

## Learning Story News VIII

### Learning Stories at EECERA Conference 2023

#### Symposium

E22<sup>1</sup>

#### LEARNING STORY NARRATIVE ASSESSMENTS THAT STORY CHILDREN'S LIVED EXPERIENCES CONTRIBUTE TO CHILDREN'S LEARNING IDENTITIES AS LIFELONG LEARNERS. EXAMPLES FROM NEW ZEALAND AND SCOTLAND.

Self-organised Symposium

#### Ankündigung im Programm

Chair: **Lorraine Sands, Educational Leadership Project, New Zealand**

“Learning Story narrative assessments (Carr, 2001) because of their sociocultural theoretical framework have the capacity to understand how storying children’s lived experiences makes a meaningful difference to communities’ images of their children. The research studies discussed in this symposium are embedded in a narrative inquiry paradigm that sees reality as a socially mediated construction contained within stories that are told and retold across times, social contexts, and places. In this view emotion, learning, culture and identity are entwined. As learning communities re-access lived experience through learning stories that enable children to act as co-constructors of their learning experiences and then track progress in dynamic, dialogic ways, children strengthen dispositional learning and the working theories that emerge as children explore possibility thinking (Carr & Lee, 2019). As a result, communities design learning environments in response to a rich, complex view of children as agentic, curious, joyful, creative, empathic social learners-in-action.”

#### The image of the child: How it impacts on pedagogical documentation

**Lynn McNair, University of Edinburgh, United Kingdom**

#### Ankündigung im Programm

“The dominant discourse of standardisation and narrowing of early childhood education, has resulted in the ‘shaping’ and ‘testing’ of young children around the globe. This action research project sparked transformation regarding how early years practitioners documented children’s learning. This paper builds upon a small-scale action research project that challenged the standardised form of documentation, in one Scottish ECEC setting (McNair et al, 2021; Blaisdell, et al, 2021). This paper is informed by an emerging body of educational theory and practice known as revolutionary critical pedagogy (Kincheloe, 2008; Giroux, 2011; McLaren 2005; 2015). This study draws from pedagogical documentation, named: ‘lived stories’. The data used came from mixed qualitative methods which included one-on-one conversations with children, questionnaires for practitioners and parents, focus groups with practitioners and parents, and a group mind-mapping session with children. Ethical approval from Moray House School of Education was received. The ethical principles that underpinned this

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<sup>1</sup> Dieses Symposium habe ich besucht. K.S.

research included voluntary participation, informed consent, anonymity, confidentiality, potential for harm, and results communication. The terminology of 'Lived Stories' captured the more fluid and liberatory nature of what practitioners wished to document, documentation which illustrated a rich image of the child. The image of the child as a knowledge, identity, and culture producer; as innocent; as a labour market supply or as a co-creator of knowledge, identity and culture (Dahlberg, et al, 2013), greatly impacts on children's lived experiences.

**Keywords:**

*image of the child, pedagogical documentation, professionalism, lived stories, critical pedagogy*

This application discusses an ongoing piece of research and findings may be preliminary/emerging."

### Notizen von Kornelia

Es handelt sich um ein kleines (small-scale) action research project in Schottland als Gegenwehr zu den neueren Bestimmungen, die standardisierte Bewertungen (standardised attachment) verlangen. Es wurde vom Froebel Trust gesponsert.

Die Autorin kritisiert die Herausforderung, die mit dieser Art von Leistungsnachweis (attainment challenge) verbunden ist: Sie

- ist eine sehr enge Art, Kinder und ihr Lernen zu verstehen (a very narrow way of understanding children and their learning).
- beinhaltet Normalisierungsstrukturen und -ziele
- sieht das Kind als Mangelwesen und passiv an (lacking and passive)
- beinhaltet banale Entwicklungsvorstellungen (banal developmentalism)

Sie sagt:

- „No to the ‚trackers‘!“ (Nein zu den Fährtenlesern, Verfolgern!) – z.B. zu „milestone charting“ (Meilensteinkartierung)
- „Engaging with complexity demands thinking about taken-for-granted practices in early childhood“ (Sich mit Komplexität zu befassen erfordert, über Praktiken in der frühen Kindheit nachzudenken, die als gegeben hingenommen werden). Es braucht gemeinsames Denken (collaborative thinking together).

Sie bringt Beispiele von „Learning Letters“<sup>2</sup>, die zeigen, wie Kinder bei ihrem Spielen lernen. Darin wird z.B. formuliert: „Today I learned that you are a curious observer ...“

Sie nennt sie auch „Love letters to children“, da es Lernbriefe sind, die mit Liebe geschrieben werden. So werden sie auch unterschrieben: „With love ... (hier folgt der Vorname der schreibenden Person)“.

Schüler/innen schreiben auch selbst solche Briefe über ihr Lernen für ihre Lehrer/innen.

Lynn McNair wird die PPP zur Verfügung stellen.

### How learning stories enable children to relive their experiences and stretch possibility thinking:

A narrative inquiry

Lorraine Sands, Educational Leadership Project, New Zealand

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<sup>2</sup> In der Ankündigung werden sie „lived stories“ (gelebte Geschichten) genannt.

## Ankündigung im Programm

“I aim to show how sharing learning stories within a community of learners has the capacity to contribute to children’s learning identities and strengthen children’s views of themselves as curious, dispositional learners-in-action. My research builds on formative assessment (Cowie, 2008; Cooks et al., 2016), Learning Story narrative assessment (Carr, 2001, Carr & Lee, 2019) and research into ways in which dispositions and working theories (Hargraves, 2014, Hedges, 2021) nurture children's learning identities (Claxton & Carr, 2004; Sands & McChesney, 2022). Narrative inquiry (Clandinin & Connelly, 2000) framed every aspect of this study as a way to generate iterative processes that valued the storied-lives of a community of learners (Lincoln & Guba, 2013; McAllum et al., 2019). Alternative paradigms (Moss, 2018), including posthuman concepts of relational living (Murriss, 2016) are explored. Participant reflections on Learning Stories (Carr & Lee, 2019) provided data to investigate community perceptions of the formation of learning identities (Carr & Lee, 2012). Explanatory letters outlined potential ethical issues and consent forms stated participants could withdraw for any reason. This study showed that dispositionally focused Learning Stories created a culture of dispositional language and working-theory-focused narratives. Consequentially, children’s working theories had momentum and an ever-increasing tilt<sup>3</sup> towards strengthening learning complexity. These working theories were situated in sociocultural contexts and contributed to a deepened sense of children’s learning identities. Learning Stories, embedded in children’s lived experiences, enabled learning communities to design meaningful learning environments that support children to be agentic learners-in-action (Gunn & Gasson, 2017).

**Keywords:** *narrative inquiry, learning stories, dispositional learning, working theories, agentic learners*

This application discusses a completed piece of research.”

## Notizen von Kornelia

Das Lernen der Kinder wird nicht nur während ihrer Zeit in der Kindertageseinrichtung gestärkt sondern auch für die Zukunft (strengthening the children’s learning during their time in childcare and also for the future).

Es geht um formatives Assessment für Lernende, die Sinn stiften (meaning-making learners). Es zeigt ihnen, wer sie sind (who they are). Entscheidend sind die Lernziele, die Kinder sich selbst setzen. Das macht sie motiviert und engagiert (deeply involved).

Anmerkung dazu von Keira, einem Mädchen: „When I look back at my learning stories I remember all the things that make me a great learner.“

Lorraine zieht dazu eine Maori-Philosophie heran, die in einer Art Sprichwort (whakatauki) zum Ausdruck kommt:

„I walk backward into the future with my eyes fixed on my past.“

So heißt dann auch die Überschrift zu der Lerngeschichte von Keira, die damit beginnt, das Keira etwas nicht gleich so hinkriegt, wie sie es sich vorstellt. Die Pädagogin fragt sie daraufhin: „Shall we look at your book to see how you conquered this challenge?“ (Sollen wir in Dein Buch schauen um zu sehen, wie Du so eine Herausforderung schon mal gemeistert hast?). Keira ist einverstanden. Als sie sich mit der Pädagogin gemütlich niederlässt, um diese bestimmte Geschichte zu suchen, entsteht aus diesem Moment heraus, dass sie von sich aus ihr ganzes Buch durchgeht. Die Pädagogin bleibt dabei. Und am Ende sagt Keira den erwähnten Satz.

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<sup>3</sup> = Neigung

Lorraine: "We are all committed to building that learning together." (Wir sind alle verpflichtet bzw. darauf eingeschworen, so ein Lernen gemeinsam zu ermöglichen.)

Eine entscheidende Frage ist: "Who has the power here? What's the power of this moment?" (Wer hat hier die Macht? Worin besteht die Macht des Augenblicks?)

Lerngeschichten betonen das „indikative“ Lernen, was Kinder aus sich selbst heraus entwickeln.

Lorraine greift die 5 Fragen aus Sicht der Kinder auf, die nicht von ihnen ausgesprochen werden, sondern von den pädagogischen Fachkräften bzw. Forschenden Podmore, May und Carr (2001) zu den Lerndispositionen (unter dem Stichwort „teaching stories“) formuliert worden sind<sup>4</sup>:

- Do you know me? Are you able to see me?
- Can I trust you?
- Do you hear me?
- Do you let me fly?
- Is that place fair for us?

Sie stellt eine ergänzende Frage:

- "Will you silo me away from the community and natural experience I so long for?" (Wirst Du mich wegsperren von der Gemeinschaft und der Naturerfahrung, nach der mich so sehr verlangt?)

Wenn diese unausgesprochenen Fragen der Kinder alle positiv beantwortet werden können, wird ein positives Selbstwertgefühl erzeugt: „She knows who she is.“

**Beispiel** dazu: Ausspruch eines Mädchens als Empfehlung an ein anderes: „Think like a lightbulb“<sup>5</sup>  
Anmerkungen dazu:

- It's a „tuakana“ process: Kinder geben untereinander weiter, was sie selbst gehört und erfahren haben, meistens die älteren an die jüngeren.

**What role does emotion have when considering the purposes and consequences, balancing acts and dimension of progress when writing Learning Stories**  
**Wendy Lee, Educational Leadership Project, New Zealand**

### Ankündigung im Programm

“My objective is to show how documentation of formative assessment has the capacity to engage and strengthen emotional connections and enhance relationships in an early childhood setting. This paper builds on research-based exemplars (Kei Tua o te Pae : Carr, Lee and Jones 2005, 2007, 2009) neuroscience (Immordino-Yang 2018) and emotion (Goleman, 2021, 2005; Elder, 2020; Nodding 2003, 2010; Brackett, 2019; Hooks, 2003; Palmer, 1998). The research underpinning this paper used a teacher inquiry and action-research approach (McTaggart et al., 2017; Escamilla et al. 2021). Learning Stories (Carr & Lee, 2012, 2019) provides the platform to explore pedagogy and recognises that teaching is fundamentally inquiry in the domain of human attention and awareness (Mason 2002). Narrative inquiry (Clandinin, 2016) underpins this research. The New Zealand assessment practice of Learning Stories,

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<sup>4</sup> Podmore, V./May, H./Carr, M. (2001): "The Child's Questions": Programme Evaluation with Te Whāriki Using "Teaching Stories". Wellington

<sup>5</sup> Ein Artikel unter dieser Überschrift ist zu finden unter: [https://elp.co.nz/wp-content/uploads/2023/04/Sands-L.-2023.-Think-like-a-light-bulb.-Retrieved-from-www.elp\\_co\\_nzarticles.pdf](https://elp.co.nz/wp-content/uploads/2023/04/Sands-L.-2023.-Think-like-a-light-bulb.-Retrieved-from-www.elp_co_nzarticles.pdf)

provides the platform to explore pedagogy (Carr, Lee, 2012, Lee et al. 2013<sup>6</sup>). New data from teachers' interviews, documented assessments and reflections are used. Consent forms and information sheets were provided to all participants.

Informed consent was negotiated with all involved and participants could withdraw their data from the research at any time.

Teachers' reflections on both the children's and teachers' learning illustrate how inquiry and documentation makes a powerful contribution to both strengthening emotional connections and enhancing pedagogy. Workable strategies for teachers, developed from assessment data, can construct opportunities that recognise the emotional learning journeys of children, families and teachers. This creates cultural shifts that strengthen relational pedagogy as teams work collectively to examine and reflect on their practice.

**Keywords:** *learning stories, emotional connections, pedagogy, community of practice, inquiry*

This application discusses an ongoing piece of research and findings may be preliminary/emerging."

### Notizen von Kornelia

#### Aussagen und Empfehlungen von Wendy:

- "Engage your heart and your mind!"
- "Aroha" (Maori word) wird in der Regel mit "Liebe" übersetzt, es ist aber mehr als Liebe, z.B. Empathie, Engagement, Enthusiasmus
- Carla Rinaldi says about documentation: "It is an act of love."
- Margaret Carr says: "That which is nurtured blossoms and grows."
- "Assessing progress is a complex topic" (Fortschritt zu bewerten, ist ein komplexes Thema). „Nothing is remaining the same“ (Nichts bleibt gleich).

#### Themenschwerpunkt: Progress (Fortschritt) des Lernens

Wendy bezieht sich auf die 4 Dimensionen von Fortschritt (A, B, C und D), die schon im Buch von Margaret Carr und ihr (2012<sup>7</sup>) aufgezählt waren und im neuesten Buch der beiden von 2019, das seit 2022 ins Deutsche übersetzt vorliegt<sup>8</sup>, wieder aufgegriffen werden (s. Tabelle auf S. 12).

Entscheidend ist die **Ergänzung um eine fünfte Dimension: E** (= Emotion, Empathy, Engagement, Enthusiasm, Excitement) (s. Carr/Lee 2022, Seite 36 f.):

- „To genuinely spot the flow of learning, we must embrace it's emotional core“ (Um den Fluss des Lernens wirklich zu erkennen, müssen wir seinen emotionalen Kern annehmen).
- „Education of the mind without educating the heart is no education at all“ (Aristoteles).
- "Seek the treasure you value most clearly. If you bow your head, let it be to a lofty mountain."
- "It is outside the comfort zone, that we make new discoveries about our practice and immense learning power."

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<sup>6</sup> Lee, Wendy/Carr, Margaret/Soutar, Brenda/Mitchell, Linda (2013): Understanding the Te Whariki Approach. Early years education in practice. Routledge

<sup>7</sup> Learning Stories: Constructing Learner Identities in Early Education. London, SAGE

<sup>8</sup> Carr/Lee (2019): Learning Stories in Practice. London, SAGE; **Deutsch (2022):** Lerngeschichten in der Praxis. Berlin: wamiki

- "There is no learning in giving up."
- Ask yourself: "In what emotional ways does it connect to the child?"
- "Learning stories bring a sense of awe to fill our hearts with 'aroha'" (Lerngeschichten vermitteln ein Gefühl der Ehrfurcht und füllen unsere Herzen mit "aroha").

### **Formulierungsbeispiele von Zwischenüberschriften**

zum 2. Teil einer Lerngeschichte, der Lernanalyse,

- „My thoughts of Keitos Learning in this moment“

und zum 3. Teil des möglichen Weitergehens und Weiterdenkens:

- "How can we keep the learning growing for Keito?"
- "In what emotional ways do I connect to you as the teacher?"

### **Beispielerngeschichte von Gretel (zu einem Angebot mit Musik und Bewegung):**

Ein Mädchen weiß nicht weiter, weil ihr nicht einfällt, was für einen Rhythmus sie machen kann. Ein anderes Mädchen sagt zu ihr: „Think, think!“ und meint damit, sie solle sich Zeit nehmen zum Überlegen. Das ist ein Beispiel für einen „tuakana“ process (s. oben). Die Pädagogin sagt: „Take your time!“ Und daraufhin entspannt sie sich und ihr fällt etwas ein, was sie machen kann und tatsächlich macht in der Runde der Gruppe.

### **Literaturhinweise von Wendy Lee:**

- Alison Clark (2019): Questions about visibility<sup>9</sup>.
- Brown, Stuart/Vaughan, Christopher (2009): **Play: How it Shapes the Brain, Opens the Imagination, and Invigorates the Soul.** Penguin Publishing Group (Reprint edition 2010)

Nach diesen drei Beiträgen lädt Lorraine ein zu einer

### **Murmelrunde**

Sie fordert uns auf, mit einem Nachbarn, einer Nachbarin zu reden, was das alles in uns bewegt.

Als sie sie beendet und feststellt, dass die meisten gern noch weiter geredet hätten, nutzt sie die Gelegenheit, uns darauf aufmerksam zu machen, wie unangenehm es sich für Kinder anfühlen muss, wenn sie immer wieder (aus Zeitgründen) unterbrochen werden: „Interruption disturbs the processes of thinking and togetherness“ (Unterbrochen zu werden zerstört die Prozesse des Denkens und des Zusammenseins).

### **Fortsetzung von Informationen zur Arbeit mit Lerngeschichten durch Lorraine**

- Each day in Greerton<sup>10</sup> could be different: „It’s a flow, a rhythm. We have a ceremony of burning the roster“ (Jeder Tag in Greerton kann anders sein: Es ist immer im Fluss und hat einen Rhythmus. Es gibt bei uns eine Zeremonie, den Dienstplan zu verbrennen).

<sup>9</sup> Das konnte ich im Internet nicht finden. Es gibt jedoch einen Abschnitt „Invisible connections“ in dem neuesten Buch von Alison Clark (2023): Slow Knowledge and the Unhurried Child: Time for Slow Pedagogies in Early Childhood Education. Routledge, S. 123-126 (K.S.)

<sup>10</sup> Greerton Early Childhood Centre (1 Emmett Street, Greerton, Tauranga) ist die Kindertageseinrichtung, in der Lorraine Sands seit 20 Jahren (1993) tätig ist. Sie hat offiziell die Leitung inne, doch ihr Leitungskonzept beinhaltet „shared leadership“, d.h. dass die Leitung geteilt wird. Die Kindertageseinrichtung bestand viele Jahre aus zwei

- „It’s a matter of connection“ (Es geht um Beziehung und Verbindung).
- „It’s important to have someone to see me and what I can do“ (Es ist entscheidend, eine Person zu haben, die mich sieht und das, was ich kann). „It’s important to be valued.“
- Erfahrungen mit Eltern: Sie sagen alle, sie wollen Lerngeschichten. Denn: „You see a different child“ (Durch Lerngeschichten sieht man ein anderes Kind). Das ist besonders wichtig für Kinder, die aus irgendeinem Grund beeinträchtigt sind. Sie werden „children with special rights“ genannt (Kinder mit besonderen Rechten anstelle von „besonderen Bedürfnissen“).  
Egal, um was für ein Kind es sich handelt, es geht immer um die Beziehungen, die Interessen, die Emotionen, die Ausdrucksweisen. Als Beispiel dafür wird die Lerngeschichte von Leo erwähnt:  
His way of walking (?)
- The only rule is: What is fair in this place?

**Anregung für Forschung:** Wer und wie werden die Kinder, die mit Lerngeschichten aufgewachsen sind, später als erwachsene Person sein?

Dazu gibt es in Greerton schon Erfahrungen: Bei 150 Kindern, die mit 5 Jahren in die Schule kamen, wurde untersucht, welche Rolle sie in der Schule einnahmen. 8 von 10 Kindern hatten eine Führungsrolle (leadership role) inne. Ein Grund dafür wird im Selbstvertrauen (confidence) gesehen, das die Kinder durch Lerngeschichten bekommen.

Was Kinder später sagen, wenn sie ihr Portfolio anschauen:

- “Look at the things I could all do!” (Schau dir an, was ich alles machen kann!)
- “These people loved me.” (Diese Menschen haben mich geliebt.)

Ein Problem liegt darin, dass Erzieherinnen sich selbst oft nicht so positiv sehen, dass sie nicht so viel Selbstvertrauen haben. „If you don’t have agency yourself you will unlikely support children in having agency“ (Wenn Du selbst nicht beseelt bist von Tatkraft, wirst Du kaum Kinder darin unterstützen können, Motivation und Tatkraft zu entwickeln).

**Beispiele für Lerngeschichten** sind zu finden auf der Website des Educational Leadership Projects (= ELP) unter: <https://elp.co.nz/learning-stories/>

### **Neuigkeiten: Persönliche Mitteilungen von Wendy**

- Wendy hat ihre **Interviews mit Eltern** zur Bedeutung von Lerngeschichten, von denen sie beim Deutschlandbesuch 2019 berichtet hatte, fortgesetzt, doch leider die großartigen Ergebnisse noch nicht zu Papier gebracht. Das hat sie jedoch vor.
- Wendy ist dabei, mit SAGE zu verhandeln, ein **drittes Buch** zur Arbeit mit Lerngeschichten zu veröffentlichen.

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Abteilungen, einer für Infants & Toddlers (= Kinder bis 2 Jahre) und einer für Toddlers & Young Children (= Kinder im Alter von 3-5 Jahren). Seit einiger Zeit gibt es einen Neubau, in dem beide Abteilungen zusammengelegt wurden. Mehr Information unter: <https://greertonearlylearningcentre.com/>

**Lerngeschichten** waren auch noch **Thema in folgenden Symposien**, die ich nicht besucht habe:

## **Symposium**

**G4**

### **FOSTERING STUDENTS' PROFESSIONAL DEVELOPMENT BY RESEARCH ENHANCED TEACHING IN HIGHER EDUCATION**

Self-organised Symposium

**Chair:** Nadine Madeira Firmino, Hochschule Bielefeld – University of Applied Sciences and Arts (HSBI), Germany

#### **Enabling students to challenge and document children's curiosity**

**Helen Knauf** and Juliane Gerland, Hochschule Bielefeld – University of Applied Sciences and Arts (HSBI), Germany

#### **Ankündigung im Programm**

“The presentation introduces a conceptual approach for the training of early childhood pedagogues. The aim is to sensitise students to children's curiosity by working with empirical data. The paper builds on our previous research using video recordings of children's musical activities (Gerland & Stange 2022, Gerland 2022) and learning stories (Knauf 2017). Research-based learning has so far been used mainly in the training of teachers for schools (e.g. Brew & Saunders 2020), but hardly in training of pedagogues for ECE. The theoretical framework of our concept is provided by Bourdieu's (1974) habitus theory, which is further developed as a research habitus (Cloos & Lochner 2021). We exemplify how the research habitus can be fostered by the work with video recordings and learning stories about children's musical activities derive principles for research-oriented learning. Our research follows the rules of good scientific practice of the German Society for Educational Science (DGfE 2005, especially §4). Central to this is the principle of voluntariness and informed consent, ensuring anonymity and confidentiality and avoiding harm to the children, their families and the pedagogues. Our concept illustrates, firstly, that the analysis of film sequences of children's musical activities can increase students' perceptual capacity for curiosity. Secondly, we show that the analysis of learning stories can be used to express appreciation for children's curiosity. Our contribution offers concrete impulses for the training and further education of early childhood educators. From this we derive general conclusions for the professionalisation of the sector.

*Keywords: ece teaching, esearch-oriented teaching, video analysis, music, learning stories*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.”

**G25**

### **INDIGENOUS KNOWLEDGE SUPPORTS CULTURALLY SUSTAINING LEADERSHIP, TEACHING AND LEARNING; EXAMPLES FROM AOTEAROA NEW ZEALAND.**

Self-organised Symposium

**Chair:** **Emma Parangi, Educational Leadership Project, New Zealand**

#### **Ankündigung im Programm**

“Indigenous knowledges have been drawn upon to enrich education across the globe (Smith, 2012). In Aotearoa New Zealand, bicultural curricula and educational leadership which integrate Māori knowledge are the national aspiration. The research shared in this symposium engage Kaupapa Māori (foundational) conceptual frameworks to explore specific examples of the integration of Māori knowledge into ECE. The common thread of the Māori ontological tools of Wānanga (generative discussion) and Pūrākau



(cosmogony through storytelling), illustrates the transformative and democratizing power of sharing story. Māori epistemology, as with many Indigenous cultures, has been created and shaped through these oral traditions (Hemara, 2000). The research communities involved provide insights into the potential outcomes for children, teachers and families, when Indigenous knowledge and methodologies are implemented from the foundations of pedagogy and practice. Teachers who know themselves deeply, and seek supported access to Māori knowledges, can provide culturally sustaining learning opportunities for all children.”

**Exploring the weave of indigenous wisdom and narrative assessment - The power of story to reclaim, honour and transform.**

**Stories from Aotearoa/ New Zealand.**

**Maria Sydney, Educational Leadership Project, New Zealand**

“This research inquiry aims to support teachers to better understand Indigenous knowledge systems and to strengthen the application of this knowledge in learning stories in ways that affirm Māori identities. Research has shown the barriers that exist for teachers implementing Indigenous knowledge in practice which include teachers' connection to their own cultural identity and cultural responsiveness. (Hohepa et al., 2010; Macfarlane et al., 2014; Lave and Wenger, 1991; MSD, 2016) and (Mahuika, Berryman, & Bishop, 2011). This research uses a Kaupapa Māori framework defined as research by, with and for Māori (Walker, et. al., 2006).

Learning stories (Carr & Lee, 2012) and waananga (Mahuika & Mahuika, 2020), a traditional method of Māori knowledge transmission, will be the primary methodologies used to gather data from the research community. Consent forms and information sheets were provided to all participants. Consent was negotiated with the children involved and participants could withdraw from the research at any time. Participants and I co-operatively created a shared kawa (set of protocols) of which guided the ethics of our engagement together. The findings evidence the need for teachers to engage in critical reflection to strengthen the application of Indigenous knowledge. As a result, learning stories can be used to affirm children's identity and uniqueness. The normalisation of Māori ways of being, doing and knowing contribute to the participation and success of Māori learners. This coupled with Learning stories can be used to capture these moments and highlight future pathways for transforming communities through the power of story.

**Keywords:** *indigenous knowledge, cultural awareness, learning stories, identity, empowerment*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.”

**Modern Mātauranga; Ancestral wisdom applied to pedagogical leadership in early childhood education in Aotearoa.**

**Emma Parangi, Educational Leadership Project, New Zealand**

“This paper examines Indigenous conceptualisations and embodiments of leadership through elevating the voices and stories of Indigenous women leading in ECE. Research exploring Māori leadership has been woven into education through curricula and regulations (Spiller 2012; Barnett & Te Wiata, 2020; Hohepa, 2013). Indigenous models have been implemented in ECE however these are often designed and delivered in a top down approach. This research sits in the gap of leadership models created by Indigenous leaders currently leading. This research uses a Kaupapa Māori framework, defined as by, with and for Māori (Walker, 2006) where the researcher and research community are Tangata Whenua or Tangata Moana (have ancestry of Aotearoa or the Pacific Ocean). Māori ontological methodologies are

integral within Kaupapa Māori frameworks. Wānanga will be used both to generate and gather data from the research community. Wānanga, a complex inter-relational discussion method, consists of inherited traditions, centered on local ways of knowledge transmission and creation (Mahuika & Mahuika, 2020). Informed consent is negotiated and recorded throughout the process of Wānanga, as whanaungatanga (establishing and maintaining relationships) is central to all Kaupapa Māori research (Williams, 2015). This study is ongoing. Current findings will share autoethnographic data from the researcher's own experience as an Indigenous leader in ECE (Parangi, 2019). Knowledges shared in this research will expand on the understandings of complex ideas and realities for Indigenous educators, including the relationship of Indigenous practitioners to the colonial education system, and how to better center, recognise and compensate their contributions to ECE.

**Keywords:** *indigenous knowledge, leadership, co-creation, community, heritage methodologies*

This application discusses an ongoing piece of research and findings may be preliminary/emerging.”

**Trissessment: Learners & families leading assessment**  
**Roberta Skeoch, Educational Leadership Project, New Zealand**

“This research investigated how the Trissessment approach, modelled on traditional Maori knowledge, can be used to amplify the voices of children and their families in the assessment for learning process. Data was drawn from a pilot project (Cown, Werry & Skeoch, 2016) and research completed as part of a two-year NZ Ministry of Education Teacher-Lead Innovation Fund project completed in 2018. (Cown, Werry, Hollis & Skeoch, 2018) The Trissessment approach underpins this research and includes Tautuutu, a traditional Maori framework used to enhance ‘mana’ - a core value of the Māori world and of central importance to Te Whāriki (ECE curriculum, NZ) Trissessment includes children, family and teachers in the assessment process. An action research approach was used. Interviews and thematic analysis of children’s narrative contributions were completed. Informed consent was gained from families and teachers with special attention given to gaining children’s consent. Ethical approval was granted by the Toi Ohomai Institute of Technology Research Committee. Teachers reported significant shifts in their practice including deeper listening and talking more to children about their thinking and learning. The order of the process saw parents contributing to- rather than just commenting on, assessment for learning. Teachers felt they gained a richer understanding of children and their families and parents felt included and empowered by the process. The Trissessment approach can be used as an effective tool to build relationship between teachers, children and parents to support belonging and agency and enable all to contribute to learning.

**Keywords:** *indigenous knowledge, assessment for learning, agency, empowerment - mana, collaboration*

This application discusses a completed piece of research.”

**D28**

**EVALUATING, INTEGRATING AND PROMOTING STEAM PRACTICES**

**Chair:** Linda Bosman, Stellenbosch University, South Africa

**Reflecting South African preservice teachers’ voices on implementing inquiry-based science/engineering education (IBSE) in foundation phase (FP) classrooms**

**Linda Bosman, Stellenbosch University, South Africa**

## Ankündigung im Programm

“This research aims to reveal South African pre-service teachers’ (PT) experiences of hands-on, minds-on IBSE training and implementation in Grade 1-3 classrooms. Inquiry-based STEAM education in early childhood is a curriculum priority worldwide (Lin, et al., 2021), yet teachers generally struggle to implement IBSE in practice (James et al., 2019). Quality experiences during the formative years are critical to promoting children’s STEAM development (Murcia, et al., 2022), hence teachers must be specifically prepared (Bansal, 2021). Socio-constructivist theory (Vygotsky, 1987) was applied to interpret the PTs experiences of IBSE implementation as co-constructed within the university and school contexts. An interpretative, multiple case study design (Stake, 1995) with observation-in-action, learning stories-and-reflection, and productions was used to co-construct data with three PTs from different city schools in South Africa. A thematic inductive data analysis process was followed. Ethical clearance, gatekeeper permission and participants’ informed consent were given. Principles of autonomy, non-maleficence, beneficence and justice were applied. PTs constructed strength-based child views (e.g. child-scientists) and competencies as IBSE facilitators; and revealed context-specific factors affecting the implementability of IBSE in FP classrooms. Suggestions are made for supporting teachers’ construction of essential competencies to implement IBSE in FP practice during the critical early years.

**Key words:** *inquiry-based science education (IBSE), preservice teachers’ voices, foundation phase, STEAM, child views*

This application discusses a completed piece of research.”