Karen Hope:

Hello, my name's Karen Hope, Program Manager of the Early Years Unit here at the Victorian Curriculum and Assessment Authority. This presentation that you're listening to today, titled a pedagogy of inquiry, will encourage you to think about what does a pedagogy of inquiry look like and how do we champion children's ideas? "While most adults doze in front of a world considered predictable, legions of insatiable experimenters sniff out crevices and crannies everywhere in which to plunge their curiosity. They are children and they are the most excellent of explorers." And I've introduced this quote right at the start of the presentation, because when you work with a pedagogy of inquiry, children are already, if you like, hardwired to work this way. They are curious. They do have hypotheses. They are researchers and they definitely are experimenters. So you are coming to your workspace with people that are all very ready, very receptive to these ideas

There are two ideas or two dispositions, if you like, that I really think you need to consider when starting to think about working this way. And they are wonder and uncertainty. Both are important here as they lead to a welcoming of the unexpected. And to work with a pedagogy of inquiry really requires you to be open to the unexpected. When you remain open to these unexpected ways of learning and working, that's when rich learning opportunities appear. It is not a closed off linear way of thinking about working with children, but you are open to ideas, the ideas of your colleagues and the ideas of children and the ideas of families.

Let's think about what some of the differences are between inquiry and projects, because it sometimes is easy to get them a little bit confused. And it's actually a very simple way of thinking about them separately. Project-based learning or working around themes is about exploring an answer. You already know the answer. So if you did a project on Autumn, you already know broadly speaking, what happens in Autumn and when Autumn starts, and these are ideas or answers that you're giving to children. But when you work with inquiry, inquiry-based learning is about discovering an answer. You don't know it and neither do the children, and you're going to find it out together. When you use inquiry as a pedagogical approach, children can engage deeply and direct their investigations with their own individual questions and personal interests. Inquiries develop organically, building on what children already know. Working with a pedagogy of inquiry positions the child as a constructor of knowledge. And this stands in contrast to some less contemporary pedagogical approaches that might view the child as a passive recipient of someone else's knowledge and thinking.

It also encourages us to view the role of the educator also as a co-constructor in this process, rather than a transmitter of knowledge. To work with a pedagogy of inquiry, then allows children and educators, the opportunity to follow their own interests and take an active role in their own learning.

The Victorian Early Years Learning and Development Framework, or the VEYLDF as you might know it, has as outcome four that children are confident and involved learners. This means that responsive learning relationships with all children then support them to learn successfully. They're encouraged to be curious and enthusiastic about their learning, and this word curious is an important one when you are considering how to work in this way. Children benefit from opportunities to discuss ideas, make plans, brainstorm solution to problems, and reflect and give reasons for their choices. "The ongoing nature of such experiences then ensures that children's engagement with them becomes deeper and richer.

When children reflect on what they have done previously, or plan for what they are going to do in the future, or have the opportunity to discuss, rethink, and change their plans and change their ideas as they go, their learning and thinking becomes far more complex" (Touhill 2012, p 2).This approach to working is not without worry, however, but there must be a level of discontent in your thinking in order to grow. But it is worth reminding you that this is not a new approach and it is widely used around the world. And the reason why it is so popular and effective is that when broadly embraced, it builds social and emotional learning capital, problem solving and life skills for both child and educator. So asking questions here really is at the heart of this model. And that's what propels learning, and that's where the growth happens.

So why work this way?

We must gather perspectives other than our own. We must especially gather the perspectives of children. We must learn to welcome and wrestle with perspectives different from our own, also in our adult conversations with our colleagues. Because when we do this, when we take on board the ideas of others and we discuss and we critically reflect on those and think deeply about how they might be applied in our work, new things are born. New ideas are born and new ways of working are born. And this really is how the inquiry becomes activated. It does all start as all planning for children does with your image of the child.

Think about your early learning environment now as a place of research and you and the children are researchers together. We must believe that children possess their own theories, their own interpretations and questions, and that they are powerful co-protagonists in the knowledge-building process. And your job, every day, is to create a context in which these theories, curiosities, research is legitimised and listened to.

If you consider that a study in the UK found that preschool children ask 73 questions a day, most of which their parents cannot answer, and that this natural curiosity peaks at the age of four, for both boys and girls, you will start to appreciate the importance of the question, and children are natural born questioners. Children talk, and they have always talked. However, we do not often listen deeply to them. Giving children a voice means that you must recognise the child's right to be the primary author of their life. They are the experts on their life. Children have a natural born tendency to listen to other children. Children love discussion and they love conflict. They love listening to the ideas of others and they like changing their minds. And they like taking on board the ideas of educators as well. Children want to learn whatever they think is worthy of their attention and worthy of learning.

"Children have the privilege of not being excessively attached to their own ideas, which they construct and reinvent continuously. They're apt to explore, make discoveries, change their points of view, and fall in love with forms and meanings that transform themselves." (Edwards, et al, 2012, p 51). This quote is important to consider in your work with children, as it really does highlight the idea that children are not excessively attached to their own ideas and that they are open to new interpretations, new information, both from educators and children.

This brings us to the role of questions and questions are integral in working within a pedagogy of inquiry. The right question at the right time can move children to peaks in their thinking that result in significant steps forward and real intellectual excitement. Although it is almost impossible for an adult to know exactly the right time to ask a specific question of a specific child, especially for a teacher who is concerned with 30 or more children, children can raise the right question for themselves if the setting is right. (Duckworth, 1996, p5). The statement or question on what to find out about and how to proceed is only valid to the extent that it is seen for what it is, a hypothesis. The idea or the question is a way to increase expectations, excitement, and possibilities for welcoming the unexpected. Essentially you are being asked to abandon preset ideas and preset programmes and join efforts with children. You are being asked to join your attention to children's attention.

And I've included this quote from Pablo Picasso. He said, "Computers are useless. They only give you answers." And I like this quote because it really does illuminate the importance, I think, of the question. This makes the role of listening very important.

Inquiry projects must start with active listening. This is built on engagement and curiosity. It starts with you being open to researching and experimenting with children. I want you to listen to what I'm about to tell you.

You are driving a bus. At the first stop, five people get on the bus. At the next stop, three people get off the bus and two people get on. At the next stop, 10 people get off the bus and two people get on. My question to you is, what was the bus driver's shoe size? You might be thinking now that you've used the wrong processes to answer that question. And that is because you were not listening in the ways that we might have wanted you to. You need to follow children's footprints. That's why listening is important. The directions that children take you with their thinking and learning and their questions. By following children's footsteps, it means that the inquiry being carried out incorporates the thoughts, feelings, and ideas of children. This is only possible through in-depth reading and in-depth interpretation of your various documentation materials.

If you consider that questions are critically important in working with a pedagogical model of inquiry, I have some answers for you. This can sometimes be a useful activity to do with children as well, but it will warm your brain up into thinking about the value of questions and the importance of the right question at the right time. So here are some answers.

When dinosaurs were alive, there were 370 days in the year. The smallest standard scientific measure is the Planck time. It takes you about 550,000 trillion, trillion, trillion Planck times to blink once quickly. It takes time for light to reach us, and as a result, everything we see is in the past. When you see the sun out your window, the light is already eight minutes and 20 seconds long.

You can only imagine that if you provided some of those answers to children, what might be the possible questions that they would put back to you. So the value really is in the question. What direction are you taking children with your questions? Is the question you are asking close to the child's processes? And what I mean by this is, is the question close to the way that they are working and thinking? What processes are they pulling into play to try and figure out answers?

You need to ask big questions. Is it a thick question or a thin question? And by this I mean, is it a question that closes off children's thinking, or is it a question that might open up their thinking?

You also need to ask bridging questions. What do you think would happen if? I wonder what would happen if this happened.

Children's questions and your questions hold traces of your own thoughts and theories. So when you think about the design of the actual inquiry project, you have your adult, what I call pre-configurations. What are you imagining will happen? What idea do you have in your head about where you might take children in their learning and thinking? What explicit and implicit questions do you have? What languages are present? And by languages you can think about the hundred languages. What materials are children using? What resources are they calling in into play in this project?

And then critically, I want you to think about relaunching, relaunching the work and relaunching the ideas. And I like you to think about this as almost throwing the ball back that they have handed you their current thinking, working hypothesis, and you are working with that process with the child and handing it back to them. It's circular if you like. The role of the adult here becomes very concerned with gathering clues that help you direct the design of the inquiry.

So here's a moment for you to think about what we've talked about so far and apply these ideas to your work. I call this your thinking space. I want you to find a question or a snippet of a conversation that you have collected in your work with children. That can be some documentation, an artefact, some recording of a conversation that you've had with the child, art. You are not limited here in what that might be, and then I want you to take that artefact, and I want you to look deeply at it. And I want you to think about the clues that children are giving you here in this work or in their conversation. And then I want you to think about what questions you have based on what you are looking at. What clues are they giving you here? What ideas do you have, and where might you take that?

To work with this model of inquiry means that you have to become very good at championing children's ideas. This can be difficult sometimes because sometimes children's interests do not match with our own. And we are sometimes forced into what I spoke about earlier about this level of discomfort in working this way in the ideas that they bring to you. So what messages do you give children when you accept or reject their interests and ideas? And it is important to consider that because we all have a natural tendency to lean towards our interests when we plan and design programmes for children. And it's really critical that you are aware of possible biases that might be there in your practise, and to think about if you look at your documentation work critically, you will see their ideas and you can then move them forward for children.

Snails. Snails are often used as metaphors when we talk about work with children. They can remind us that one of our roles as an adult, working alongside children, is to notice what children noticed. And this is what I talked about before, about joining your attention to children's attention. Snails can also teach us about the importance of taking our time. Children can sometimes wonder, are the snails that you see outside on Monday the same ones that you might see on a Saturday?

Some facts about snails and perhaps why they are interesting for children. And again, giving children the answers and wondering about what the questions are that will be relaunched back to you as an educator. So snail can be found everywhere on earth. The snail shell stays with it for life. And there are approximately 43,000 species of snail that live in the sea, in freshwater, and on land. Garden snails have over 14,000 teeth that are all located on their tongue. Snails can only crawl and the distance they travel ranges from 33 feet per hour to 157 feet per hour. Most species of snails lay their eggs underground while a few do give birth to live young.

I want you to consider for a minute, the great provocations of those answers that you provide to children and consider the possible questions that might come back to you. And snails is one of many inquiry projects that you might develop an interest in with children, but it does show you the importance of the questioning and the listening.

Educator mindset and preparedness are so important and questioning and being curious is at the heart of inquiry-based teaching. You have to be a curious based person to work this way. When you do not know what to do or ask, you can sometimes default to asking closed-ended, content-specific questions. And it is this very kind of questioning that we want to avoid. So think about what I said earlier about thick questions and thin questions.

Children need to have the capacity to inquire and make decisions on their own. But what I would say here is that quality teaching and working this way takes a very bright light and shines it on a question or an idea. And therefore, by doing that, you make it accessible to children's way of thinking and working as well.

Another little thinking space activity for you. I want you to go back to your previous question or snippet or artefact, and I now want you to consider what concepts children might be exploring in that. So you're looking at the clues that you pulled out before, and now I want you to think about the concepts. Instead of thinking about specific activities or specific learning experiences, I want you to start to think about processes and materials that you might provide to children. So you can see there a shift away from thinking in a very closed-ended, linear, experienced-based approach to more emphasis on materials and concepts and processes of working.

In Reggio Emilia, they start off with what they call a reconnaissance. I love this idea, both metaphorically and in the way I'm going to explain it to you, but I do think sometimes to consider it metaphorically is to gain a better understanding of it. They describe this as what they call a flight over all of the human, environmental, technical documentation, conversations, resources. All of the work that you collect around children's thinking and learning and educator thinking and learning. They do a flight over it all. So imagine hovering over everything that was on a table and looking at what you've got. And they say that the more missions that you make, the more flights you make over the work, the more likely you are to get an overview of what children are really thinking and learning about. And your role here is, again, to gather clues. And that then propels you forward into the next bit of work and the next bit of thinking.

The value of the inquiry is in this flight, is in this reconnaissance. And the question and the design, and then the embracing of working with a degree of uncertainty is actually what results in a robust piece of inquiry. Adults and children both need to participate in these stages.

So thinking about working with this model, there are some strong takeaway messages that I want you to consider as you think about applying these ideas into your work and into your practise with children and families.

Number one, curiosity. It is the springboard of all learning. You have to be a curious educator. You have to wonder about how things work, how the world works, what children are thinking. Children more than ever, should be encouraged to do what children have always done, and that is to be curious. And as I said at the very beginning of this presentation, it is hardwired in them. Half of your work is done. They come already warmed up to work this way. Children's daily context should be a curious one. The environment that you provide for children from the minute they walk in the door should be one that speaks of curiosity, both in the materials that you provide and the conversations that you have, and the environment is the third teacher here in terms of really saying to children, this is a place where great thinking and great research happens.

If you provide materials, resources, and then adults, that can provide and provoke questions and thinking, then cognitive disruption is the result. And this shifts children's thinking from one point to another, and this is called learning. Adults can often anticipate difficulties with children and resolve them. And I would like to say here, I think that educators are very good at resolving problems for children. It's part of what we do in our daily work. However, we often do not give children enough time to think and find solutions for themselves. Adults that create a culture of ideas rather than answers, and then offer to children the sustained time to really think deeply, that's what's required. And when you offer children time, this is called research. Children want to learn whatever they decide is worth learning. When children want to know how something works or how to do something, they will figure it out themselves. And this is called invention.

I'd like to thank you for listening to this presentation. I hope that it has warmed up your brain into a way of thinking about working with children differently. And I would like to add that when you work this way, it is a much more exciting way to work with children, and it's a much more exciting way to think about your work with children. Thank you.

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