Or glorified babysitters? In addition, many professionals are forced to implement a form of ECEC they don't believe in, or even find detrimental to children's development.

Thus, referring to Froebelian principles and calling oneself a Froebelian fosters a feeling of identity and belonging, and advocating for a better way of ECEC. It might even give a higher status, so Sacha Powell wonders: "And maybe being able to associate yourself with a pedagogy that has been in history in England seen to be very high-quality pedagogy maybe that helps you to think about your own professional identity in ways that elevates your status" (Powell, personal communication, June 27, 2024). Fröbel, in this sense, brings people together. "The Froebelian identity, then, is not a rigid construct but an evolving process emerging through self-conception that is also reflected in relation to soul-searching in the next section" (Aksoy-Kumru, 2023, p. 65).

The shared vision and language can help to overcome the feeling of isolation. Not only does it inspire, but knowing that others think and feel the same way creates a sense of identity. Lynn McNair describes this feeling of identity and coming together:

> "Importantly, I remained steadfast in my Froebelian principles, slowly building a shared vision for the nursery that transformed it into a place renowned for its Froebelian approach to play. While some staff chose to move on, I took the opportunity to recruit individuals who were open to Froebelian ideas, including one remarkable practitioner, Ms. F (later Mrs. H), a pedagogical genius whose support became invaluable. Together, we created an environment that truly oozed Froebelian play, where children flourished in ways that were both profound and joyful" (McNair, 2025a, p. 25).

Unquestionably, Froebelian thinking remains relevant and important to many today.

3 The future part I: Thinking with Fröbel about democracy

And finally, what role can Fröbel's educational thinking play in helping us grapple with the challenges we face now and in the future, including those that are not educational in nature, such as increasing racism, the climate catastrophe, or the decline of democracy?

Of course, education can't solve any of these problems. However, given the importance and the threat these issues pose to the future, I believe it would also be irresponsible to ignore them. And while I can't provide satisfactory answers, I can offer preliminary thoughts in the hope of stimulating further discussion. Fortunately, as discussed earlier, "thinking with Fröbel" isn't about finding the correct answers but about asking new questions.

The crisis of democracy

Democracy is in crisis (Mouffe, 2013; Rosanvallon, 2017, 2018; Selk, 2023). The long-held assumption that liberalization and democratization will never be reversed because they have a self-reinforcing and self-stabilizing effect seems naïve today. Around the world, democracy—its legitimacy and effectiveness—is viewed with skepticism. 2024 marked the nineteenth consecutive year in which freedom and democracy have declined globally (Freedom House, 2025). Even liberal democracies once considered stable are under threat or already slowly being transformed into autocratic systems (Levitsky & Ziblatt, 2019). Veith Selk calls this decline the "twilight of democracy" (2023). Democracies, though, do not die with a single event and a loud bang; they slowly transform into increasingly autocratic systems. And this process can be resisted, and pedagogy can help strengthen democracy.

Fröbel and the right-wing attacks on democracy

Pedagogical associations, such as the IFS, often see themselves as non-political and thus avoid addressing such questions. In the world we live in today, this is, so I believe, no longer acceptable. One just needs to look at Thuringia, Fröbel's homeland, which he cherished so much and spent so many years of his life in, and where the 11th IFS Biennial Conference took place. In Thuringia, a party classified as right-wing extremist, not to say fascist, received 38.6% of the vote in the last federal election. And following the state elections in September 2026 in Saxony-Anhalt and Mecklenburg-Western Pomerania, this very party may come to power. What might this mean for Fröbel's legacy? What role can—indeed, must—ECEC in Fröbel's name play to strengthen democratic values and democracy in everyday life? And how vulnerable is Fröbel to being co-opted by right-wing ideology?

Fröbel's educational philosophy undoubtedly contains elements of national education. And if taken out of context, they can be misunderstood. As we all know, the institute in Keilhau was called the "General German Educational Institution," and during the early 1820s, Fröbel developed a concept of national—or rather, popular—education, particularly in the writings *An unser Deutsches Volk*, or *To our*

German people (1820) and *Über deutsche Erziehung überhaupt und über das allgemeine Deutsche der Erziehungsanstalt in Keilhau insbesondere*, or *On German Education in General and on the General German Character of the Educational Institution in Keilhau in Particular* (1822) (Brodbeck, 2025). In these writings, Fröbel argued that a national renewal of the German people is both necessary and possible through education. And even 20 years later, when he introduced the "General German Kindergarten" in 1841, Fröbel emphasized once again:

> "What distinguishes this general *German* kindergarten in terms of its essence, requirements, and characteristics?
> 1. It is not only called, but is truly a *German* kindergarten, not in an exclusive sense, but as a work whose concept and idea were not only conceived and originated in the *German* mind, but were also cultivated with *German* sensibility and spirit and implemented with *German* spirit and *German* strength" (Fröbel, 1841, p. 171. Emphasis by the author).

Obviously, Fröbel thought that kindergarten has some specifically German elements. However, the terms "German" and "national" had different connotations in Fröbel's time than they do today, since we read them against the backdrop of the experience of National Socialism. In Fröbel's time, those terms referred to political self-determination, aimed at opposing tyranny and oppression. That is important to bear in mind. And if one reads *An unser Deutsches Volk*, it quickly becomes clear that Fröbel understood "national education" rather as a concept of general human education. Karl Christian Friedrich Krause, one of Fröbel's most important correspondents during this time, therefore pointed that out to Fröbel, with the hope, that Fröbel would "soon recognize and acknowledge that it is first and foremost a purely human institution and, consequently, only secondarily a German one; that its primary purpose is to educate and form human beings, and only then, at the same time, Germans" (Brodbeck, 2025, p. 125). What Fröbel saw as typical German in the 1820s, he later understood as typical of all human beings.

Another topic that is increasingly occupied by right-wing and fascist ideologues is the family, which was of utmost importance for Fröbel. However, family life in the community of Keilhau was anything but traditional. Today, it is almost reminiscent of a commune. Fröbel was not interested in a family life as it is propagated today by the right with the ideal of a supposedly true family consisting of a father, mother, and (as many as possible and as German as possible) children.

Still, Fröbel can be misinterpreted in such right-wing terms, and his statements can be taken out of context. And such attempts need to be rebuked strongly.

And with a look at the past, and how the German Froebel Association acted, or better not acted, after the seizure of control of the Nazi regime, it is important to emphasize that. In 1934, the association's old board resigned, and Hans Volkelt, a Fröbel expert and a sympathizer of National Socialism, was appointed as the new "leader". Volkelt led the association, along with three other board members and an advisory board that included Nohl and Spranger, until its dissolution in 1938. Unwanted members, such as Conradine Lück, Gertrud Bäumer, Elisabeth Bloch-

mann, and Martha Muchow (who committed suicide in September 1933), were removed from their positions. While some members certainly opposed National Socialism and others showed thoughtless opportunism, the German Fröbel Association, as an association, accepted the *Gleichschaltung* (Wasmuth, 2011).
Furthermore, Fröbel's pedagogy was reinterpreted in a National Socialist light, despite all the actual contradictions. Fröbel was seen as a pioneer of ethnic-political education and, as absurd as it may seem today, was interpreted as a precursor to Hitler. The well-known educational scientist Peter Petersen even claimed: "It (Fröbel's method of education, H.W.) leads to a new stage of German folk and national education in every respect: Be German! A German! A German woman! A true German! Develop perfect humanity in Germanness!" (1940, p. V).
Again: Fröbel can be misinterpreted easily.

Thus, it is important, and I want to emphasize that strongly, to point out that Fröbel's concept of national education contradicts the goals pursued today by nationalistic movements in Germany and worldwide. As Mathias Brodbeck has recently emphasized, even the early writings show "how Fröbel moved from an initially nationally oriented educational idea toward a universal concept of 'human education'" (2025, 111). Fröbel's concept of national education has nothing to do with chauvinistic nationalism. Fröbel cannot be associated with contemporary nationalist, far-right, and racist movements. Therefore, any attempts by the right wing to appropriate Fröbel must be strongly opposed. The only ones who benefit from the shift to the right by democratic parties and the normalization of right-wing narratives are right-wing extremists. Anyone who refers to Fröbel's pedagogy and sees value in it, shouldn't engage with the values and understanding of education and family represented by the forces that want to destroy our democracy. It might only be pedagogy, but is important to take a strong stand.

Fröbel's pedagogy and democracy
Luckily, the danger of such a usurpation seems small today. Today, the international Fröbel community is progressive and anti-nationalistic.
Of course, Fröbel was not a democrat, neither in today's sense nor would his contemporaries have described him as a "Democrat." Democratic and revolutionary tendencies, as expressed by his nephews Karl and Julius, were foreign to Fröbel. Throughout his life, Fröbel supported the concept of a constitutional monarchy. Still, he welcomed the revolution of 1848. In a letter on March 20, 1848, he wrote to his aunt, the "Muhme Schmidt," that a "surging storm, which, God grant it, thoroughly improved all conditions of life, and which came rushing over our little country and tore it down," is coming. He ended the letter with the words: "Hail the German people, the free German people spring morning. With nature and sky spring began on the earth the German people and fatherland spring. Praised be God's eternal world government. Your rejuvenated cousin Fr Fr." (Fröbel, 1848a, 220R). A few months later, he expressed similar enthusiasm about the dawn of a new era in a letter to Dr. Karl Hagen, suddenly claiming: "Examine all my edu-

cational activities in their innermost core, - I have been educating for an age for the Republic and towards it, I educate and train for the practice of the republican virtues" (Fröbel, 1848b, 93/94). The excitement, though, was probably more of an opportunistic move aimed at establishing kindergarten as part of the public educational system (Wasmuth, Sauerbrey, & Winkler, 2023). Fröbel was never a particularly political person.

However, how can we think with Fröbel about the "twilight of democracy"? What makes Fröbel fascinating is the hope and optimism that emanate from his educational philosophy. Fröbel always dreamed of a better future and was convinced that his educational philosophy would lead to just that—a future in which people live in life unification. Karl Neuman similarly argues that the concept of life unification can be understood as a form of peace education, and that the kindergarten is "a place for humane living in the world" (2023, 92). These principles of a humane life, of peace, and especially of hope are relevant today. To be hopeful in dark times is not naive but a reaffirmation that the history of humanity is also a history of compassion, self-sacrifice, and courage (Zinn, 2007). Fröbel, whose life's work was so often ridiculed, never lost his optimism. He never stopped dreaming of and believing in a better future. And hope is important because a world we can imagine is a world that can exist. Fröbel's pedagogy reminds us of this.

Democracy as a fundamental value and practice in education is certainly not absent from the traditions of ECEC (Dahlberg & Moss, 2005; Dahlberg, Moss, & Pence, 2007; Margrain & Löfdahl Hultman, 2019; Moss, 2014; Roberts-Holmes & Moss, 2021; Sousa & Oxley, 2021). Educational thinkers such as John Dewey, Janusz Korczak, Paolo Freire, Loris Malaguzzi, Maxine Greene, and Nel Noddings exemplify this tradition. Today, though, democracy seems to play little or no part in the dominant stories told about ECEC (or indeed about any other form of education), mainly because it has been marginalized by the dominant neoliberal discourse (Dahlberg & Moss, 2005; Moss, 2021; Roberts-Holmes & Moss, 2021). At best, it is paid lip service, and more often, it is not mentioned at all.

ECEC institutions, though, can be "public forums situated in civil society" (Dahlberg, Moss, & Pence, 2007, p. 73); spaces in which children and adults participate together in active citizenship and practices of democracy. They can be places of lived democracy, of "everyday democracy," a term coined by Tom Bentley and further elaborated for the context of ECEC by Peter Moss (2014, pp. 121ff.).[5] However, to be such a place of everyday democracy is a choice. Early childhood institutions must choose to understand themselves as such and actively assume the task. It includes the view of a child as an active and competent citizen with agency, whose ideas are worth listening to and who has the right to participate in collective decision-making, as well as ECEC professionals who practice "democratic profession-

5 See also the article by Jens Beljan in this anthology. He argues that early childhood settings can become laboratories of democratic life.

alism" (Oberhuemer, 2005). It is a conscious choice that requires never-ending work to live to an "enactment of democracy as a fundamental value" (Moss, 2021). And thinking with Fröbel, so I would like to argue, encourages such an attitude. One of the fundamental pillars of democracy is the right of *all* children to education. As Fröbel wrote in 1841:

> "Kindergartens therefore do not exclude any status, any social class and educational level of the parents and of the civil and social life. The child of everyone is recognized and treated first and foremost as a human being and as a link of society destined to promote the common good. The idea of kindergarten therefore encompasses city and country, children of all backgrounds; for children of all classes should be educated from an early age in the harmony of the lifehole (Lebensganzem) in knowledge and action" (Fröbel, 1841, p. 159).

Kindergarten, and with it the idea of a holistic, well-rounded, and general education – a human education in Fröbel's words – is not the privilege of a few elites, but of all children. All children have the right to education, an education worthy of the name. It is a remarkably modern idea that has lost none of its value to this day; one needs only think of UNICEF's Sustainable Development Goal 4.

And such education must treat children with dignity. At the end of his life, in a letter to Marenholtz-Bülow, Fröbel emphasized that the primary goal of the kindergarten is the "education of the human being as a human being" (Fröbel, 1851, 727). Children are, first and foremost, human beings and must be treated as such. And this is something we must remember every day. In a world where language is becoming increasingly inhumane and children, as a minority without protection, are increasingly being pushed to the margins of society (El-Mafaalani, 2025), we must stand up for the rights and dignity of children. Every child exists in the here and now and is a human being with the right to be themselves and to be treated with dignity. Children are not objects; they are not "not-yet-adults." Childhood must not be reduced to a stage of life that serves only as preparation for later life. Children have the right to childhood and to being children.

An educational approach that emphasizes children's dignity and human rights strengthens democracy. Astrid Lindgren expressed this as follows during the 1978 award ceremony for the Peace Prize of the German Book Trade:

> "Whether a child grows up to be a warm-hearted, open, and trusting person with a sense of the common good, or instead becomes an emotionally cold, destructive, and egoistic person, is decided by those to whom the child is entrusted in this world, depending on whether they show the child what love is, or fail to do so" (1978).[6]

I think Fröbel would have agreed with Lindgren.

6 Translation by Helge Wasmuth

And finally: play

Lastly, the pedagogical idea for which Fröbel is, and rightly so, most famous: play. Unlike anyone before him, Fröbel emphasized that young children learn through play and, therefore, need to play. What he meant, of course, was real play, not educational instruction that tries to disguise dull memorization or boring activities as 'joyful activities.' Play must be a young child's principal activity because play nurtures all the child's aptitudes and strengths; it is crucial "for the first care/nurturing, education, and edification (*Bildung*) of the child" because it "occupies the child at all times simultaneously in the totality of his activity as well as in the various directions of the activity, as a simultaneously acting, feeling and thinking being" (Fröbel, 1842a, p. 221). Play, for Fröbel, isn't a pastime or frivolity, but "rather a continuous learning, but one at, around and in life itself" (1842b, p. 92). Lynn McNair, one of the most prominent contemporary Froebelian scholars, expresses this thought similarly: "Watching them I was reminded of Fröbel's wisdom: that play is not merely a pastime by a profound expression of learning, joy, and human connection" (2025a, p. 21).

But how does that apply to democracy? Through play, so Fröbel argued, children make sense of the world and their place in it. In a democracy, this includes the practice of everyday democracy. Play is the form of everyday democracy with an immense democratic potential (Koubová et al., 2021). "Play, then, in the Froebelian sense, is not 'innocent'. It is a space where realities are born, ideas contested, risks taken, mistakes made and identities tested" (Tembo & Bateson, 2025, p. 188)

Through play, children experience what it means to live in a democratic society. When children engage in play, they learn to practice cooperation and shared responsibility, principles essential to democratic participation. Play naturally involves disagreement – who gets which blocks, what rules apply, or who plays which role. When children are allowed and encouraged to resolve these conflicts on their own, they practice negotiation, compromise, and perspective-taking. And play requires rules, rules that everyone agrees to follow, and that might need to be revised if they do not work (or do not bring fun). Each child can voice their ideas, make decisions, and participate in developing consensus, another core democratic value. And finally, play brings together children from different backgrounds, abilities, and perspectives. Through play, children learn to value differences and respect others' opinions.

Lynn McNair illustrates that wonderfully in *What is this play of the little ones? It is the great drama of life itself (Friedrich Fröbel)*:

> "One memory that has remained etched in my mind is of two little boys who came from vastly different backgrounds. One lived in a less affluent neighbourhood, while the other hailed from a more privileged home. Yet in the world of play, these differences melted away, replaced by curiosity, laughter, and a shared purpose. […]
> I stood back watching this moment unfold with awe. These two little souls, from such different worlds, were building something far greater than a roadway of toy cars – they were constructing a bridge between their experiences, fuelled by their innate creativity

> and openness. The play was unstructured yet profound, their differences embraced and transcended in a way only children seem capable of achieving. […]
> Watching these boys find common ground through their play gave me a profound sense of hope – not just for them, but for the world. It was a reminder of Fröbel's belief in the transformative power of play, where children explore not just their own imaginations, but also the shared humanity of those around them" (McNair, 2025a, pp. 22/23).

That is why Froebelian practice must insist on the importance of play! In today's educational settings, where young children's choices are often curtailed, with less and less time for free play, while at the same time expected to master the "academics" before entering 1st grade, where recess is often reduced or organized by adults, with increasing punitive regulations such as zero tolerance or silent halls – where is the place for young children to play and practice democracy? Froebelian pedagogy is one of the most compelling calls to embrace play. ECEC that enables children to practice democracy through play and live democracy daily contributes to the fight against the decline of democracy. Thus, anyone who refers to Fröbel should be committed to this cause.

4 The future part II: Thinking with Fröbel about climate catastrophe

The "twilight of democracy" isn't the only pressing issue worth thinking about with Fröbel. The even more important one might be the climate catastrophe.
One would assume that, compared to democracy, Fröbel has more to offer on this topic, as the unification with nature was one of the main goals of all his (educational) endeavors. Interestingly, one can't find much, at least regarding humankind's responsibility towards nature. Fröbel mainly spoke about nature in the sense that it helps humans become aware of the spherical law. Furthermore, Fröbel mentions nature in a very practical way, meaning that a real kindergarten must enable children to take care of their own piece of garden, especially plants.

Yet nature, climate change, and the resulting disastrous consequences might have shaped Fröbel's educational thinking. Keilhau and its pedagogy were developed in the aftermath of one of the most significant climate catastrophes of the early 19th century, the so-called Year without a Summer—a severe climate anomaly predominantly caused by the massive eruption of Mount Tambora in April 1815 in modern-day Indonesia (Behringer, 2015). The volcanic ash and gases released into the atmosphere blocked sunlight, causing average global temperatures to decrease. Summer temperatures in 1816 in Europe were the coldest on record between 1766 and 2000. 1816 saw persistent cold, heavy rains, and frosts, which led to crop failures, sharp price surges, and famines. This was also true for Keilhau, where the limitations shaped educational practice and, in turn, Fröbel's educational thinking (Wasmuth, Sauerbrey, & Winkler, 2023). While perhaps developed out of necessity, the idea of nature, being in and caring for nature, became an essential

part of his pedagogy. Thus, Fröbel's pedagogy, the constant striving for a better future and utopia, can be seen in such a light. It was developed while experiencing a devastating climate catastrophe.
And, of course, it is called kinder*garten* for a reason. Garden care (*Gartenpflege*) is the third element, besides the Whole of Gifts and Occupations, and the movement games of Fröbel's pedagogy of kindergarten and play (Wasmuth, 2020). And he didn't call it gardening, but garden care.

> "Just as children grasp the form of objects more clearly through images and words, so too do they understand their own inner lives more vividly through attentive observation of development, especially that of plants. Caring for plants, no matter how few and small they may be, when brought close to the child through constant attention, contributes greatly to the child's intellectual and moral development, as well as to the unfolding of their humanity" (Fröbel, 1841, p. 165).

Fröbel wanted children to understand that they need to *care* for plants, for nature, because it prepares them to take on responsibility later in life. In nature, the child can practice what will happen later: "In working in and caring for nature, they prepare for a higher level of life care and they see the creator at work around them; the child finds themselves through his activity and help as a link of the entire creation" (Fröbel, 1842b, p. 27). Through the joint care for nature, children recognize and experience themselves early on as a part of a larger whole. Being part of a larger whole is another key idea of the kindergarten period, Fröbel called it "linktotal" (*Gliedganezes*). Every human is a link of humanity, nature, and God. Thus, children need to "be recognized and accepted as a linktotal of the universal life, first the living of humanity, and treated in unison with the whole life, with the entire development of humanity, nature, and life, and in concord with their very own being" (Fröbel, 1841a, p. 155/156).
Reflecting on what Fröbel means when speaking of a linktotal, emphasizes that each human being has a responsibility toward every part of the total: every individual, humanity as a whole, and nature. As Fröbel would argue, humans must recognize that we are part of nature. We do not stand outside of nature; nature flows through us. As a life form destined for ethical awareness and self-consciousness – to become conscious of the spherical law and live accordingly, as Fröbel would say – we have a moral obligation to care for nature and other human beings. Such thinking has consequences for education. It asks for the rejection of individualistic educational concepts that place the individual's ego above all else and instead calls for becoming aware of our responsibility in our interactions with others and for living by such – one might also say democratic – principles. And the fact that humanity has maneuvered itself into an existentially threatening situation calls for a lifestyle change compatible with the new circumstances. It calls for respecting nature rather than subjugating it to human beings and exploiting it without restraint. And education must contribute to bringing this about. In this sense, ECEC is tasked to allow young children experiences that help them understand what it

means to care for the whole world, to "take responsibility for the future, the world that will emerge" (Osberg and Biesta, 2007, p. 47, as cited in Moss, 2014, p. 105). Thus, one might ask, how can ECEC support young children in developing an attitude of caretaker of the planet, a gardener? Issues such as climate justice, sustainability and circularity, learning about ecological systems, self-responsibility and activism, collective action and solidarity, questions of mobility and food, and the importance of voting can, maybe must play a role in a kindergarten that understands itself as a public form, as a place of lived democracy.

5 Conclusion

My remarks, so I hope, show how enriching it can be to "think with Fröbel". And contemporary work by Froebelians shows the potential. For example, while Stella Louis acknowledges in her blog entry *Where does race or anti-racism show up in Fröbel?* that Fröbel doesn't address such issues, she also shows why a Froebelian lens is fruitful: "In all of Fröbel's translated writing race is not mentioned and whilst anti-racist practice is not explicitly promoted some of Fröbel's key principles about the adult role can be seen to support an anti-racist approach. Even though they do not specify race, they give us a starting point" (Louis, n.d.). Other current examples are *Antiracism in Early Childhood Education*. *Theory and Practice*, edited by Bamsey, McNair, & Campbell (2025), which includes two articles that explicitly refer to Froebelian principles (McNair 2025b; Bateson & Tembo, 2025b). We can think with Fröbel and critically reflect on current socio-political issues.

For many Froebelians worldwide, Fröbel serves as the inspiration and lens to think about current issues: "My work is deeply rooted in Fröbel's emphasis on play, relationships, and community," so Stella Louis, "I believe these principles can be powerful tools for addressing issues of social justice and promoting equity in early years settings" (Stella Louis 2025, personal email to me). Asking new questions, thinking with Fröbel about essential questions of the present and the future—this is how Fröbel's pedagogy will continue to remain relevant.

Bibliography

Aksoy-Kumru, F. B. (2024). The philosophical and pedagogical underpinnings shared by philosophy for children (P4C) and Froebelian approaches. Contemporary Issues in Early Childhood, 27(3), 399-412. https://doi.org/10.1177/14639491241289150

Aksoy-Kumru, F. B. (2023). What does it (not) mean to be "Froebelian"?: exploring Scottish early years professionals' perspectives. Early Years, 45(1), 60–74. https://doi.org/10.1080/09575146.2024.2307537

Behringer, W. (2015). Tambora und das Jahr ohne Sommer: wie ein Vulkan die Welt in die Krise stürzte (3. Auflage). C.H. Beck.

Bollnow, O. F. (1977). Die Pädagogik der deutschen Romantik. Von Arndt bis Fröbel. (3., überarbeitete Auflage). Klett-Cotta..

Bruce, T. (2021). Friedrich Froebel. A critical introduction to key themes and debates. Bloomsbury.

Bruce, T., Nishida, Y., Powell, S., Wasmuth, H., & Whinnett, J. (Eds.) (2023). The Bloomsbury Handbook to Friedrich Fröbel. London: Bloomsbury.

Castner, D. J. (2023). Froebel as an antidote to twenty-first-century neoliberal curriculum reform policies. In T. Bruce, Y. Nishida, S. Powell, H. Wasmuth, & J. Whinnett (Eds.), The Bloomsbury Handbook to Friedrich Fröbel (pp. 436–443). Bloomsbury.

Dahlberg, G., & Moss, P. (2005). Ethics and Politics in Early Childhood Education. Routledge & CRC Press.

Dahlberg, G., Moss, P., & Pence, A. (2007). Beyond Quality in Early Childhood Education and Care: Languages of evaluation. 2nd edition. Routledge & CRC Press.

El-Mafaalani, A., Kurtenbach, S., & Strohmeier, K. P. (2025). Kinder: Minderheit ohne Schutz: Aufwachsen in der alternden Gesellschaft. Kiepenheuer & Witsch.

Engelmann, S. (2023). Translating pedagogy –reading Froebel in different languages. In T. Bruce, Y. Nishida, S. Powell, H. Wasmuth, & J. Whinnett (Eds.), The Bloomsbury Handbook to Friedrich Fröbel (pp. 21–28). Bloomsbury.

Freedom House (2025). Freedom in the World 2025. The Uphill Battle to Safeguard Rights. Retrieved from: https://freedomhouse.org/report/freedom-world/2025/uphill-battle-to-safeguard-rights

Froebel Trust (2022). Why does Fröbel matter in the 21st century? https://Fröbel.org.uk/training/films/why-does-Fröbel-matter-in-the-21st-century

Fröbel, F. (1841). Die Kindergärten als um- und erfassende Pflege- und Erziehungsanstalten der Kindheit, der Kinder bis zum schulfähigen Alter und der deutsche Kindergarten als eine Musteranstalt dafür insbesondere. In E. Hoffmann (Ed.) (1982), Friedrich Fröbel. Ausgewählte Schriften. Vierter Band. Die Spielgaben, (pp. 149–178) Klett-Cotta.

Fröbel, F. (1842a). Über die Bedeutung und das Wesen des Kindergartens überhaupt und das Wesen und die Bedeutung des deutschen Kindergartens insbesondere. In E. Hoffmann (Ed.) (1982), Friedrich Fröbel. Ausgewählte Schriften. Vierter Band. Die Spielgaben, (pp. 203–235). Klett-Cotta..

Fröbel, F. (1842b). Brief an die Gräfin Brunszvik. In E. Hoffmann (Ed.) (1944), Friedrich Fröbel an Gräfin Therese Brunszvik. Aus der Werdezeit des Kindergartens (pp. 20–97). Alfred Metzner Verlag.

Fröbel, F. (1848a). Letter to Friederike Schmidt in Gera, 20.3./21.3./22.3.1848 (Keilhau). BlM XIV, 65, p. 219-221.
https://editionen.bbf.dipf.de/exist/apps/briefedition-friedrich-Fröbel/briefe/fb1848-03-20-01.xml

Fröbel, F. (1848b). Letter to Karl Hagen in Heidelberg, 17.7.1848 (Keilhau). In E. Hoffmann (Ed.) (1948), Friedrich Fröbel und Karl Hagen. Ein Briefwechsel aus den Jahren 1844-1848 (pp. 87–94). Verlag Werden und Wirken.
https://editionen.bbf.dipf.de/exist/apps/briefedition-friedrich-Fröbel/briefe/fb1848-07-17-01.xml

Heiland, H. (2010). Fröbelforschung aktuell. Aufsätze 2001–2010. Königshausen & Neumann GmbH.

Hoffmann, E. (1982). Friedrich Fröbel. Ausgewählte Schriften. Vierter Band. Die Spielgaben. Klett-Cotta

Jarvis, J. (1895). Friedrich Froebel's Pedagogics of the Kindergarten. New York, D. Appleton and company.

Koubová, A., Urban, P., Russell, W., & MacLean, M. (Eds.). (2021). Play and Democracy: Philosophical Perspectives. Routledge.

Lange, W. (1874). Friedrich Fröbels gesammelte pädagogische Schriften. Zweite Abteilung: Friedrich Fröbel als Begründer der Kindergärten. Zweite Auflage. Verlag von Th. Chr. Fr. Enslin.

Levitsky, S., & Ziblatt, D. (2019). How Democracies Die. Crown.

Lilley, I. M. (Ed.). (1967). Friedrich Fröbel: A selection from his writing. Cambridge University Press.

Lindgren, A. (1978). Anlässlich der Preisverleihung des Friedenspreises des Deutschen Buchhandels im Jahr 1978. http://www.niemals-gewalt.de/rede.htm

Louis, S. (2021). Where does race or anti-racism show up in Froebel? *Froebelian Futures*. https://www.froebel.ed.ac.uk/where-does-race-or-anti-racism-show-up-in-froebel/

Margrain, V., & Löfdahl Hultman, A. (Eds.). (2019). Challenging Democracy in Early Childhood Education: Engagement in Changing Global Contexts (Vol. 28). Springer Nature Singapore. https://doi.org/10.1007/978-981-13-7771-6

McNair, L. J. (2025a). 'What is this play of the little ones? It is the great drama of life itself'. In T. Baillie., & J. H. McKendrick (2025), Born to Play, (pp. 17–27). C/C/W/B Press.

McNair, L. J. (2025b). Let us Live for our children: Anti-racist practice in early childhood. In V. Bamsey, L. J. McNair, & N. Campbell (Eds.), Antiracism in Early Childhood Education: Theory and Practice (1 ed. , pp. 28-48). Bloomsbury Academic.

Michaelis, E. K., & Moore, H.K. (1891). Fröbel's letters on the kindergarten. Swan Sonnenschein & Co.

Margrain, V., & Löfdahl Hultman, A. (Eds.). (2019). Challenging Democracy in Early Childhood Education: Engagement in Changing Global Contexts (Vol. 28). Springer Nature Singapore. https://doi.org/10.1007/978-981-13-7771-6

Moss, P. (2014). Transformative Change and Real Utopias in Early Childhood Education: A story of democracy, experimentation and potentiality. Routledge & CRC Press.

Moss, P. (2021). Democracy as First Practice in Early Childhood Education and Care. Retrieved from https://www.child-encyclopedia.com/pdf/expert/child-care-early-childhood-education-and-care/according-experts/democracy-first-practice-early

Mouffe, C. (2013). Agonistics: thinking the world politically. Verso.

Neumann, K. (2023). Peace as unification of life – peace building as hidden curriculum in Froebel's Education of Man. In T. Bruce, Y. Nishida, S. Powell, H. Wasmuth, & J. Whinnett (Eds.), The Bloomsbury Handbook to Friedrich Fröbel (pp. 87-94). Bloomsbury.

Oberhuemer, P. (2005). Conceptualising the early childhood pedagogue: Policy approaches and issues of professionalism. European Early Childhood Education Research Journal, 13(1), 5–16. https://doi.org/10.1080/13502930585209521

Petersen, P. (1940). Einführung. In I. Knoch, S. Mentz, & G. Stricker (Eds.), Kindergarten und Volksschule organisch verbunden. Weimar.

Roberts-Holmes, G., & Moss, P. (2021). Neoliberalism and Early Childhood Education: Markets, Imaginaries and Governance. Routledge & CRC Press.

Rosanvallon, P. (2017). Die Gesellschaft der Gleichen. Suhrkamp Verlag.

Rosanvallon, P. (2018). Die gute Regierung. Suhrkamp Verlag.

Sakr, M., & Kaur, V. (2024). Re-imagining the Froebelian influence on early childhood education as a dynamic and ever-changing web of encounter. Pedagogy, Culture & Society, 32(4), 923–940. https://doi.org/10.1080/14681366.2024.2355092

Selk, V. (2023). Demokratiedämmerung. Eine Kritik der Demokratietheorie. Suhrkamp Verlag.

Sousa, D., & Oxley, L. (2021). Democracy and early childhood: diverse representations of democratic education in post-dictatorship Portugal. Educational Review, 73(1), 17–33. https://doi.org/10.1080/00131911.2018.1556609

Tembo, S., & Bateson, S. (2025). Before race: A literature review on de/colonial habits in play within early childhood. Journal of Early Childhood Research, 23(2), 109–123. https://doi.org/10.1177/1476718X241241142

Tesar, M. (2021). "Philosophy as a Method": Tracing the Histories of Intersections of "Philosophy," "Methodology," and "Education." Qualitative Inquiry, 27(5), 544–553. https://doi.org/10.1177/1077800420934144

Urban, M. (2018). Editorial. European Early Childhood Education Research Journal, 26(3), 311–315. https://doi.org/10.1080/1350293X.2018.1469857
Wasmuth, H. (2011). Kindertageseinrichtungen als Bildungseinrichtungen. Zur Bedeutung von Bildung und Erziehung in der Geschichte der öffentlichen Kleinkinderziehung in Deutschland bis 1945. Klinkhardt-Verlag. ISBN 978-3-7815-1809-4
Wasmuth, H. (2020). Fröbel's Pedagogy of Kindergarten and Play: Modifications in Germany and the United States. Routledge.
Wasmuth, H. (2022). What does it mean to be a Froebelian in the 21st century? Global Education Review, 9(2), 23-37.
Wasmuth, H. (2023). Connections – Searching for the Authentic Fröbel. In Bruce, T., Nishida, Y., Powell, S., Wasmuth, H., & Whitnett, J. (Eds.), The Bloomsbury Handbook to Friedrich Fröbel (pp. 15-20). Bloomsbury.
Wasmuth, H. (2024). An Explanation of My Educational Principles: Friedrich Fröbel's Letter to Max Leidesdorf. Global Education Review, 11(4), 9-26.
Wasmuth, H., Sauerbrey, U., & Winkler, M. (2023). Finding Fröbel – The Man Who Invented Kindergarten. Bloomsbury.

Author

Wasmuth, Helge, Prof. Dr.
ORCID: 0000-0003-1556-2041
Mercy University, New York
Professor of Early Childhood and Childhood Education
Main areas of work and research: history of early childhood education; theory and history of play, early childhood education policy
hwasmuth@mercy.edu

Authors

Beljan, Jens, Prof. Dr.
Freie Hochschule Stuttgart, Germany
Professor of Education
Main areas of work and research: educational and social philosophy; ethical, cultural, and social conditions of teaching and schooling; resonance pedagogy; expressive learning; and the phenomenology of learning
Jens.Beljan@freie-hochschule-stuttgart.de

Ferris, Mairi, M.A. (Hons), M.Sc.
Inspiring Scotland, UK
Thrive Outdoors Programme Manager
Main areas of work and research: outdoor play and learning; nature connection; more-than-human approaches
mairi@inspiringscotland.org.uk

Freitag-Amtmann, Ines, Dr.
DIGI:PÄD Agentur für Digitale Medien und pädagogische Werkstatt, Germany
Teacher of educational professionals
Main areas of work and research: digital media production and educational workshops; research in early childhood education
digipaed.info@email.de

Harding, Stephanie
Froebel Trust, UK
Froebel Travelling Tutor
Main areas of work and research: Froebel's mother songs; Froebel in contemporary practice

Hermiston, Suzanne
University of Edinburgh, UK
Director of Open Studies
Main areas of work and research: focuses on innovative sustainability education through cross-curricular lenses and its potential impact on societal behaviour change. This includes reflection on the value of outdoor learning and learning technology, assessing its potential for long-term change and improvement in learner outcomes.
Suzanne.Hermiston@ed.ac.uk

Louis, Stella, Dr.
ORCID: 0000-0001-5726-3539
University of Roehampton, UK
Main areas of work and research: focus on the power of observation in developing learning, particularly through children's schemas, underpinned by Froebelian principles that prioritise child-led exploration and discovery
sramlouis@aol.com

Matsumura, Naoko
ORCID: 0009-0005-3255-7107
Yamaguchi Gakugei University, Japan
Professor, Faculty of Education
Main areas of work and research: Froebel's educational theory; history of educational thought
matsumura@y-gakugei.ac.jp

McNair, Lynn J., Ph.D.
ORCID: 0000-0002-5730-0704
University of Edinburgh, Edinburgh, UK
Senior Lecturer in Early Childhood Practice and Froebel, Moray House School of Education and Sport, Institute for Education, Community & Society
Main areas of work and research: early childhood; Froebelian pedagogy, principles/liberal education and environment; children/human rights; children in nature; pedagogy as a critical and political practice/pedagogical culture of questioning; practitioner inquiry; relational pedagogy
Lynn.mcnair@ed.ac.uk

Nojiri, Mie, Ph.D.
ORCID: 0009-0004-3489-8282
Jissen Women's University, Japan
Associate Professor, Child Care and Education, Department of Human Sciences and Arts, Faculty of Human Life Sciences
Main areas of work and research: Froebelian pedagogy; history of early childhood education and care
nojiri-mie@jissen.ac.jp

Plamper, Sabine
training institute Atelier in een Koffer, the Netherlands
cultural pedagogue and teacher of educational professionals
at training institute 'Atelier in een Koffer'(studio in a case) in Amsterdam, the Netherlands
Main areas of work and research: evidence-based practice; educational workshops and training courses; children play and learning; creativity and flow
www.atelierineenkoffer.nl

Rathert, Nikolas A., Dr.
ORCID: 0000-0001-5270-1392
Ludwig-Maximilians-Universität München, Germany
Research Associate and Seconded Teacher, Faculty of Psychology and Educational Sciences, Department of Educational Sciences and Rehabilitation
Main areas of work and research: Froebel pedagogy, Froebel gifts
n.rathert@lmu.de

Sauerbrey, Ulf, Prof. Dr.
ORCID: 0000-0001-8897-7358
University of Erfurt, Germany
Professor of Childhood and Youth in Digital Educational Environments, Department of Education
Main areas of work and research: early childhood education; history of childhood; media education; media-mediated parenting advice
ulf.sauerbrey@uni-erfurt.de

Schmid, Andrea Christine, Prof. Dr.
ORCID: 0000-0002-3854-8165
University of Erfurt, Germany
Professor of Inclusive Educational Research with a Focus on Learning Disabilities, Department of Education
Main areas of work and research: inclusive school and teaching development; reform- and Froebel pedagogy in an inclusive setting
andrea.schmid@uni-erfurt.de

Selvarani, Selvaraja, M.Sc.
University of Edinburgh, Moray House School of education and Sport, UK
Main areas of work and research: early childhood, Froebel, social justice, outdoor education

Sprey, Titia
Art Academy's Hertogenbosch, the Netherlands
Studio pedagogue and teacher of educational professionals
at training institute 'Atelier in een Koffer'(studio in a case) in Amsterdam, the Netherlands
Main areas of work and research: evidence-based practice; educational workshops and training courses; children play and learning; creativity and flow
www.atelierineenkoffer.nl

Towler, Marcella
University College Cork, Ireland
Lecturer, Early Years and Childhood Studies, School of Education
Main areas of work and research: early years and childhood studies; play; Froebel; neoliberalism; outdoor education
m.towler@ucc.ie

Walsh, Caroline
Royal Botanic Gardens Edinburgh, UK
Outdoor Early Years Learning Officer
Main areas of work and research: early years research
CWalsh@rbge.org.uk

Wasmuth, Helge, Prof. Dr.
ORCID: 0000-0003-1556-2041
Mercy University, New York
Professor of Early Childhood and Childhood Education
Main areas of work and research: history of early childhood education; theory and history of play, early childhood education policy
hwasmuth@mercy.edu

k linkhardt

Froebelian Pasts, Present & Futures explores why Friedrich Fröbel still matters today. Bringing together scholars and practitioners from diverse contexts, this volume examines how Fröbel's ideas have been remembered, adapted, and debated across time, how they continue to shape contemporary early childhood education, and how they may inspire future pedagogical thinking. The collected contributions reveal Fröbel not as a figure of the past alone, but as a vital conversation partner for reimagining education today and tomorrow.

This volume documents the 11th Froebel Biennial Conference, held in Erfurt from July 31st – August 2nd 2025 and hosted by the International Froebel Society (IFS) and the University of Erfurt/ Fröbel Research Section. The next conference will take place in Auckland/New Zealand from November 25th – 27th 2027.





The Editors

Andrea C. Schmid, Prof. Dr. phil. habil., Special and Social Education, University of Erfurt (GER) and President of the International Froebel Society (IFS/IFS-D).

Helge Wasmuth, PhD, Professor of Early Childhood and Childhood Education, Mercy University (US).

978-3-7815-6265-3