

Leading Teaching and Learning with Pedagogical Documentation

a resource for early childhood leaders



Government of South Australia
Department for Education

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INTRODUCTION TO THIS RESOURCE

This resource has two components: A downloadable booklet and an online platform, with hyperlinks to film clips, research papers as well as examples of pedagogical documentation from the state.

This resource was co developed in 2019 with two South Australian preschools who embarked on a journey to explore formative assessment and make visible their STEM learning (science, technology, engineering and mathematics) through the process of Pedagogical Documentation.

The intention was that they would contribute their thinking to this material, in order to support other educators to enact formative assessment across the curriculum, through Pedagogical Documentation.

These two preschools were chosen because of their existing strengths and their willingness to be challenged and share their learning.

The resource is thus, a part of a narrative of sites that are interested in exploring Pedagogical Documentation.

As you read this booklet you will find that there are video and document links to click on to enable exploration of the material in more depth. We encourage you to click on all the links as you come to them.



Introduction

Watch this film to get an overview of the research. (Click on the video icon to view online)

The Project

Two preschools, Pennington Children's Centre in Adelaide and Madge Sexton Kindergarten in McLaren Vale explored how they could use formative assessment to inform and make visible STEM learning at their preschools. Both preschools are 'Reggio-informed', having been involved in projects with Carla Rinaldi, exploring the philosophies and practices from Reggio Emilia. Not all staff members had engaged in that professional learning, but the insights were shared as part of ongoing reflective practices. Both preschools are supported by experienced Early Childhood Leaders.

Alma Fleet, a consultant facilitator from Semann & Slattery mentored the educators from both preschools to further their understanding of formative assessment through pedagogical documentation. Alma and Semann and Slattery had previously assisted in delivery of a state-wide professional learning initiative in 2018, focussed on Learning Design, Assessment and Reflective practice (LDAR).

Working with the relevant Early Childhood Leaders (ECL) and members of the team from Early Years Learners, Learning Improvement, Alma facilitated:

- site visits to both preschools - at least one a term
- regular site specific tele-conferences - once a month
- email and phone correspondence as necessary.

What is Pedagogical Documentation?

Pedagogical documentation is grounded by being in a relationship and being in the present; it is community based - requiring listening, research and respect for 'the hundred languages' of children



What is Pedagogical Documentation and why is it important?

Watch this film for an introduction to Pedagogical Documentation. (Click on the video icon to view online)

Alma Fleet

As an Honorary Associate Professor at Macquarie University, Sydney, and consultant with Semann & Slattery, Alma has particular interests in practitioner inquiry and pedagogical documentation as empowering vehicles for educational change. She is committed to working with educators interested in rethinking professional practice across a range of age groups in diverse settings. She is constantly learning from and enjoying her work with Aboriginal and Torres Strait Islander peoples. Her practical experiences lead her to an ongoing interest in tensions between constraints and opportunities in various educational settings. She enjoys thinking with others and sharing at national and international conferences. Her publications include journal articles, 3 books unpacking pedagogical documentation, another on practitioner inquiry, and contributions to a six-volume book series on issues in early childhood pedagogy.

Using this booklet

This booklet is broken down into sections:

- An Introduction to Mentoring
- The Enablers
- Introduction to the sites
- Dealing with Data
- Analysis
- Cycles of Planning and Implementing
- Evaluation and Sharing
- Glossary of Terms
- References
- FAQs
- Attachments



These reflect core components of the processes being explored.

The material can be used by individuals, small groups or large teams, as reading, workshop, or reference material.

Each section includes information, narratives, and reflection points, and is accompanied by links to videos and documents you can click on for more information.

Actual conversations are included so others have a window into the processes that support this form of professional learning.

Each section has three components:

- a general introduction to the concept being explored in this section
- a sharing of the experience at the two sites
- an 'in conversation' section with Alma Fleet (the consultant facilitator who undertook mentoring at the two sites).

AN INTRODUCTION TO MENTORING

The process of supporting educators to use Pedagogical Documentation to make STEM learning visible is a type of mentoring. The work with the two preschools outlined in this booklet was undertaken via a mentoring relationship.

What is mentoring?

Mentoring has been defined as 'an alliance of two people that creates a space for dialogue that results in reflection, action and learning for both' (Rolfe-Flett, 2002, p. 2). An alternative definition is 'mentoring is the process by which an expert person facilitates learning in the mentee through arrangements of specific learning experiences' (Tovey, 1999 cited in Rolfe-Flett, 2002, p.2). Cummins (2004) suggests that mentoring is not a supervisory relationship, but rather, it is an opportunity for colleagues to engage in reflective dialogue that can enhance feelings of empowerment and success.

Within the early childhood sector, mentoring may be understood as a leadership strategy for optimising learning and professional development (Rolfe-Flett, 2002) and is viewed as a viable strategy for the professionalism of early childhood staff (Rodd 2006).



Early Childhood Leaders as Mentors

Watch this film to see how some Early Childhood Learners navigated their relationship with preschools they were mentoring around Pedagogical Documentation. (Click on the video icon to view online)

Characteristics of successful mentoring

Ebbeck and Waniganayake (2003,p25) suggest that the first step in developing a successful mentoring relationship is having credibility and gaining trust, both of which they believe are essential for creating a climate of change. In the early stages of mentoring it is critical that everyone involved is clear about goals and obligations to each other by staying in touch and communicating with each other openly.

Mentors need to have certain qualities and skills. They need to:

- be good at what they do
- be a good teacher as well as a good practitioner
- to be able to motivate/inspire
- be flexible and available, especially when most needed.

For Rodd (2006), successful mentors display:

- empathy and understanding;
- an interest in lifelong learning and professional development;
- sophisticated interpersonal skills;
- cultural sensitivity;
- an understanding of the role of the mentor; and
- considerable early childhood expertise.



Other attributes needed include authenticity, gentleness, patience, consistency, positive attitude, teachability and enthusiasm.

Rodd also identifies certain skills associated with effective mentoring which include:

- ability to engage in active listening;
- ability to observe affectively;
- ability to undertake reflective conversations; and
- having an awareness of different learning styles.



Learning to listen

Read this document about how one can learn how to listen as a mentor. (These materials are available on Plink.; search LDAR)



Motivating Educators

Watch this film to see how Early Childhood Learners worked to motivate educators to explore Pedagogical Documentation.
(Click on the video icon to view online)

Phases in the mentoring relationship

There are five phases that characterise most mentoring relationships. These include:

PHASE 1: Initiation This phase includes the following: decision to proceed or not; definition of scope of the relationship; broad goals determined; roles clarified; logistics agreed; commitment stated.

PHASE 2: Development Objectives may be specified; action plans developed; activities undertaken.

PHASE 3: Maturity Action plan completed; objectives achieved, or not; success and satisfaction evaluated; closure or continuance agreed.

PHASE 4: Disengagement Closure and celebration or; lack of closure, unresolved issues and/or mourning.

PHASE 5: Redefinition Continuance of mentoring, and a return to phase 1 or 2 or; discontinuance or current mentoring but a redefined relationship continued or; no continuance of the relationship.

References

- Ebbeck, M & Waniganayake, M. (2003) Early childhood professionals: leading today and tomorrow, East Gardens NSW: MacLennan and Petty.
- Rolfe-Flett, A. (2002) Mentoring in Australia: a practical guide. Frenchs Forest, NSW, Prentice Hall., Pearson Education.
- Rodd, J. (2006) Leadership in Early Childhood, 3rd ed., Crows Nest, NSW.: Allen & Unwin.

THE ENABLERS

In any early childhood site there are enabling factors which might support or inhibit that site's effective engagement with Pedagogical Documentation as a component of formative assessment. This section explores those factors.



The Enablers

Watch this video to learn about the factors that might enable effective engagement with Pedagogical Documentation.
(Click on the video icon to view online)

The Mentoring Process

“Once we understand our beliefs and knowledge, we can make considered, wise choices in our decision making in planning for, supporting and reflecting on children's learning.” (DEEWR 2010 p10)

Our ways of working are informed by our beliefs, values, and understandings of children and the ways they learn as well as by the mandated frameworks for the sector. In South Australia, core documents and frameworks include the National Quality Framework and *National Quality Standard*, including the *Early Years Learning Framework* and its planning cycle. Current policy documents also include site-based *Quality Improvement Plans* and the *Literacy and Numeracy Guidebooks*. When teams recognise that these various accountability frameworks should not be seen in isolation, but can be approached through 'integrated thinking', working with Pedagogical Documentation as a frame of reference becomes empowering.

As with any strategies that support enriching and effective teaching and learning processes, there are contextual factors which can enhance or constrain growth in professional practice. This section invites the mentor and the site to step back from the daily hustle-bustle to take a reflective stance.

When a mentor is intending to work with a site it will be helpful for them to clarify in their own mind, and in conversation with staff teams, what factors currently contribute to or inhibit the site's work with Pedagogical Documentation. In the following material, note that there is a focus on **centre culture** and **infrastructure**. Finding a non-threatening way to find out about the current situation will be useful – especially if you perhaps hope to change it. If you are established in your role with a site, you may already be clear about the site's culture and infrastructure– although most places find they are 'in transition' with these key areas.



Cultivating a Culture Open to Learning

Watch this video to learn about how having a culture of critical reflection helps to make Pedagogical Documentation work. (Click on the video icon to view online)

Consider how key contextual factors influence pedagogical practices, particularly as they relate to the site's philosophy.

It will become clear that 'centre culture' – while embracing the cultures of people in the site – must also grow a climate of curiosity and intellectual engagement in order to be able to offer young children and their families an optimal educational experience. Building on the strengths-based orientation of the *Early Years Learning Framework*, the pedagogical dispositions that support Pedagogical Documentation can be unpacked.



Teaching Thinking not Giving Answers

Watch this video to understand another key factor towards making Pedagogical Documentation flourish in your site – the difference between imparting knowledge and encouraging thinking. (Click on the video icon to view online)

The two preschools that were part of this project were invited to step back to rethink their approaches to STEM learning, including the impact of their existing routines, timetable, staff meeting structures and current ways of documenting. Your thinking may highlight aspects of your site's planning processes and structures that may require further consideration to support evolving pedagogical practices. This may include seemingly mundane aspects of daily routines, as well as rethinking staff meeting times and agendas, and choices about what to record before, during and after learning encounters.

Site contexts and agreed philosophies will inform and be informed by Pedagogical Documentation. When our thoughts and actions are made visible and are part of the processes that we critically reflect on, we better understand our decisions and why we do what we do. The processes of Pedagogical Documentation are multi-layered and philosophically-based. This way of working continuously evolves as it is responsive to the thinking and learning of both children and educators over time.



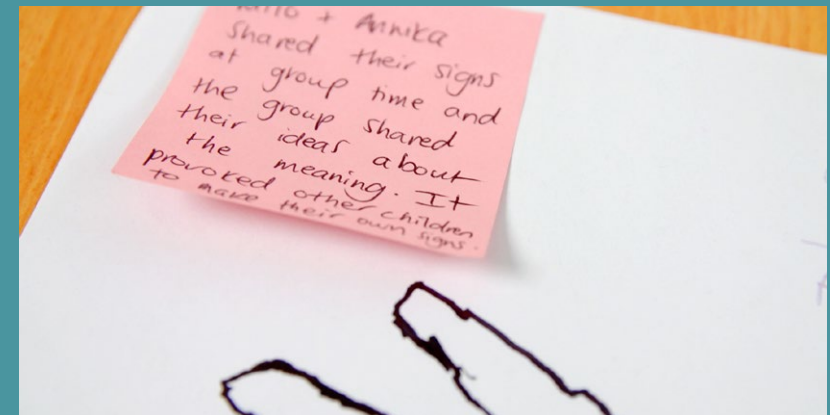
Pedagogical Documentation as a rich source of assessment

For an overview of Pedagogical Documentation – definitions and philosophical positioning. (These materials are available on Plink.; search LDAR)

It will be helpful if people who have participated in professional learning related to Pedagogical Documentation are able to share their thinking across the team. Much has been written about this way of working, but understandings are unfolding all the time. Sharing the stories of the preschools from this booklet will help move this thinking forward. This may help people recognise that 'Ped Doc' is not just something one 'does' to meet accountability requirements. It becomes a way of being which contributes to a responsive and respectful centre culture, while sharing understandings about children's learning and the pedagogical strategies that support that.

Enablers include multiple factors related to contextual information including:

- a center culture open to rethinking established practices and working collaboratively to support alternative approaches;
- flexible infrastructure that is open to varying timetables and grouping arrangements;
- inclusive practices that welcome diverse perspectives and contributions to planning and recording; and
- openness to a sense of joy and a sense of humour in challenging situations!



Strengths based approach to education

A cornerstone of working in this way is having a strengths based approach to education. (Click on the video icon to view online)



In Conversation with Alma

In mentoring, it is important to establish common understandings of ways of working and site values. To that end, both preschools were asked to bring to the table examples of current documentation and questions they might have about Pedagogical Documentation.

Mentors must work to:

- plan time to share and discuss staff philosophies, and review these in the context of the site philosophy;
- establish group norms and conditions that encourage safe rigorous debate; and
- develop shared staff understandings – in this case of Pedagogical Documentation.

The opening conversation and introductions may include:

- “Can we share a little about who’s working here at the moment? Maybe from each of you a little about who you are, your background, your awareness of/interest in Pedagogical Documentation??”
- “Tell me about your site – maybe a bit about the history, what you consider to be special about this place.?”
- “What is working well here?”

Being explicit about the goals that you each have for your time working together is also valuable.

INTRODUCTION TO THE SITES

Pennington Children's Centre and Madge Sexton Kindergarten were chosen for this project because of their existing strengths and their willingness to be challenged and share their learning. Excerpts from conversations are included in this booklet (and in the linked videos) to give people a glimpse into the way these processes unfolded at each site. The generosity of the educators in sharing their thinking offers others a chance to consider their own perspectives and decisions regarding their work with Pedagogical Documentation.



Pennington Children's Centre



Madge Sexton Kindergarten

Meet Pennington Children's Centre

Pennington Children's Centre is a newly developed integrated children's service next to a school in a culturally diverse community in Adelaide. They welcome two groups of preschool children, with an enrolment of approximately 62 children as well as housing occasional care on site.

- Jessica, the director, participated in the state-wide professional learning initiative, delivered in 2018, focussed on Learning Design, Assessment and Reflective practice (LDAR) and has diverse experience including teaching in the Anangu Pitjantjatjara Yankunytjatjara (APY) lands.
- In addition, two early childhood teachers, Tamara and Michelle were also engaged in the project.
- Linda, one of the early childhood workers engaged in the project, was experienced working alongside children with diverse abilities.
- Many other staff were also involved in discussions related to this project.



Meet Madge Sexton Kindergarten

Madge Sexton is a stand-alone preschool in a wine region, serving approximately 110 children. There are 7 continuing staff, including the director, early childhood teachers, early childhood workers and casual relief staff.

- At the time of this project, the director Tennille was new to her role, although experienced on the site having previously worked as the early childhood teacher. She had also participated in the Learning Design, Assessment and Reflective practice (LDAR) professional learning in 2018.
- Anita, her colleague in this project, is an experienced reception teacher who is new to the preschool environment this year.
- The early childhood worker who was most involved in this project previously worked in early childhood sites in the UK.

GETTING STARTED

If you are responsible for mentoring a team, it is important to review your knowledge of the site's staffing profile, being aware of people's roles, general comfort with the process and any previous involvement with professional learning focussed on Pedagogical Documentation. A mentor needs to work out where to start from the centre's existing documentation.



Starting Somewhere

Watch this very short clip of Early Childhood Leaders who talk about starting somewhere! Having watched this film where could you start with this work? (Click on the video icon to view online)

The Mentoring Process

Less formal conversations are helpful to set the scene and to agree on purposes for meeting. In the two case studies outlined in this booklet, the agreed goals were to think further about Pedagogical Documentation as a tool in the formative assessment of STEM thinking, with the intention of trying to clarify steps and stages for colleagues across the sector. These sites were open to provocations.

If you are responsible for mentoring a team, it is important to review your knowledge of the site and their involvement to date with Ped Doc. Also, review your own knowledge about Pedagogical Documentation.

Sharing your thinking with someone else in a similar role is useful to clarify approaches and identify possible stumbling blocks along the way.

In your opening sessions keeping an eye on the clock can be useful – to balance the time across settling in, open discussion and forward planning. Some circular conversations can give people time to gather their thoughts, but naming any concerns to inform next steps planning concerns and proposing next steps needs to fit into the available time.



LDAR on-line materials

Reviewing these materials and resources may help you refresh your knowledge about Pedagogical Documentation. (These materials are available on Plink.; search LDAR)



Equipping yourself with knowledge

Watch this short clip of what Early Childhood Leaders recommend to equip yourself with the knowledge to work with Pedagogical Documentation. (Click on the video icon to view online)

The Pennington Story



Pennington's Enablers

Hear about the philosophy and other enablers that underpin Pennington's work. After watching this film consider whether your site's philosophy and practices align with Pedagogical Documentation as a way of working? (Click on the video icon to view online)

Pennington's exploration of Pedagogical Documentation has evolved over a number of years. It began when members started to reflect on questions related to the evidence of children's learning. The team then participated in the LDAR initiative in 2019 and with the support of an Early Childhood Leader (ECL), the Pennington team began a journey of investigating diverse forms of documentation alongside the philosophies from Reggio Emilia which had been introduced through the South Australian initiative Project Quattro.

In describing current enabling aspects of organisational infrastructure, the Director explained that team meetings were being held weekly and included conversations about children who are/were struggling and potential planning decisions. Existing practice included documentation being shared at the end of the day on every third Tuesday. At these meetings the educators explored links to goals and the Learning Stories that they were collecting for children and their families.

A unique aspect of this centre is the number of transient children. The team often reflects about ways to strengthen their relationships with children and their families. This journey of inquiry includes reviewing the existing philosophy with families and incorporating newer perspectives built on collaborative dialogue. At the beginning of the first term, following a brainstorming session, the team establishes a set of goals. As they get to know children, they begin Learning Stories in the style of letters to children ("I have noticed that you..."). An important part of this process is that drafts of these Learning Stories are placed in a box in the staff room for others to comment on and respond to.

Teachers at Pennington also have their own journals where they keep ongoing notes of their thinking and planning.

Recognising that a focus for this project embraced children thinking scientifically and mathematically, the team asked questions about:

- How can we identify a child's theory and then sustain it?
- Where are we missing noticings about children's engagement with STEM thinking?
- Where do we go next?

Michelle began the conversation by sharing her noticings of a mini-project in which 4 boys had been engaged for long periods of time trying to put together loose parts, but were frustrated: *"Nothing goes together!"* It was clear that they didn't want to just play around with these materials, they wanted to 'construct'. These boys were frustrated that the pipes didn't fit and they actually wanted to create something 'real'. Engaging with STEM thinking requires children to identify a problem and offer a solution. They decided that Thomas's dad should go to Bunnings to get pipes that would fit!

Recognising the children's authentic fascination with a concrete problem, Michelle asked the team:

- "What are our intentions for this group of boys?"
- "Where do I focus my thinking?"
- "What might be my next step?"



The Madge Sexton Story

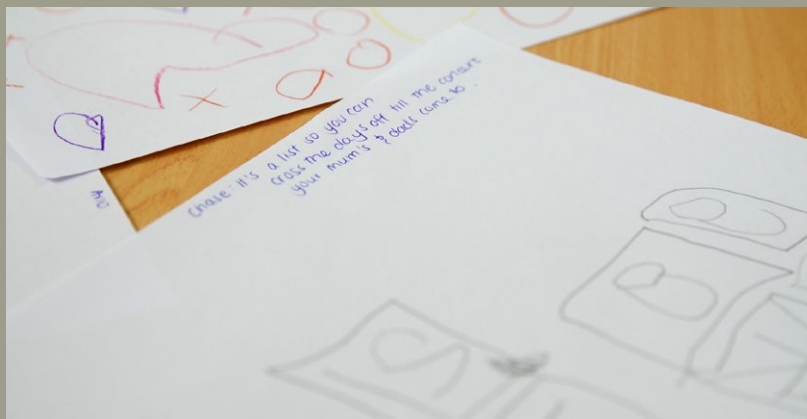
At Madge Sexton, the educators explained the importance of learning goals being established through conversations with families and children at the beginning of the year. As the work unfolded throughout the year this became a point of reference in conjunction with the site's focus on dispositions. The team noted their intention to engage with families about learning by asking questions such as: *"We've seen [that] here and wonder if you have noticed [it] at home?"*

Children's goals were included in children's learning portfolios which were sent home for sharing and comments. Pedagogical approaches across the site included a focus on children's 'interests' and inclusion of 'community research walks' which have been a longstanding practice to assist in connecting the site with the local community. An engaged parent group were comfortable sharing their perspectives with the staff team, through experiences such as a 'Learning Journey' wall which summarised current investigations and activities.

The round table discussion that began the mentoring at Madge Sexton threw up some questions regarding their current documentation, with one person musing about the questions the children ask. Anita wondered aloud: *"Who are we documenting for?"* She admitted that she was perplexed about what the children might be getting from their focus on the (conscientious and extensive) documentation. In considering one set of wall panels, she commented: *"They look beautiful, but what did the children get out of it?"* Tennille (the new director) also questioned: *"What should we document? You can't document everything!"* She suggested that what they were recording was more of a history of what the educators were doing rather than a collaborative effort with children.

Laura noted that they have extensive notes, but maybe they should be including more theory – perhaps questioning: *"Why we do the things the way we do?"* There was general agreement that they were not really sure what was meant by 'Pedagogical Documentation' but were happy to explore the idea. Laura suspected it had to do with getting a clearer view of the child.

In sharing some current records, Anita reflected that: *"This is mostly about observing them; I think Pedagogical Documentation is more about interpreting what we see."* One of the others responded: *"Yes, but then what?"*



What data to collect?

This video shows educators from Madge Sexton talking about where they started with collecting data. At the end of the day the moral of the story is to start somewhere. (Click on the video icon to view online)



In Conversation with Alma

Pennington

When listening to the introductions and explanations of the Pennington context, I was listening for areas of confidence, doubts and potential conflicts amongst the team. Sitting around the table, it was important to try to get a sense of centre culture and ways of working. When there were pauses,

I sought clarification. I asked questions such as:

- *“Could you tell me a bit more about that?”*
- *“Would one of you be willing to show me your ‘learning story box’ and your journal so I can have a sense of what’s being valued here?”*
- *“Is there a recent example of a Learning Story you could share? What was your thinking around the material you chose to include here?”*

A key intention was to foreground the idea that documentation includes choices — choices of what to include or exclude and what format/tone is used to convey the information.

Questions that enabled reflections included:

- *“I know you’ve been working with Learning Stories for a while here. Could you share with me what you find valuable about them? Are there any issues with them?”*
- *“What do you see as similarities or differences between Learning Stories and Pedagogical Documentation?”*
- *“How might you each define Pedagogical Documentation at the moment?”*

Listening to their answers I then asked:

- *“What’s worrying you?”*
- *“What questions are on your mind about Pedagogical Documentation?”*



Each contribution was accepted and noted, without trying to 'answer' questions but rather to collate them for a later collaborative discussion.

Noticing some anxiety around the table as to whether they were 'on track' with their work (despite reassurances that they 'couldn't be wrong') and being keen to take my cue from the educators as to an accessible and valuable place to begin the collaboration, I asked: *"What's something that has come up that you found surprising or interesting?"*

They agreed that the story of 'loose parts play' was an exciting area to explore and that 'measurement' might be central. Listening, observing and questioning, I agreed that there were untapped possibilities with the loose parts, including a focus on each child's approach to problem-solving.

To support the process of documentation I asked the following questions:

"Do your notes include:

- *a list of the materials that were available?*
- *excerpts of the sequence of the conversations?"*
- *notes that will help when you share your thinking about which child is initiating, who is clarifying the problem, how the solutions are being explored?"*

This process builds on the strengths already within the site and sets the scene for further extension.



In Conversation with Alma

Madge Sexton

It can be useful to begin with introductions, maybe a cup of tea. A mentor needs to try to understand the context. It could be useful to ask:

- *“What are the things that are important to you as a staff team?”*
- *“Is there anything particular about this site and its history?”*
- *“How do you currently plan and record your intentions and children’s ideas?”*
- *“What does a typical day look like?”*
- *“What are you feeling confident about with your approaches to Pedagogical Documentation – (in this case, particularly with regards to formative assessment with STEM thinking)? ”*

Listen carefully to support and be expectant of open communication, enable a free-flowing conversation. Avoiding interrupting requires restraint! Handing the question back also increases possibilities for clarification and inviting different points of view:

- *“That’s an interesting question. Can you tell me more about your thinking?”*
- *“I wonder what’s helping you make choices about that?”*

Another useful provocation here is:

- *“What is it that you are you seeing? And what might you be missing?”*

Having this conversation with the Madge Sexton staff made it clear to me very quickly that this was a confident staff team, willing to share their thinking as well as their concerns about what they might need to rethink or ‘do better’.



Enabling educators to admit confusion can be a stronger starting place than a (potentially) false assumption that everyone around the table shares the same expectations and definitions related to their work.

Be mindful that mentoring here requires in-the-moment decision-making. For example, enthusiastic agreement with one staff member can be seen as dismissing the opinion of another or 'cutting off' the opportunity for someone to offer an alternative point of view. The process is about community collaboration! Trying to decide if the enablers are in place (as they are in the two sites documented in this booklet) is important, as well as working alongside teams to see how their work links in with their centre philosophies. For example asking:

- *"How do you communicate/ share your site philosophy with parents, new staff and community?" makes assumptions!*
- *Perhaps preface that thought with: "Have you been able to share your site philosophy with parents, new staff and community?"*

DEALING WITH DATA

The issue of data management/ organisation is a challenge for everyone in Pedagogical Documentation. It may be useful to conduct an audit of all the reporting/data recording that is happening at the site to explore if the data explores children's learning or is used to inform learning design.



What does data collection mean?

Watch Alma Fleet explain what data collection means in the context of collecting material for Pedagogical Documentation.
(Click on the video icon to view online)

The Mentoring Process

A useful place for mentors to start this part of the process is to meet to share data currently being collected. The data will vary widely, from mandatory health and enrolment figures to tables of phoneme or number knowledge, to 'Learning Stories.' It is critical to establish what words mean in different contexts: the concept of 'data' will not resonate with some educators. Because information about children's learning is required by law, something will be available to be put on the table!

Curiosity and a positive reaction to whatever is offered is important for growing a trusting relationship, but seeking clarification about the history of data collection procedures and purposes for current practices is equally important.

It may be useful to conduct an audit of the all the reporting/data recording that is happening at the site as many people are collecting more information than is helpful. Think together about:

- whether the data develops or explains children's thinking; and
- if the data is used to inform learning design.

The Pennington Story



Starting to collect data

Watch Tamara Homes from Pennington discuss where they started collecting data. (Click on the video icon to view online)

Pennington's team had a number of niggles that included wondering about:

- the relationships between learning stories and Pedagogical Documentation;
- how to revisit children's theories;
- how to complicate children's thinking; and
- how to find and analyse patterns of learning over time.

These niggles encapsulated a move from being totally 'child-based' to incorporating 'ideas-based' pedagogy. All relied on having meaningful data to inform thinking and serve as a baseline for demonstrating growth and development.

The question about Learning Stories was important at Pennington, as this practice was embedded in the work of educators and families' expectations. This was a time to pause to revisit the operating definition of Learning Stories. The term 'Learning Stories' is interpreted differently across the education and care sector, and rarely implemented as envisaged by Margaret Carr and Wendy Lee (2012). Potentially, these stories might be Pedagogical Documentation (e.g. analysing ongoing investigations of something that has intrigued a small group of children), but often they are labelled photographs with a 'daily diary' style entry by an educator or simply an anecdotal record being shared with families.

As their version of Learning Stories was important to the educators at Pennington, the practice was continued, but with fewer stories being recorded and those that were, being recorded in a more analytical frame. They often show the focus child in interaction with others, thereby capturing thinking and the social construction of knowledge rather than simply reporting the educator's attitudes about a child's engagement.

In thinking about what they had tried, the Pennington educators shared that they were listening to and documenting children's questions in the everyday environment.

In this research they chose one such question to revisit – the question of a particular child, Emily, which was: “What time do insects go to bed? Is it night-time like us?”

When recorded, this thoughtful query becomes data:

- It could be recorded (e.g. in a 'day-book') and left as an example of children's curiosity or in a record of this particular child's inquisitiveness.
- It can also reflect an awareness of assessment elements, perhaps regarding Outcome 2 (Children are connected with and contribute to their world) and Outcome 4 (Children are confident and involved learners) from the Early Years Learning Framework.
- It may also illustrate mathematical understanding (time of day linked with relevant behaviour: night-time and bed-time). It might also springboard an ongoing investigation as un-folded here.

Upon reflection, Tamara (one of the Pennington teachers) realised that

“I was talking with children about their thinking and drawing and kept offering so many possibilities! I need to step back and let them do the thinking”.

This was a wise moment. The Mentor affirmed Tamara's decision, noting that there was a tendency to not include adult thinking when documenting, despite the fact that this component of data collection is important! Data collection can easily turn into reporting formal 'teaching' rather than 'listening' to what children are offering/puzzling about.



Using the data

Watch Tamara talk about using the data for professional learning.
(Click on the video icon to view online)

It seemed that this educator was becoming aware of how often adults shape the direction of the investigation pursuing an educational outcome (such as labelling portions of the insect) before trying to understand the child's intention. After discussion around the table, the way forward seemed to be to acknowledge and affirm the child's question before inviting additional general comment from the child, and then to focus on the specifics if appropriate. Analysis of components across several drawings might come later.

The recording of conversations at the drawing table also provided data for later revisiting and analysis. The associated videos, educator notes and planning sheets are all data that can be mined for relevance, depending on the focus of the investigation by educators, and the 'niggle' that is being investigated. Where multiple forms of data are available, there is greater potential for understanding children and sparking a trajectory of rich pedagogy.

Invitations to the children to revisit the ideas and draw again after further conversations and investigations provided more (dated!) data about children's increased understanding of the physicality of insects as well as their dawning conception of themselves as scientists. Combined, this all contributes to evidence-based practice.

A small group of children were invited to further pursue this investigation. Their drawings of insects demonstrated their scientific knowledge of these life forms as well as contributing data for discussion by educators and sharing with families.

Jess (the director) noted that:

"The first day we regrouped, we were trying to scribe what the children were saying and forgot to write what the educator was saying to prompt children, so the next day we tried video!"



Using data to plan for learning

This film shows how Pennington used the data to plan for learning as a team.
(Click on the video icon to view online)



The Madge Sexton Story

In a frank exchange, a torrent of issues emerged in conversation with Madge Sexton about data. Anita, one of the teachers, stated:

- *“We have been mining through all the data we have collected, and the STEM noticings we have seen. We are worried – what is the thinking? Do we know enough about STEM? We are not sure where to start.”*
- *“We have images of the children. For example, building a cubby house – this has maths and engineering in it. We saw the children integrating their ideas – design/ make/ appraise...”*
- *“We thought it would be easy but it is not. We are noting the STEM components, documenting the language, but some children are capable, already!”*

Tennille (the Director) also commented that they weren't sure what they were looking for in the Pedagogical Documentation. They didn't know how to 'mine the data' – how to get it organised and analysed to get the most out of it.



Mining the data

Watch Tennille talk about their process of mining the data for information. What the educators at Madge Sexton started to understand was how rich and deep the learning was for the children with what they were doing. (Click on the video icon to view online)

The team stated that for the cubby house building that the children had been doing they had:

- photos
- records of language use in conversations
- reference to STEM areas
- their goals from children and families
- for this project, the team had a 'STEM in Play' folder, with notes including educators' thinking, children's activities and patterns of thinking.
- generally, there were 6 photos on an A4 page (labelled but not annotated in detail).

The team could see the children talking about the materials and lengths of wood that they needed to build a cubby house: there was the language of length, problem-solving, technology in design and engineering.



In Conversation with Alma

Pennington

The question of Learning Stories referred to at Pennington is complicated, however, a mentor might further this thinking by asking:

- *“Let’s think together about where your ideas come from for your planning decisions, including the data you collect which informs your decision making?”*

Becoming conscious of the decision-making involved in the pedagogy of the site is a powerful step in the professional learning journey. Rather than proceeding on ‘automatic pilot’, these educators are stepping back from their actions for deep reflection. It is important to point this out and commend it when noticed. Engaged in the busyness of the day, educators are sometimes not aware that they are making decisions moment by moment. Another pair of eyes and ears can be a gift to offer!

- *“I love that you heard Emily’s question as a provocation for further exploration! It would have been easier to ‘hear’ it as a closed question!”*

Valuing the child’s perspective becomes the impetus for further thinking by both children and adults, energising planning together. This mini example demonstrates the integrations of observation and interpretation with analysis and decision-making, that is being present with a child’s query and moving onto pedagogical planning.

- *“Do you see an example in the conversation (data) where you were leading children’s thinking through the questions you were asking?”*

This reflects what our colleagues in Reggio Emilia refer to as ‘the pedagogy of listening’, which includes deeply listening, avoiding jumping in to insert our knowledge. Trying to understand the child’s perspective may require us to slow down, to withhold what may seem like an obvious solution to a problem or option to be considered.



A child may need more time to formulate their thoughts than a busy adult recognises! We are so socialised into an instructional way of proceeding that the 'pause' which Tamara, from Pennington identified is often very difficult.

"The Early Years Learning Framework (DEEWR, 2010) reminds us that children demonstrate their learning in diverse ways. Therefore, documentation intended to support assessment and contribute to teacher planning should reveal greater complexity than can be provided in traditional approaches to assessment." (Fleet, Patterson & Robertson, 2015, p300)

It is important to remember that children may be learning in spite of us! Dated material for 'check in and act' is vital to see growth, and indeed, to be able to report on learning over time. Mentors can affirm practice by pointing out strategies which support sound pedagogical practices such as:

- *"It's great that you are dating everything..."*

Keeping track of the ideas can be tricky, remembering it is impossible to capture everything! But being alert to the unfolding richness is a good place to start. Children's drawings and an associated chat are often missed as 'data', but these forms of meaning-making can make children's thinking 'visible'.



In Conversation with Alma

Madge Sexton

To start our second meeting at this site I asked:

- *“What’s been on your minds since we last spoke?”*

Then sensing some unease in the extended pause and glances around the table for a willing speaker, I reframed the question:

- *“Let me re-state that: What’s bothering you about the way you are currently working?”*

Rather than trying to provide an answer to each concern – which is not necessarily helpful in any case, the next facilitating question was:

- *“What do you physically have in front of you?” (This recognised that they all had papers or folders on the table. The mentor is trying always to get into the shoes of the speaker, to try to understand what might be behind any questions, as well as ‘buying time’ to think a way forward.)*

It was apparent that the educators, in thinking aloud, were being critically reflective of their own practice – acknowledging that they were collecting a great deal of data, but that a key element of what they were seeing was the existing competence of some children in the focus area. This underlines the importance of identifying (and recording) baseline data.





When they stated they had many possible areas in the children's play that they could think more about, but had decided to focus on two for their STEM thinking (for this project), it was clear this team knew much more about Pedagogical Documentation than they were giving themselves credit for! It also became a case of acknowledging/ identifying what the children already knew about STEM before trying to extend their learning.

The issue of data management and organisation is a challenge for everyone. I asked the team to look at the STEM 'noticings' in their folder, to document what is happening for individual children, as well as for groups of children, to understand their thinking. This encouraged a focus on the social construction of knowledge across small groups, their thinking, problem solving and learning dispositions.

It was becoming increasingly clear to the team at Madge Sexton that STEM was just a lens to explore the learning that is happening through play; a literacy lens could be equally fruitful, applied to the same experiences and collection of data for another purpose.

There are many things for educators to think more about here, starting with, what kind of a listener do they think they are?

Educators need to consider if 'waiting watchfully' is natural for them, or is it difficult to pause and wait while a child (or colleague!) works, plays, chatters, or struggles to find words? People often find it helpful to concentrate specifically on avoiding quick responses, in order to give others a chance to contribute!

ANALYSIS

This section deals with the tricky but essential component of analysis. What do we mean by 'analysis' and where does the process fit into Pedagogical Documentation as a course of formative assessment of children's learning?



Analysis is important!

Watch to see the processes both settings use to analyse the data they are collecting.
(Click on the video icon to view online)

The Mentoring Process

Mentors have a range of choices about how to handle conversations about analysis. A helpful way forward is to ask: "what was important?" or "what is surprising about..." some story or piece of information being shared.

Thinking thoughtfully about children's conversations and actions is inherent in an educator's role, but 'close analysis' is less common. Engaging in Pedagogical Documentation requires an analytical frame of mind, a piece which is often missed when preparing for planning or evaluating and recording unfolding situations.

"The thing that separates Pedagogical Documentation from other forms of observation and record keeping is the use of analysis and reflection." (Fleet, Honig, Robertson, Semann and Shepherd, 2011, p6)

Analysis is an essential component of Pedagogical Documentation that informs on-going teaching and learning. It is the key step that discriminates 'ordinary' record-keeping from the thinking and recording associated with Pedagogical Documentation.

The process of analysis may be a little confronting for some and quite straightforward for others; however, this is the part of assessment and planning that is so often missed.

Educators tend to 'see something' and then 'do something', without pausing to interpret what they are hearing and seeing. This 'pause' for teaching and learning analysis helps educators make decisions about how they should respond – whether to remain quiet, acknowledge, provoke or expand, depending on their knowledge of the child and analysis of the situation.

Analysis: A Learning Lens

Analysis of learning builds educators' knowledge of each child – what they know, can do and understand. Analysis of teaching builds educators' knowledge about the effectiveness of current practice.

For this mentoring project, teams were encouraged to analyse their data through the STEM learning focus they had identified. This targeted analysis of children's learning helped educators to better understand each child's STEM thinking. The educators realised that while they had set a STEM learning focus, the same set of data or sequence of events could be analysed through multiple lenses, e.g. a literacy lens to track sentence length, or vocabulary development.

Educators discussed and made notes on the data about:

- how children were demonstrating STEM learning – in small groups and individually
- patterns in what children were thinking, exploring or wondering about; and
- what surprised, challenged or affirmed their own thinking.

At both Madge Sexton and Pennington educators were learning to analyse patterns of thinking from a range of data sources. For example, analysis of children's drawings can reveal fascinating insights. Are some children more focused on one physical part of the insect (or animal or cubby or whatever) or does the fascination seem to be with something like size (the dinosaur filling the page) or movement (wavy lines next to butterfly wings)? Small groups of children can then be grouped together for further investigations through their particular fascination.

Analysis: A Teaching Lens

Analysis of teaching builds educators' knowledge about the effectiveness of current practice.



Two-Part Titles

Consider introducing the concept of a 'Two-part-title'. A two-part title can be a useful analytical tool to help focus the intent of Pedagogical Documentation.



Titles are important!

Watch Alma Fleet describe why titles are important and how to write them.
(Click on the video icon to view online)

A two-part title can be useful to focus the intent of Pedagogical Documentation. It is not a 'rule', but an effective strategy to both inform an audience and invite the reader into an evolving or finished investigation. A two-part title can also give direction when thinking about or writing a summary-narrative.

Where does the title come from? While analysing data – from the point of an initial curiosity or fascination, to a set of experiences with a small number of children over time – a documenter can begin to label what s/he thinks is of interest/importance about the material being captured. The title should include:

- an INFORMATIONAL phrase – that explains the learning being focussed on; and
- an INVITATIONAL phrase – an interesting hook to engage readers.

These 'halves of the title' could go in reverse order, as long as the title makes sense. Using a colon between the two parts is a good way to remember to try to think of both parts of the title – what an educator is seeing or hearing and why it's important! The title can also change as the understanding of the learning and children's perspectives develops.

The first idea might just be 'building cubbies' or 'sleeping insects', but that factual label does not highlight why it matters, what might be 'sitting underneath' the investigation or experiences which links the thinking or exploring over time. So, the 'other half' of the title emerges. So, in these cases it could be:

- *Building Cubbies: becoming engineers*
- *Scientists Investigating: do insects sleep?*

The Pennington Story



Analysing the data!

Watch Pennington educators talk about how they use the data to assess children's learnings, strengths and capabilities. (Click on the video icon to view online)

The courage to revisit existing practices is a core part of professional practice in this site's learning community. Educators are encouraged to revisit their draft notes, stories and plans through a more 'critical' eye. ('Critical' in the sense of analytical rather than fault-finding.)

A question from a child, Emily, about whether insects sleep at night had been taken to a team meeting for discussion. There was consideration of ways forward, including brainstorming STEM links, and exploring the possibilities of small groups of children drawing their current understandings of insects, both as baseline data and to inform educators as to children's current thinking and understanding. When tabled, multiple eyes could scan the children's work and associated transcripts.

- Jess (the Director) mused about whether Emily's question about insects had thrown up a challenge about how they cared for insects in the centre environment.
- At the same time, Linda (the teacher) was wondering if the question itself was a 'problem' to be investigated.
- There was a concern that it might be difficult to find information to 'address the problem'. Was there available information about insects sleeping?

The Madge Sexton Story

At Madge Sexton the educators were reiterating their view of children as confident and capable, and as valued citizens in their community, but beginning to express hesitancy about whether current practices gave children much voice in daily events and decision-making. There was consideration of a long-established community visitation program in which small groups of children went 'into town' once a year and then reported back on their visit to the other children. This practice was a case of reporting on the experiences and celebrating connections with community. There was not yet a sense of complicating children's thinking (i.e., pausing to provoke more complexity) or seeing comments during the excursions as opportunities to explore children's theory-making.

Educators were challenged to see if they 'saw' Pedagogical Documentation in the work they were recording. They were confident there was evidence of 'designing' and 'making' in the cubby-building work, but felt there was more to learn about the nature of the children's theories and understanding, perhaps even about 'engineering'. Responses flew around the table with one person saying:

- *"We have it (the data), but we need to analyse it more."*
- Another asked: *"What are we recording for?"*
- She added a more challenging question for the team: *"Are we just checking knowledge or are we supporting learning?"*

As part of the processes of Pedagogical Documentation (and everyday interactions), there were many unfolding opportunities for exploring children's theories and knowledge about their building: "What does it take to make a roof?" "What does balance look like?" It became clear to the educators that each of these excerpts of ongoing projects could become little pieces of recorded Pedagogical Documentation.

"...as children are natural researchers in their play, the opportunities for STEM learning are everywhere. The role of the educator is to notice the opportunities for teaching and learning as they arise..." (TLinSA.ti.cc/STEMQuest. STEM Play, p3)

The same events (observations or encounters) can be recorded in terms of many curriculum outcomes – such things as sharing vocabulary knowledge or increasing attention to detail, or development of children's disposition for investigation (increasing evidence of interest in pursuing an idea or question, collecting, recording and analysing information).





In Conversation with Alma

Pennington

I thought this might be the time to ask the Pennington team:

- *“What ways are you finding to organise data that enables revisiting to find threads or patterns in thinking or behaviour as well as making material logically accessible to the team?”*

Then, looking at the work spread out on the table – as the first level of analysis, I asked:

- *“What jumps out at you?”*

It might be the words, phrases or questions which catch the eye because of their novelty, unexpectedness, or potential usefulness for offering back to children to gain greater reflection and insight to their perspectives.

There seemed to be thinking here that a child’s focus or query by a small group needed to be framed around a ‘problem’ to be solved rather than curiosity to be explored, (although this just might have been confusion around the word ‘problem’). Valuing the range of perspectives and acknowledging these concerns, I took another tack:

- *“Let’s try to lengthen the distance between the question and any possible answer! If we are trying to ‘teach thinking’, there needs to be time for reflection and consideration of multiple perspectives.”*

A provocation was also offered at another level of analysis – to the anthropomorphic aspects of the topic:

- *“Do you think that the children imagined that insect lives paralleled their own?”*



Taking the time to share thinking was important at this stage of analysing children's perspectives and possible ways for educators to facilitate an ongoing investigation.

Having decided that there were interesting provocations emerging, and valuable data to be analysed, I commented:

- *"Let's look back at what each child is saying in this conversation. Look at the types of contributions that each child is making – there are patterns here!"*

Consider excerpts of transcriptions of children's conversations for insights that are not immediately apparent, such as which roles children were taking in the conversations. With these children it became clear that one child was a provocateur while another was always making a more pragmatic comment. These ways of being are important in any exploration of identity (as per the *Early Years Learning Framework*).

I also reminded the group about dating all entries (daily!) both to ensure that there is a timely flow of data and wonderings, and to have potential for tracking growth over time. Further conversation unfolded around analysing children's drawings as data. An invitation to the children to draw the insects at night was generating drawings with a range of detail, including things not clearly identifiable by an adult. Having noticed one aspect of the drawing they were particularly interested in, and seeking an opportunity to revisit with the artist to gain greater understanding of her intentions, Tamara posed the question:

- *"Do we just point out the bit we are interested in?"*

This was a useful question without a straightforward answer! (It depends...)



In Conversation with Alma

Madge Sexton

As a mentor, I wondered, if there was potential for analysing children's perspectives on the community visits in order to contribute greater depth to this aspect of the curriculum. So I asked:

- *"Can you mine the data to track children's comments and non-verbal movements, both within each visit and across visits to find patterns of questions and curiosities?"*

By the following visit, it was clear that there was a move from recording for its own sake to a focus on understanding the events and behaviours unfolding around daily encounters. There was an awareness of STEM thinking happening 'all the time'. Nevertheless, staff felt they were good at recording the language children were using, but not at analysing any implications.

Revisiting the data and taking opportunities to listen more thoughtfully to children's perspectives enabled analysis of what theories the children might be bringing to their investigative play and creative imaginings. For example, one child might be testing his theory that more wood made a stronger roof, whereas his friend might be hypothesising that lighter materials would be more likely to stay on top of the cubby.

When reading notes or listening to a recount of children talking, it's often useful to ask:

- *"Did anything surprise you about that conversation?"*
- *"Have you noticed that you are analysing while listening? Are you being thoughtful about what the child might be trying to conceptualise, convey, or explain?"*
- *"What thinking was going on here? What theories did children have about what was going on here?"*



Educators are often surprised by the rich learning revealed through analysis of everyday data. Doing this analysis may lead to them seeing how small groups of children can be intentionally grouped together to further their learning.

In furthering this thinking, a mentor might ask:

- *“Can you think of an example where you have invited children to work together on the basis of your analysis of their conversations, personalities, or unfolding events?”*

Remember to analyse teaching practice throughout the day. As we know, STEM learning happens in everyday experiences and play, not just through educator-directed ‘STEM learning’ activities.

CYCLES OF PLANNING AND IMPLEMENTING

Cycles of planning and documentation should be integrated with other components of Pedagogical Documentation, as pieces of the puzzle that are all part of an ongoing process.



Using the data in planning cycles!

Watch to learn about planning for thinking.
(Click on the video icon to view online)

The Mentoring Process

Moving onto the cycles of planning and implementing aspects of Learning Design, it could be helpful for mentors to raise the topic of 'decision-making' rather than simply asking to look at planning formats. A discussion about the decisions that are made (for example, in revisiting and analysing data in order to choose planning directions) can be informative for all participants. Different approaches will need to be taken for those who are using their knowledge of children's strengths to plan experiences and those who have set activities alongside a pre-planned topic-oriented curriculum. There are, of course, many stages along this continuum, but mentors, need to try to enter the conversation at the point of current practice in order to assist with improvements.

Formative assessment, described as assessment FOR learning in the Early Years Learning Framework, '... is the only form of 'assessment which extends children's learning because it enhances teaching. All other forms of assessment serve as checks on whether or not learning has occurred, not as a means – in themselves – of bringing about learning' (Nutbrown as cited in Barnes 2012, p. 7).

Cycles of planning and documentation should be integrated with other components of Pedagogical Documentation, as pieces of the puzzle that are all part of an ongoing process. As Janet Robertson commented: *“Decisions frame everything we do. Decisions made before, during and after a pedagogical experience are platforms on which experiences play out.”* (2017, p103)

Educators make decisions constantly – everything from whether to attend to this child or that parent, to what resources to offer or projects to follow up. Working within a framework of Pedagogical Documentation enables an integrated process of ongoing decision-making. Programming becomes flexible to enable shifts in direction and fine-tuning on the basis of evolving investigations with children and insights gained from analysing unexpected actions and unfolding events. The process of documenting pedagogically is a continuous part of the planning cycle.

The decision of what to notice and what to record, which children to invite to share an investigation, what questions might engage families, what opportunities might be offered to extend children’s thinking – these are all elements that unfold as part of Pedagogical Documentation. A collage of photos and analysed narratives will build up over time to support ongoing thinking by children and educators. Short snippets may be written up as work in progress or mini-moments to share with the site community, while other topics continue to be investigated, recorded, and analysed over time.

If we go back to the traditional observation cycle that many of us studied, we will remember the observation/ interpretation/ implication sequence which is, of course, more than recording. What we are talking about here is closely related to that cycle, in that we are analysing and interpreting what we are hearing and seeing, selecting and recording the pieces of most value/interest for children’s learning and wellbeing.



The Pennington Story

As time passed the Pennington team were making decisions about following up their 'noticings' – what they were seeing in relation to their focus areas.

The mentor drew the team's attention to to the 'Yellow-sticky strategies' of putting educator 'wonderings' on Post-it notes. These were displayed on evolving mind-maps on the staff-room wall and on draft work in progress on their record-keeping.

Using 'in progress' Pedagogical Documentation as a memory-keeper offers children a chance to revisit in more depth, perhaps sharing further ideas they have had beyond the centre walls, as well as expanding their thinking to include other perspectives.



Jessica, the Director, recalled a recent decision-making sequence:

- “When we regrouped on the first day, we tried to get them to stop and notice each other’s drawings. It was tricky, sitting around a square table. It felt like the children were not listening to each other, so we asked them to stop to listen to each other. When we looked at the drawings again the next day, each child spoke about their drawings and educators made connections between the drawing. As we had felt the need to teach active listening skills and turn-taking, there was a lot more back and forth conversation on the second day.”*

It was clear that the educators were revisiting each step in their process, wondering about an experience that had not gone well, in order to create a more productive experience for children the next time the 'insect group' gathered. The group noted that they also posted teachers' wonderings next to the planning that was being developed; Jessica decided to put this way of thinking into their newsletter to share the processes with families.

More thinking with this team led to more questions from staff around the table:

- *“All these pieces of Ped Doc we are collecting, would we put them in children’s folders?”*
- *“We have a group of key protagonists, emerging ideas, exchanges between each other, lots of anecdotal comments. What do we do with all this?”*

As this work unfolded, there were small parts of the experiences that could be analysed and pulled together as ‘hard-copy’ Pedagogical Documentation to see what was being learned about children’s concepts and the roles that different children were taking within the group.

Offering these questions back to the group of educators for brainstorming and promoting multiple possibilities for problem-solving, was a useful way forward for this suite of questions, as the ‘answers’ often present themselves differently depending on the local situation.

The educators went on to say:

- *“We can see a product forming with key protagonists, but other children who are not part of the key group are also exploring interesting things. But - how does their work run alongside?”*

For example, another group has been doing drawings around worms, with many inquiry possibilities to be considered as well.

A useful technique could be taken from MiaMia Child and Family Study Centre in Sydney, where early childhood teacher, Janet Robertson, always had a mind map on the wall reflecting emerging investigations. There was a recording of questions asked with relevant names next to them and dates, so parents knew where their children were involved.

In this case, that might be the “insects at night” group as well as things like the “worm drawing” group, each with the participating children’s names recorded.



Capturing and organising data!

Watch this film to learn about different ways of capturing and organising data.

(Click on the video icon to view online)

The Madge Sexton Story



Creating Child Agency

Watch this film to see a great example of Madge Sexton staff creating child agency. (Click on the video icon to view online)

In thinking more about their decision-making, the Madge Sexton staff realised they were now listening more intentionally and incorporating more opportunities in group times for sharing from children. Rather than prioritising adult thinking, they were becoming more open to the unexpected as a source of curriculum, co-researching with and alongside children, and concentrating on strengthening relationships. They were also realising they needed to be paying more attention to (and recording) incidental chats that could reflect what children were thinking and wondering about. These ideas were then reflected in their planning cycle. Revisiting some (beautifully produced) records of children's conversations, it was becoming clear that the missing ingredient was analysis (see previous section).

Thinking about their approaches to (and value of) their traditional community walks, there were opportunities to re-look at transcripts from earlier conversations and debriefings with children. It was clear that the practice had been to 'simply' record a line from each child — perhaps to reflect participation. There was not, however, any analysis either within or across conversations to look for threads in children's thinking or roles of different participants. (Children may have had their own perceptions of the purpose of the visit, perhaps prioritising their joy in sharing an outing with friends!)



What makes this way of working different?

Watch this film to see Anita and Tennille talk about what makes this way of learning different. (Click on the video icon to view online)



In Conversation with Alma

Pennington

Note the UN Convention on the Rights of the Child : Principle 4, Article 12:...the child's right to be heard and those views to be given due weight "in all matters affecting the child" (New York: UN General Assembly, 1989, p5)

The mentor's role is not necessarily to provide answers, but rather to help clarify the questions and to offer possibilities for consideration. Joining in with the team of educators as they share their thinking may help illustrate the collaborative and evolving nature of these processes. Mentors can also ask about how planning decisions are being informed by the team's critical reflection.

In this case, after time for reflection by both adults and children, the children were then offered the opportunity to revisit their earlier work. This gave them a chance to explain their own thinking as well as being reminded to listen to what each of the others was contributing.

Educators often wonder:

- *"Where are the children going in their thinking?"*

Ongoing discussions amongst staff are helpful in order to share emerging ideas and patterns of thinking that they are noticing, so that these insights flow from the mind maps into planning cycles. Decision-making may be 'in the moment' or over a cuppa with a colleague, or in conversations with children or families.



Mentors should remember to assist educators to consider ideas and theories (like *'stick insects can't run fast because they're made of sticks'*) rather than simply learning 'topics' (like 'insect life cycles'). Avoid locking the whole group into one big investigation or pedagogical story.

In this case of scientific thinking, remember the power of a title. "Lots of Wiggles: seeing things grow" could be a lead-in to then learning more about worms, or "Stick Insects: thinking and wondering" might encapsulate the work in progress on that investigation. The title reminds the team why it's worth taking the time for working in this way; if they can't think of a title, it's probably not worth recording!

"We were prepared to engage in small group work, listen, then propose back to children their ideas. Our context was prepared... understanding that Pedagogical Documentation is the engine bringing curriculum to life and creating places for decision-making theory and practice". (Robertson, 2017, p.114)

I might say something such as:

- *"What I'm trying to do is make clear a way of thinking about your work, so that it doesn't matter if you're sitting at the lunch table, or watching paper airplanes or you're visiting the shops. The way of noticing and thinking alongside children can be exactly the same. So, you don't always box different portions of the curriculum into different times of the day. What you're doing is thinking and seeing a little differently about the things going on around you."*



Mentors also need to be alert to opportunities to clarify or challenge thinking. For example, I summarised my interpretation of an exchange both to highlight key points and to ensure I was understanding educator thinking:

- *“It’s interesting you noticed that the strategy you were trying at the drawing table wasn’t working. Perhaps while children are drawing, they are just getting their ideas in order. Ideas are being born... you can’t interrupt in the middle of the birth.”*

Talking about drawing while drawing is usually a monologue in any case, an individual thinking task while in the company of others, knowing they are doing something similar. Thinking together comes after the idea has been born.

Your decision to gather the relevant children together the next day (or week) is a good way of going about it – with a focus on turn-taking, listening and so on, at that time. Then there’s the possibility of the involved group of children coming together again later, after having rehearsed turn-taking, to have a more productive conversation. The key documenters could also report back to a larger group about what they are learning. The investigating group might also be adding new members while you’re keeping an eye out for key protagonists in other emerging investigations...”



In Conversation with Alma

Madge Sexton

The mentor's role here was to provoke re-thinking about existing practice without dampening the enthusiasm for a historic tradition. Previously in this case, there had been a focus on recording events and experiences, while that practice valued voices of children (what they said or did), there was no revisiting of data for interpretation of thinking or seeking links (of questions or theories) across experiences. The focus had been on reporting; there had not been a lens of seeking children's perspectives.

These reflections can lead to a consideration of foundation concepts such as:

- *How is your site philosophy reflected in your planning?*
- *'If you believe children are competent and capable, how does this philosophy transfer into your actions and documentation?'*



Pedagogical documentation and philosophy

Watch this film to learn how pedagogical documentation can help reflect on whether site based philosophies are enacted day to day. (Click on the video icon to view online)

This is also an opportunity to revisit children's theories. Look for examples of children as theory-makers in the stories being shared here. Discuss with colleagues:

- *"How does a child's comment indicate that they have a theory about how something in the world works?"*
- *"How does their approach to play (e.g. building a bridge or a tower) demonstrate the testing of a theory?"*



‘It seems so big and a big commitment and the whole site team needs to be on board. Where do we find the time to commit to the thinking and the action amongst all that we are required to do and often at the last minute?’

“We have a tendency in our culture to observe and document and then think of ideas for what we might do. The beautiful thing about Pedagogical Documentation, is that it helps us create a space between our observation and our interpretations of it - and of course it’s our interpretations that lead to the planning. It creates the space because it place-holds what has happened.” (Wein, C., Pedagogical Documentation: Children’s Learning and Thinking made Visible. ontario.ca/childcare)

As a mentor, it’s important to hear what is being said and try to offer it back to educators, to affirm, analyse and clarify how the thinking is evolving. The Director, Tennille, commented that it was a change in mindset – they were seeing STEM everywhere (not just in experiences labelled as scientific or mathematical for example), and titling what they were doing. Giving (two-part!) titles to emerging narratives was helping to focus what was being valued in the experiences of children that were being discussed and recorded.

Rather than pushing for an endpoint, Tennille continued:

- *“As long as you’re still curious, it just keeps going!”*

To explain her thinking to me, she mused that:

- *“We saw/heard some gaps in understanding about time, so we are moving forward by setting up provocations around time. We will invite those children back in and ask for drawings about what they were doing.”*

It was agreed that their memories, along with transcripts and a few photos, were part of the process of Pedagogical Documentation contributing to planning.



Affirming what I was hearing, I responded:

- *"It's really important that we all gradually come to be on the same page when talking about what we mean by Pedagogical Documentation - which can be lots of things for different people... so it's useful to hear that you are thinking about trying to get your brains into a space regarding how the material you are collecting will be used."*

It was clear that the idea of 'data' (see earlier section) had been accepted as an authentic form of evidence-based practice. Teams can be encouraged to analyse across different conversations to get multiple examples. Perhaps there is someone who takes on the role of 'entertainer' or someone who is the 'thoughtful friend', as well as the child with the large vocabulary or tendency to disrupt when things get too confronting.

During these investigations, the question has been asked:

- *"When might you change a question of inquiry to complicate it?"*

That might seem an odd question if you assume that it is the educator's role to simplify everything for young children to understand. The alternate point of view has to do with teaching thinking in more complex ways.

Complicating children's thinking is part of our role as educators. Examples of this were shared during the LDAR projects – e.g. from Janet Robertson's story of Hopscotch and Mel Ferrer's 'Tricky Boys' (explained in Fleet, Patterson & Robertson, 2012, chapter 14).

Note the importance of team sharing, as colleagues will have different perspectives on what 'complexity of ideas' and 'complicating thinking' might mean, and how to go about it. This conversation allows teams to relax a little, as you can't all do everything all the time; you can 'observe differently', then share what you've seen. No-one has to try to see it all!

EVALUATING AND SHARING

This section explores the links between evaluation and assessment, within a pedagogical community. Evaluation at each site will be ongoing; it is the mentor's role to hold up the mirror of experience for educators to reflect on their thinking and consider strengths and possible improvements to their practice.



Evaluating and Sharing

Watch this film to learn about the importance of evaluating Pedagogical Documentation.

(Click on the video icon to view online)

The Mentoring Process

If the previous processes have been well received, the components of evaluation and sharing will evolve naturally. When that is not the case (e.g. if a site is locked into a practice of restrictive timetables and formal implementation procedures), this conversation can be more difficult.

In either case, direct questioning may be the best way forward:

- *"How are you currently evaluating the effectiveness of...?"*
- *"What strategies are you using to evaluate children's learning?"*
- *"Have there been opportunities to share your thinking with the staff team? With children? With the families?"*

Accepting any contributions thus enables a follow-up such as:

- *"Let's consider some other options!"*

Evaluation at each site will be ongoing; it is the mentor's role to hold up the mirror of experience for educators to reflect on their thinking and consider strengths and possible improvements to their practice. Potential links with the site's Quality Improvement Plan can also be highlighted in the planning and evaluations, along with literacy and numeracy learnings which will be evolving alongside science and other curriculum areas.

The concept of evaluation is, of course, multi-faceted. The assessment of children's learning must sit alongside:

- the evaluation of processes of Pedagogical Documentation;
- any products that might be produced;
- the materials offered and environmental considerations;
- opportunities and constraints of the timetable and site structures; as well as
- teaching practices supporting learning.

Issues include such things as whether or not the assessment practices being used are ethical and strengths-based. For example, are the processes of Pedagogical Documentation assuming that to be successful, all children should be observed and assessed in terms of the expectations of the dominant culture, or are home-based strengths also acknowledged?

Are there opportunities for families to contribute throughout the planning cycle, and are their perspectives included in assessment?



Communication with Families

Watch this film to learn how Pedagogical Documentation has improved the depth of what is being communicated to families and the responses that are subsequently gained from them. (Click on the video icon to view online)

A mentor will find that the processes of Pedagogical Documentation are ideal vehicles for dealing with these concerns. The courageous educators who are sharing their thinking with us included a snippet from Pennington, where a well-intentioned grandmother stepped on a bug that was part of a child's investigation. This episode became another layer to the rich investigation into whether insects sleep at night and contributed greatly to an appreciation of children's learning. By embracing components of STEM and literacy, this authentic tribute to trusting relationships highlights the multifaceted evaluation and the sharing of processes of documenting pedagogically.

If there is a new team or if there has not been a collaborative reflective culture in the site, it will be essential for the leader to prioritise development of that culture. Raising the issue of centre culture can be delicate, particularly if there are signs of tension, poor staff relationships or commitment to rigid pedagogies. Time may need to be set aside for culture-building, including both private conversations with the leader and round-table sharing of goals and ways forward.



Pedagogical Documentation as Professional Learning

Watch this film to hear about how Pedagogical Documentation is useful as professional learning.

(Click on the video icon to view online)

As a reminder of why Pedagogical Documentation is seen as valuable in a climate of accountability, it is useful to quickly review the approaches to assessment summarised by Barnes (2012). Your understanding of the differences between each of these purposes profoundly affects the way you approach documenting pedagogically and making associated decisions for both immediate and longer-term planning.

Assessment OF learning is understood widely as ‘summative assessment’— that which happens at the end of a topic of work, a series of experiences or an identified time period to assess what has been learned during that period.

Assessment FOR learning is understood as “an ongoing process of gathering and analysing information about children’s learning in order to enhance their learning” (Barnes, 2012, p7).

These **contextualised** processes inform ongoing decision-making about next steps and teacher strategies, and are thus known as ‘formative assessment’.

Assessment AS learning may not traditionally have been seen as ‘assessment’ at all! Barnes describes this approach as one that honours children’s rights to ‘have a voice’ in things that affect them, which is a principle embedded in the UN Convention on the Rights of the Child. She describes **Assessment AS learning** as “the processes that educators use to support children to learn more about themselves as learners, including what they have learnt, how they learn, and what they would like to learn next” (p8). Offering children opportunities to revisit earlier experiences through photographs, transcripts and similar strategies enables development of this approach.

The Pennington Story

Evaluating children's learning

Early on, a question was asked about how staff were physically going about their processes of documenting pedagogically. The Director, Jess responded:

- *"At the moment (we are) collecting children's drawings, comments, questions, answers for the key group, videos of conversations, photos, sculptures, dating it all and highlighting common threads, (and) noting interesting differences in opinions when children question each other. Some of it is in educators' notebooks. We're dating it – haven't done anything with it yet!"*

Further discussion related to not only how this material could be collated as part of ongoing formative assessment, but how aspects of it could be shared with families on an ongoing basis, rather than just as a major report/sharing/product at the end of the investigation.

The mentor suggested creating excerpts on 2 x A4 pages with photos, transcripts, teacher wonderings, thought bubbles, as well as some scientific language around the area of interest. This would pull together with precision, exactly what's been happening and who the protagonists are. This kind of work in progress is really valuable for educators as well as parents/carers. Of course, it is important to collect enough snippets from selected data, and date it to show the evolution of queries, wonderings, learning and ideas.

As the table conversation bubbled into:

- *"Yes, but where do we go next?..."*

The reply was:

- *"Just do the A4 pages first—that helps to clarify the mass of information and focus your thinking on worthwhile aspects to follow up, perhaps seeing underlying elements not apparent in the rush of daily events."*

With nods around the table, Jess agreed:

- *"We'll do it tomorrow! Makes our thinking and children's thinking clearer, and becomes a way of sharing with families."*

Someone else asked:

- *"The transcripts of children's thinking aloud are so long, do we pick out parts of it?"*

The mentor replied:

- *“Yes. It’s selective listening within a scaffolded narrative: ”*

During her explanation she added:

- *“ It depends on what point you are making by highlighting the information and bringing it together — perhaps celebrating something unexpected, some new learning, maybe how learning is evolving and developing, patterns of thinking, how certain dispositions are developing. Step back, pause and force yourself to see what is going on. This needs time, and might take brainstorming with the Project Officers and Early Childhood Leader. Your struggle is helpful as we can share with others. This is focussing on a child’s learning as well as your thinking. You are offering great opportunities. This is a very insightful team; focus on what the children are trying to tell you through both their words and actions. You can’t analyse everything, so you need to be selective.”*

Evaluating teaching practices

The team’s ways of thinking about their work, their daily planning and decision-making was shifting. This rich thinking was enabled through the time given to thinking and the centre culture that valued thoughtfulness and sharing multiple perspectives.

- *“In moving into these newer ways of working, you don’t need to give up the assessment goal. That sits underneath as well, because if your various notes, photos and transcripts are dated – it’s formative assessment!”*

It was useful to remind the team of the importance of ‘mini-moments’ as well as of the larger projects. Discussion highlighted that in the future, there needed to be explicit attention to children’s listening skills and the range of ways they expressed themselves. Educators were looking forward to opportunities for following small groups engaged in simultaneous investigations, now that they realised the power of working in this way. They were also looking forward to investigating implications for the set-up of the environment to support rich engagement, particularly in relationship to the work they had been doing on culturally responsive pedagogy.

“A particular piece might be brief or unfold into a very long narrative but, regardless of length, it is always only a fragment of the whole, the pieces that were seen or grabbed or held up to the light for further consideration. A sense of the whole is gained through in-depth consideration of pieces as they unfold during the life of the room or the centre or the school. Equally important moments may have gone unseen or unrecorded.” (Fleet, Patterson & Robertson, 2012, p6)



What Pennington gained

Watch this film to hear Pennington's final thoughts on Pedagogical Documentation and what they gained from the experience.
(Click on the video icon to view online)



The Madge Sexton Story

In discussing how much more they were aware of children's learning in a range of areas, one person commented:

- *"Remember the image of the child and the pedagogy of listening..."*

Tennille, the Director, summarised the explosion of ideas:

- *"That takes us back to revisiting our site philosophy!"*

The Mentor asked whether children **would** see a difference in what was happening here now - all agreed that children would.

- Rhian: *"More note-taking alongside their play"*
- Anita: *"More chances to tell others about their ideas and to determine what resources they need"*
- Emma: *"Having more time to get on with their play!"*

Anita shared her thinking:

- *"After the first visit I was thinking I wanted to use Ped Doc for assessing, trying to look deeper into why we do it. But after this discussion, I can feel myself wanting to teach thinking or use this work in that thinking mode, not necessarily looking at the content of what comes out of the documentation, but more about the processes that the children are using; that will be more visible now when we are using a lens of Pedagogical Documentation."*

The Mentor had recommended keeping a research log:

- *"Write down your thinking about your thinking. If you catch yourself doing something different, note it down. For example, 'What I would have done before? Now, with this lens, I....'"*

Tennille thought this might work for them as a "group share-back". Like every site, Madge Sexton will negotiate solutions for them that are effective at a particular time with a particular staff configuration.

Anita noted that this way of working also included decisions about ready access to materials – having clipboards to hand as well as folders and ways of finding photographs for easy organisation. She said they now see how this way of thinking was helping them set up resources and inform their planning in a more meaningful way, including asking children: *“What do you need?”*

Marissa commented: *“Everything’s changed; the narrative’s changed!”*

Educators were still working on how to embed their learning in meaningful ways across the day.

Tennille commented that the intent was to: *“Simplify!”*– to continue to challenge their own assumptions and to share examples of their thinking across the staff team.

Others agreed that in this way of working, communication with all members of the team had become even more important than previously:

- *“With provocations like this – we rethink practice; if we are going to try to work with Pedagogical Documentation, what else do we have to change? Does it mean we have to do less of something in order to do more of something else? Or does it mean we have to make sure that when we have quick gatherings to share information, we’re sharing ideas, noticing, provocations, not just behaviour? ”*

They thought they were being more open to the unexpected and supporting co-research with children by building on relationships and then embedding their thinking into planning. Emma, an educator, shared an example of a casual comment by a child about a mulberry outing. This sort of casual comment by a child that might have been lost in the events of the morning was noticed, and became an opportunity for revisiting later in the day. Emma invited the curious observer and a few others who wanted to take advantage of the opportunity, to go back out to the tree to collect some berries. Conversations ensued about ways to share the berries, which included a range of curriculum goals (counting/dividing/describing). In addition, evolving leadership skills and support for developing dispositions of curiosity and problems solving were also shared. Thinking alongside each other, both adults and children were delighted with the social construction of knowledge and joy in the experience.

In analysing the experience of growing as Pedagogical Documenters, one person commented:

- *“At first it sounds like it’s lots of work, but we already have lots of data that’s dated so we just have to go back and look at it; it’s like it’s happening without even trying!”*
- *Thinking back, Anita said: “We stumbled initially – with what we expected children to learn in front of mind... but the more we struggled, the more we opened up the conversation!”*
- *Tennille agreed: “Your understanding continues to develop; the Ped Doc lens brings all those things together, especially reflection; we didn’t document our thinking before!”*
- *In terms of advice to others, Anita laughed and said: “Just throw yourselves in!”*

“It’s seeing where they [children] are in their thinking, because you guys can do the content, it’s putting the other pieces into place, so you can facilitate and scaffold the content” Associate Professor Alma Fleet



What Madge Sexton gained

Watch this film to hear see Tennille sum up what Madge Sexton’s team have got out of using Pedagogical Documentation.
(Click on the video icon to view online)





In Conversation with Alma

Pennington

The way the Pennington team was thinking about their work, and of going about their daily planning and decision-making was shifting. This rich thinking was enabled through the time given to thinking and the centre culture that valued thoughtfulness and sharing multiple perspectives.

As a mentor I am aware that in this approach to teaching, the educators always have one ear open for something else surprising. While major investigations are unfolding, there may be something within it, alongside it or popping up elsewhere which could be a mini story that is a Pedagogical Documentation provocation on its own, that will be worth capturing to revisit. A group can have three or four in-depth investigations going on simultaneously, are all developing well. Work in-progress can remain more casual and still be utilised; different things get written up in different ways. Teams will get better at working on short cycles of inquiry and see the patterns emerging both within and across conversations and investigations. Teacher wondering is important, as is feedback from families about what's happening at home. Remember to date everything over time so growth and development can be seen with all children.

These challenges mean that it is wise to try to **Write less and Think more**. Being concise in what one expects others to read is important. Is key information in a 30 point font on a large page? If one wants people to engage, it needs to be big and straight-forward.



In Conversation with Alma

Madge Sexton

“A particular piece may be brief or unfold into a very long narrative but, regardless of length, it is always only a fragment of the whole, the pieces that were seen or grabbed or held up to the light for further consideration. A sense of the whole is gained through in-depth consideration of pieces as they unfold during the life of the room or the centre or the school. Equally important moments may have gone unseen or unrecorded. The work is not a real-time movie or a record of events, but a subjective set of frozen moments that provoke, inform, record and provide opportunities for further thinking and wonder, able to be offered back to children for comment and reflection...” (Fleet, Patterson, Robertson, 2012, p7)

Mentors will find teams re-thinking ways of working that challenge a range of existing decisions, including implications for grouping, timetabling and recording. In analysing changes in practice, it became clear that the team at Madge Sexton were now less focused on reaching an end point, but were listening more and building on sharing from children’s investigations into group times. They were recording more incidental chats as well as notes about teacher thinking.

It would have been helpful, as a mentor, for me to ask Tennille for her definition of ‘Simplify!’, as her thinking may not have been clear to the team. I had assumed she was realising that they were collecting too much information and working hard on visual presentations when their energies could be redirected to the analysis of selected elements within the day.

Critical reflective thinking has been a constant part of the journeys shared here. Each educator and team using these materials will take away something different, based on their own experience and situations.



Additional Comments

A key point is that the question needs to be:

- *“How do we know if we are doing it well?” rather than, “How do we know if we are doing it right?”*

There is not a ‘correctness’ about this way of working, simply the possibilities of being more or less engaging and effective. Those criteria should also include being ethical and appropriate. While some might feel that having this set of criteria open to interpretation is problematic, the breadth and depth of possibilities reminds us that working alongside young children and their families must be complex if that work is going to be authentic, relevant to different lives and varying contexts.

With all sites, there are opportunities to ask:

- *“Where are you seeing potential for ‘relaunching’ experiences and ideas?”*

This may mean relaunching provocations, offering queries and ideas back to children. Even doing this several weeks later with the photos and a transcript to remind them of the context gives children a springboard back into their play in ways that support further learning. Rather than moving from single experience to single experience, the practice of ‘relaunching’ enables the teasing out of ideas, and the developing of more depth and complexity of thinking.

Both teams in this research were very focused on taking their learning forward. Key points that emerged from conversations included ways to pass on the learning to new staff or staff on leave. The existence of the shared Pedagogical Documentation was critical in this regard; by telling the stories, the values, philosophies and strategies become evident. It was then possible to demonstrate how these processes became an inherent part of the planning cycle.

On the basis of these experiences, both sites were considering revisiting their approaches to planning in order to be more authentic and inclusive. They were confident that this work sat comfortably with their *Quality Improvement Plans and expected Learning Outcomes*.

IN CONCLUSION

LOOKING BACK AND GOING FORWARD

It is timely to reflect on the degree to which the work with our two focus sites met the criteria of offering their experiences with Pedagogical Documentation as:

- ethical and appropriate;
- engaging; and
- effective.

“Learning is a social and co-participatory process. There is mutual respect, democratic conversation and dialogue, and trust.” (Stremmel, 2019, p88)

Did the work with the two focus sites meet the criteria of being ethical and appropriate, engaging and effective? Of course the answer is, most certainly. There are few guidelines for assessing such things, but we can consider some descriptors around each of these (rather arbitrary) criteria. It is also important to remember that these sites did not offer themselves as exemplars, or for judgement. They continue to learn and grow on a daily basis, and all need to be grateful for their willingness to share.

- **Ethical** While the ‘choice’ to participate might be seen as a responsibility of employment rather than a genuine choice, there were choices throughout the process, including who was sitting around the table, recorded, or filmed. I can see the wry looks from two staff members who were not at all enthusiastic about these ‘opportunities’, but who, having sustained their commitment, were glowing in their consideration of the value of that participation. On the other hand, there was at least one staff member who had been invited to contribute, but subsequently withdrew from the project and concentrated on other aspects of her work. The participation of the children was seen as part of their right to a thoughtful pedagogical experience. No child was required to participate in anything; indeed, most of the work emerged from and alongside children’s perspectives and considered involvement. The list could be extended to other matters of power or socially just practice (e.g. no-one was either included or excluded on the basis of family circumstances, race or ethnicity). For this purpose, it is enough to wave the flag that such matters should be considered.

“From a perspective of an ethic of caring, it is the child before us who becomes our central concern”
(Stremmel, 2019, p80)

- **Appropriate** The work offered here considers the goal of formative assessment through a STEM lens within a South Australian Department for Education policy structure. Under the umbrella of the Early Years Learning Framework, within the National Quality Framework, Pedagogical Documentation has been shown to be multifaceted, applicable to diverse contexts, and respectful of a range of adult and child perspectives. Children’s learning is made visible and adult learning is strengthened, as is appropriate in professional learning.
- **Engaging** A key element of Pedagogical Documentation is that children are central and adults are enacting curriculum as it evolves alongside them, and the engagement is inevitable. While provocations may be either child or adult-initiated and scaffolded, the exploration of ideas emerged from children’s perspectives. Engagement over time in the narratives reported here testifies to the valuing of experience by participants. Learning theory clearly indicates that there is greater potential for creative and intellectual growth when (child & adult) learners are interested in the material they encounter. That visible learning is palpable here.
- **Effective** From the point of view of children’s learning, a useful strategy was to invite children to summarise their investigation; perhaps for sharing with families or the other children. The points they highlighted may not be the ones that were key in the minds of educators; those differences can be considered but cannot be challenged or overlooked. Children’s perspectives may highlight learning that has not been considered by educators as particularly relevant to the investigation!

From the point of view of adult learning, both the conversations and visible material made it clear that a culture of working collaboratively was strengthened, and that educators are now revisiting work in greater depth and complexity. Growth in professional skills and confidence were also apparent, even though these were strong teams at the outset.

Note: Mentors may find some tensions around transition to school agendas. Ways forward include roundtable conversations with reception teachers and relevant school executive members to share perspectives, and allow the valuing of dispositions. Improving relationships and regular communication often opens up unexpected possibilities for sharing, which challenge stereotypical relationships across the sectors. Pedagogical Documentation also becomes a useful advocacy tool in demonstrating children’s strengths and insights that might not be apparent in traditional school entry procedures.

To hear children’s ideas, to build and consider them as the heart of the curriculum in early childhood requires courage. Children have complicated ideas; they deserve teachers who can cope with complexity”
(Robertson, Fleet & Patterson, 2017, p216).

GLOSSARY OF TERMS

AUTHENTIC - Authenticity in education usually refers to practices that emerge in natural, meaningful situations that are relevant to the learner, rather than being delivered in generic ways that do not recognise local contexts

BASELINE - Comparison point for data analysis/ the starting point from which growth can be tracked

CENTRE CULTURE - The aspects of a site which create the emotional and cognitive space in which the families, children, educators and visitors understand the lived philosophy, relationships and climate of the facility. The culture may be evident in signage, tidiness, sensory elements (including sights/sounds/noise levels) as well as in routines, timetables and meeting processes for both adults and children.

DISPOSITIONS - Inclinations/orientations or ways of being that characterise a person's behaviour. These include attitudes or approaches to learning and elements such as curiosity, persistence, resilience.

ENABLERS - These are the elements/conditions which support the effective use of Pedagogical Documentation as a pedagogical tool and formative assessment strategy.

EVIDENCE-BASED PRACTICE - Referring to a way of working that can reference locally-collected information to justify teaching decisions; multiple forms of data inform understanding of individual children as well as identified groups of children

GENRE - A form of text with particular form and function, with characteristic structures reflecting social and cultural contexts

LENS - In much the same way as a shift from a telephoto to a wide angle will change what is seen through the eye of a camera, this term encapsulates the perspective being brought to interpretation - whether for example, the view is a narrowly-defined developmental view in which stages define expectations of behaviour, or a more socially-constructed view in which multiple influences interact to shape and help explain behaviour.

GLOSSARY OF TERMS

MINDSET - A mental view of the world that may include differences in personal approaches to challenges or beliefs about success and failure

MINE/MINING/MINED - Referring to in-depth processing of the data, looking thoughtfully through what is available in order to find information useful for the current investigation, revisiting records to gain a different perspective from the original interpretation

PHILOSOPHICALLY-BASED - This is a reminder that any pedagogical decisions, whether related to teaching, recording, environmental planning or team management, will reflect the beliefs and values of the people making the decisions. These differing perspectives need to be considered in terms of an agreed centre philosophy - those principles and statements of belief that underlie forms of practice. This philosophy will be the point of reference for evaluating pedagogical decisions.

PHILOSOPHICAL POSITIONING - In this context, reference to the valuing of children and adults as co-learners in a supportive environment that values creative and intellectual challenge. The reference to 'positioning' is recognition that there are other positions that could be adopted with reference to the ways that children and adults are perceived or treated in an educational environment.

STRENGTHS-BASED ORIENTATION - An approach to pedagogy which recognises what children know, can do and understand rather than a focus on what they do not yet know, are able to do or comprehend. This includes working to the positives that children bring to a site, which may include literacies or cultural-ways of being not familiar to the educators or characteristics/disabilities that might initially be seen as limitations.

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FREQUENTLY ASKED QUESTIONS

Many of the questions below have been explored in the conversations with teams at Madge Sexton and Pennington. In looking for answers or seeking clarification, it is important to think about each of the components in the resource as there are interconnections for each idea. (For example the enablers are important to consider when wondering about data analysis.) Nevertheless, one of the following may offer useful review for discussions with a team of interested people.

Documenting

How do I know what to document?

- Considering the knowledge that you have about these children (including behaviours that puzzle you as well as unexpected ways of working together or tackling challenges), what has surprised you?
- Anything that appears to excite and entice children.
- Little moments that are unexpected but may help capture dispositional learning (e.g. persistence, resilience, curiosity).
- Starting with a question or a focus such as the priorities in your *Quality Improvement Plan* will provide guidance about what to document.

What happens with the rest of the children while I'm documenting for this group?

- The environment should be constructed so that children continue to be engaged in learning with or without an adult present, continuing to be involved in their learning alongside peers.
- Other educators will be engaged with a range of children.
- You may notice something unfolding in another area while you're talking with a few children and can return to the experience later, reminding those children what you saw happening and inviting them to revisit their thinking or exploration.

How can I possibly do this for all of our children?

- You start with a small group and as your skills grow you are able to have multiple pieces of exploration and documentation occurring for different groups of children.
- Remember this thinking is not about the published product; this is about a way of working that supports educators' attunement to what all children actually know, can do and understand.
- By documenting children's conversations/ narrations during dramatic and symbolic play, drawing /writing/painting/dancing/singing, noticing their dilemmas and problem-solving encounters, we can analyse this data to better understand children's abiding interests, perspectives, knowledge, understandings and abilities to inform planning. That is what the *EYLF* and the Department require us to do, so we need to work together to explore this mindset.

Is it 'normal' to commence documenting something you think is going to be amazing then it peters out, or changes direction, and what to do with that; can this be re-written into something that make sense?

- Yes, that's 'normal'! You might find that the idea or way of playing or investigating resurfaces days, weeks, months later.
- Look for little pieces within the larger piece — what originally captured your interest? Title it and share.
- Avoid thinking that only extended investigations contribute to this way of working; some things will extend for a long period of time, enabling rich revisiting, but that is only one way in which Pedagogical Documentation assists us.
- It can be useful to document the change in direction; this is all part of documenting pedagogically. The evolution is very powerful and reveals children's thinking.

Families

How can we better engage families with our documentation?

- If children have been involved in collating and commenting on material in the unfolding pieces of documentation, they are more likely to be keen to share with families.
- Informal opportunities to chat will increase opportunities for two-way sharing, where families feel their perspectives are making a contribution to the program and unfolding documentation.
- Many of our families speak languages other than English, so it's helpful to connect with older siblings or bilingual relatives who can assist. Try to introduce family members with limited English to other families from their language group who can help navigate centre processes.
- In some cases, educators might visit with groups of families and a translator to explain some of the ways the centre is teaching and reporting learning. Being seen as 'going halfway' can help anxious family members feel more welcome at the centre.

- Send home photos and targeted information that shares with families the learning being noticed at the site with an invitation for families to comment; this helps build the learning connections between home and site.
- Jointly plan events that celebrate and share learning where families can engage out of hours in ways that recognise childcare or language challenges.

“When the adults who care for a child don’t listen to each other it is the child who suffers” Learning to listen
Listening to learn, (Mary Renck Jalongo)

Analysis

How do I invite multiple perspectives into the analysis phase?

- Ask other members of staff for their ideas or reflections upon your initial analysis.
- Share your thinking and the raw data with colleagues outside of your site for their perspectives.
- Share your thinking and documentation with the children and ask for their input (it might be a response to a photograph or a query: “I wonder what was happening here – can you draw it for me?”)
- Share your thinking with the family and ask for their thoughts (“We are intrigued by this investigation – does this seem familiar? Are you hearing about something like this at home?”)

Should I analyse every piece of data that I collect?

- You can analyse a single piece or several pieces together.
- You can look for many aspects in the same data; you might like to look through the lens of expressive language or number sense and so on.
- It might not be appropriate to analyse every piece of data straight away; it could be weeks before you see the children engage in an experience that links back to the original observation.
- It’s ok if you never use the data, although you might ask yourself what it was that made you think it was important; that in itself is analysis!

When do I provide the answer to children’s questions?

- The gift is in the thinking that occurs between the question and possible answers, lengthening the time between the question and the answer provides children with space to think of hypotheses and explore.
- Your knowledge of the child will come into play and guide how you navigate this to maintain children’s wellbeing.

Re-visiting/relaunching

Should I be directing children's project work, by pulling them out to work on these projects? Aren't I interfering with their right to play?

- Project work should be driven by children's exploration and thus the children will be requesting their project time. Then you negotiate: *"Would you rather do our map-work before or after morning tea?"*— encourage the children to have agency in this space.
- Re-offering pictures /records of conversations / thinking and photos, to support children to further explore their thinking is our role; it is part of the balance of child/ adult initiations.

What are some of the strategies we can use to re-launch an investigation?

- Use a clue to trigger memory. This might be a photograph of them building/playing or a snippet of conversation that you introduce with something like: *"Remember yesterday (last week, last term!) when xx or yy, well, I was telling my friend about your question, and I was wondering..."*
- Another strategy is to have a mini-display on a table/in a corner/wherever's convenient, showing something they had been doing (a photo or drawing perhaps) and inviting key players back to ask what other thoughts they had had about (designing a cubby, how volcanos work or whatever).

Is it ok to come back to something after a week or more has passed with photos or a piece of work? People ask, "will the child remember?" "will it still be relevant or meaningful?" "what if they are not interested?"

- Revising and relaunching can occur hours, days, weeks and even months later. When educators see connections, it is powerful to be able to remind children what they had done or were exploring earlier.
- If children aren't interested, we might have misunderstood their thinking or something more pressing has taken over their curiosity. What else do we need to consider? What other data do we need to collect to get closer to children's thinking?

Structures and Processes

How do we use Pedagogical Documentation to demonstrate learning progress?

- Working through the components of the resource should assist with this. Working alongside children, dating interesting encounters, analysing unfolding events, sharing information with team members- all contribute to making learning visible, both for individuals and for groups. Having examples of children 'doing things' at one moment in time, and doing something similar some months later, will make progress apparent (e.g. longer conversations, more turn-taking, better persistence at problem-solving, use of larger vocabularies and mathematical concepts).

How can we better organise this information?

- This question can only be answered through round table conversations with people in a team and with others working in these ways. There is not one system that works for everyone! A combination of hard copy and dated digital files can be used for multiple purposes (cut and pasted where appropriate), so easy access is very important!

We want to see more children revisiting/rethinking/being challenged in this work. How can we get better at the process so that our team can manage multiple projects?

- Starting small will help educators gain confidence in both the skills and benefits of working in this way. With regular sharing across the team (on mind-maps, in feedback meetings), individuals will see the potential for noticing 'mini-moments' and following up children's investigations wherever sustained engagement becomes apparent.

Pragmatics

How do we support families and staff as we move from traditional ways of documenting learning to Pedagogical Documentation?

- Share your thinking with families (on notice board/webpage/newsletter) as your work with children evolves. Families will be as intrigued, as will new members of staff, when they see the rich depth apparent when children's thinking, exploring and theory-making are recognised as part of ongoing investigations. Avoid waiting for the 'Big Share' of finished pieces of work! Work in progress is more engaging!

Who is Pedagogical Documentation for?

- This important question is explored in *What's Pedagogy Anyway?* Sharing this resource with your team may help unpack the many layers of interpretation and multiple purposes shared through this way of working.



What's Pedagogy anyway?

This handbook aims to challenge us all to refrain from creating a one-size fits all approach when it comes to documenting teaching and learning. It also challenges educators to resist the notion of reducing children's learning and consequently the associated pedagogical documentation to the five outcomes as outlined in the Early Years Learning Framework. (These materials are available on Plink.; search LDAR)

How can we support/encourage teachers to move from the 'talk' to the 'writing'?

- Begin small! What was something you saw this morning/yesterday which surprised you? Tell me, then record in no more than three sentences. Then decide why it might be important. Brainstorm a title with colleagues- no more than ten minutes all up!

How do I document shared learning in children's individual folders?

- Most learning will be shared as we are focusing on the social construction of knowledge.
- Assuming that you have permission from families (wise to do at enrolment!) you simply copy and paste material for each child involved in an investigation!
- It may be appropriate to have a paragraph re the group investigation and another few lines -which varies for each family- about the particular role that each child/ the particular child has had in the unfolding work.

How do you go about the practical physical organisation of the Pedagogical Documentation – ways of keeping it together before producing a final polished piece?

- The first key point here is that the term 'Pedagogical Documentation' refers to more than 'polished pieces'; this is a mindset that includes curiosity about everyday moments, about ways to understand children better.
- There are many ways you could try, including sticky notes, folders for different projects, clip boards with documentation for each project, folders for each child with analysis written onto observations, whiteboard to share thoughts.
- Look for opportunities to create a shared space for everyone to see and feed into the documentation and analysis, bearing in mind that your wonderings can't be 'wrong', and that other ideas can help extend your thinking or reinforce early interpretations.
- See examples from educator presentations (including whiteboard and folders of documentation).

When do I teach the skills and knowledge that children need to know?

- This occurs alongside children during problem solving and shared sustained thinking.
- Skills and knowledge need to be taught in ways proximal to the children's learning in order to build conceptual understanding and authentic learning.

How do I choose who should work together in the small group project work?

- These judgments are best made from your knowledge and understanding of children's strengths e.g. dispositional orientations, content knowledge, abiding interests, social relationships, predominant role the child takes on
- Sometimes the groups 'self-form' and sometimes one child's query will be the catalyst for inviting co-researchers.

ATTACHMENTS

DRAFT

LEARNING DESIGN
ASSESSMENT AND REFLECTIVE
PRACTICE IN THE EARLY YEARS



Analysing data: What we mean and why it matters

Authors: Associate Professor Alma Fleet and Mr Anthony Semann, Semann & Slattery

When you hear the words 'analysis of data' what comes to mind? Does it take you back to a period of your professional studies when you were writing an assignment and had to analyse text, or perhaps do the words 'analysis of data' bring forth images of university lecturers at their tables with loads of paper around them as they sift through these to search for an answer to a question? These images might in fact be relevant, but analysis of data also has a place within the everyday early education sector. Perhaps we haven't used these words in this way before, but have been analysing data and referring to this process as 'interpretation of observations'. Words aside, the early years planning cycle requires educators to consider analysis of data as part of professional practice. The early years planning cycle provides a systematic approach to the collection of data, interpretation of data, planning for learning, implementation of plans, and reporting on learning as part of a cyclical and ongoing process. Embedded in each of these steps is the need to reflect. Collectively, analysis of data can inform both our formative and summative assessment processes, as well as providing rich information to inform the task of documenting pedagogically. As Wien (2018) suggests, pedagogical documentation has – and must have – a level of analysis embedded within it.

The material which we collect – we study it, and it is process of studying it which makes it pedagogical. What makes pedagogical documentation really meaningful is the inquiry that is in the adult's intention. Because when we are creating data, we are doing so with an idea about what we are studying and it is that which helps the documentation have meaning. (Carol Anne Wien, 2018)

The Early Years Learning Framework for Australia (DEEWR, 2009) establishes data analysis as a key component of an educator's professional toolkit. This may seem to be an odd claim, as the word does not appear in the document (!) and 'data' is only mentioned in the context of children's numeracy learning. On the other hand, there is an expectation that: 'Educators carefully assess learning to inform further planning' (p.9); in other words: '...educators assess, anticipate and extend children's learning via open-ended questioning, providing feedback, challenging their thinking and guiding their learning' (p.15). This focus on the assessment for learning 'refers to the process of gathering and analysing information as evidence about what children know, can do and understand' (p.17). Educators are also asked to consider 'how they can expand the range of ways they assess to make assessment richer and more useful' (p.18). Each of these expectations includes the analysis of information collected in the process of daily work with colleagues, children, and their families.

Extending on the importance of seeing assessment within (rather than separate from) learning, Barnes (2012) explained that:

- *Assessment for learning*: 'Educators assess for learning in order to enhance children's learning rather than to make comparative judgments. Because it is ongoing, frequent and usually in context (meaning that it is not necessary to remove the child from the situation in order to assess that child's learning and development) and intended to support learning (meaning that the person who conducts the assessment is the one who acts upon what she or he has learnt from the assessment), assessment for learning is frequently referred to as formative assessment.' (p.7)
- Educators who look for ways to use *assessment as learning* recognise that children's learning is a dynamic and interrelated process and they honour and respect children's right to have a voice in matters that directly affect them.' (p.8)



LEARNING DESIGN, ASSESSMENT AND
REFLECTIVE PRACTICE IN THE EARLY YEARS



Pedagogical documentation as a rich source of assessment

This paper contributes to the preschool professional learning program provided by the Department for Education and Semann and Slattery as part of the Learning Design, Assessment and Reflective practice strategy.

AUTHORS:

Mr Anthony Semann – Director Semann and Slattery

Associate Professor Alma Fleet – Adjunct Associate Professor Semann & Slattery and Adjunct Macquarie University

Why should we document learning?

Considering why we document learning assists educators in understanding what constitutes pedagogical documentation and how to **purposefully** engage in the process. There continues to be a wide variety of ways to document the teaching and learning which takes place in an early childhood site: this diversity allows sites to adopt the most useful and relevant approach to suit their context.

Documentation is not about what we do, but what we are searching for. (Carla Finaidi)

To begin the journey towards documentation, or when reviewing your current approach, it is important to pause and reflect on the following questions:

- What part does your documentation play in the cycle of planning?
- Does it offer a space for reflection related to the teaching and learning of both adults and children?
- In what ways does your documentation make learning visible to families, children, educators and other interested individuals?
- In what ways does documentation celebrate learning and development?

In the Australian context, the regulatory frameworks impacting on early childhood education require sites to document children's learning and development **over a period of time**. However, regulatory frameworks neither stipulate what forms documentation should take nor their frequency. These decisions are best made at the site level by leaders and educators. In deciding on their approach, they should reflect on the resources available, the expectations of families, and the skill and knowledge of their educators.

Undertaking documentation is an opportunity for educators to **reflect** on their practices and the learning which takes place. However, there is a tendency for educators to want to find answers to questions or to want to suggest that their assessment of learning marks the end of a journey. Rather, the benefit of documentation is that it captures a story of learning which continues beyond the date of the documentation itself. Effective documentation, when reflective in nature, can raise more questions, leave educators and readers wanting to know more, and also suggest that there is more to the learning than what is currently being captured. This **uncertainty** is to be embraced and valued, rather than being seen as a failing.

Documentation is not about finding answers, but generating questions. (Filippini in Turner & Wilson, 2010, p.9)

