Pedagogies that engage five to eight year old children's imagination and creativity at school

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Abstract

Children's imagination and creativity are widely recognised as important to learning in the early years (Bruner, 1986; Egan, 2005; Vygotsky 1967/2004). What is not clear is how Australian teachers nurture this aspect of thinking and learning when children enter formal schooling. The aim of this study was to investigate the pedagogies employed by teachers reputed to be exemplary practitioners to foster 5-8 year old children's imagination and creativity. This study used descriptive case study to explore the thinking, actions and insights of three teachers in different settings. Data were collected using non-participant observation and video recording of classroom interactions; and a video-stimulated review interview process. Analysis revealed four common pedagogies that fostered imagination and creativity across the curriculum. They were: supporting children to direct their own learning through play; listening to children; provoking children's thinking and emotions; and tolerance of ambiguity and mistakes. The findings demonstrated that teachers in the early years of school can successfully use pedagogies that engage children's imagination and creativity, within the perceived constraints of curriculum, timetabling and space. Future research into this topic could investigate children's responses to these pedagogies.

Keywords: imagination; creativity; pedagogy; teachers; early childhood education

Introduction

Children's imagination and creativity have long been of interest to psychologists, philosophers and educators (Bruner, 1986; Egan, 2005; Eisner, 2003; Vygotsky 1967/2004; Warnock, 1976). Vygotsky's early writing emphasised the importance of children's imagination in their development, and the implication of this development for all human achievement (Vygotsky, 1967/2004). Contemporary scholars have recently begun to synthesise Vygotsky's understandings about children's imagination and creativity, and consider the pedagogical implications for early childhood educators (Eckhoff & Urbach, 2008; Gajdamaschko, 2005; Lindqvist 2003b). Today, government and business leaders recognise the importance of imagination and creativity in meeting the challenges of a dynamic society, prompting questions about how schools nurture this aspect of learning in children (Robinson, 2006). In 2004, the Victorian Schools Innovation Commission provided a comprehensive rationale for creativity in schools, asserting that engaging with creativity significantly enriches individuals' lives, motivates learning, propels the economy and is important in responding to social, cultural and environmental issues (O'Rourke, 2007). The new Australian Curriculum proposes that 'critical and creative thinking' is one of the seven 'general capabilities' students must develop (Australian Curriculum Assessment Reporting Authority, 2010, p. 2). Fettes, Nielson, Haralambous, and Fitzgerald (2010, p. 16) argue for the central importance of imagination in education, despite conceding that imagination in education will be contested and 'at odds' with current educational practices. Robinson (2006; Robinson & Azzam, 2009) argues that education stifles creativity through adherence to constraining assessment agendas. The importance of children's imagination and creativity to education appears to be gaining wide recognition and some pedagogies have been researched, however few studies have been conducted in the early years classrooms in Australia. The aim of this study was to investigate the pedagogies three exemplary teachers used to engage five to eight year old children's imagination and creativity. Specifically, the study investigated teacher thinking, actions and insights. The following section presents a

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theoretical framework for imagination and creativity, reports on existing research about pedagogy for creativity, and discusses methodological issues.

Theoretical Framework
Defining imagination and creativity
Vygotsky (1967/2004) defines imagination as the ability of the mind to combine perceptions from reality into new forms through processes of disassociation and association, developed through the emotions. Warnock (1976, p. 10) describes imagination as 'that which creates mental images', a function that is activated in ordinary perceptions of our environment. These perceptions may be emotional as much as they are intellectual. White (1990, cited in Egan & Judson, 2009, p. 127) characterises imagination as 'our ability to think of the possible'. Gallas (2001, p. 460) states that creativity is 'action in the mind and the world', or a further transformation of images and ideas formed by the imagination. Robinson (2006) argues that creativity is a process of having original ideas of value.

According to Vygotsky (1967/2004, p. 71), play is the initial expression of imagination and 'the root of all creativity in children', followed by drawing and storytelling. In these three forms, elements of reality gained from prior experience are combined in new ways to meet children's desires and interests. Several scholars posit that imagination, thinking and learning are imbued with emotion, and it is at this intersection that creative responses emerge (Bodrova & Leong, 1996; Egan 2005; Vygotsky, 1967/2004). Research in neuroscience supports this assertion, describing the nexus between high reasoning and emotion as the basis for creativity and learning (Immordino-Yang & Damasio, 2007). Burnard et al.'s (2006) research identified some features of 'possibility thinking' in young children in early years settings. This thinking involves posing questions, play, immersion, innovation, risk-taking, being imaginative and exercising self-determination.

Pedagogies for imagination and creativity
Recent research about teaching for imagination and creativity in educational contexts has focused on child development, literacy learning and play in the pre-school years. Rather than relying on the long-held view that children's prior knowledge should be the basis for all new knowledge, Kieran Egan (2003) took the provocative stance of considering what the child can imagine as the starting point for learning. Smith and Mathur (2009) recently offered a comprehensive review of research into the developmental effects of imaginative activity on children from preschool to adolescence. The authors found that children showed increased emotional regulation, empathy and cognitive ability when engaging in play, and language, literacy and drama activities designed to elicit imaginative responses. Gallas' (2001, p. 488) extensive ethnographic research in school settings positioned imagination as central to literacy learning, and argued that teaching 'must become an imaginative, inside/out process that places student action and interaction at the center'. These findings challenge traditional teacher control of the classroom as children collaborate and improvise, and the teacher immerses her/himself in play with children, using a less scripted pedagogical stance (Gallas, 2001). Recent research into play pedagogies in the pre-school years, prioritised adult-child interactions and co-construction of meaning (Goouch, 2008; Lindqvist 2003a). Similarly, Kudryavtsev (2011) noted the key role of teachers in engaging children creatively. Further support for this prioritising comes from the findings of Bilton (2012) and Siraj-Blatchford (2010) who pointed to the role of teacher-child interactional quality in promoting children's thinking. The present study does not address specific curriculum areas, however, as the previously cited literature indicates, play and adult-child interactions are likely to be relevant to the study of children's imagination and creativity.

Further to studies about curriculum areas and play, researchers have been interested in conceptual ideas about teaching for imagination and creativity that translate into classroom strategies.

Researchers have expressed concern about the effect on children's imagination and creativity of pedagogy that separates intelligence and creativity (Robinson & Azzam, 2009). Robinson (2006) condemned schools for penalising children's mistakes, as it is the willingness to risk being 'wrong' that gives license to creativity. Sternberg (2003, p. 91) proposed that teachers and learners conceptualise the development of creativity as essentially a 'decision-making process'. He stated that strategies that enable teachers and learners to choose creativity include the tolerance of ambiguity; encouraging sensible risk taking; teachers modelling creative thinking; helping children believe in their creativity; allowing mistakes; teaching children to consider others' perspectives; and giving time for creative thinking. Research on the use of these strategies has found that their use improved school achievement (Sternberg, 2003). These studies, however, were conducted with children over eight years of age, with some participants identified as gifted. Further research on teaching is required on younger children and children in mainstream classrooms.

Researchers in the United Kingdom have paid considerable attention to pedagogies that promote children's imagination and creativity. Woods' (1990) research into the practices of creative teachers found four factors, innovation, ownership, control and relevance, to be central to their pedagogy in school settings. Research conducted in preschool and early years settings has found that teaching for creativity involves 'the passing of control to the learner and the encouraging of innovative contributions'; teachers valuing learners' 'ownership and control'; 'encouraging children to pose questions, identify problems and issues'; 'offering children the opportunity to debate and discuss their thinking'; 'encouraging children to be co-participant in learning'; and 'prioritising learner agency' (Jeffrey & Craft, 2003, cited in Craft, 2005, p. 42). Jeffrey and Craft (2004) used Woods' (1990) framework to examine the distinction between teaching creatively and teaching for creativity, finding that this dichotomy does not reflect the reality of teaching. The authors suggested that research should focus on the experiences of the learner and the teacher (Jeffrey & Craft, 2004).

Cremin, Burnard, and Craft (2006, p. 108) have described, from the perspectives of early years teachers, the pedagogy of 'possibility thinking', or that which can be imagined. The findings revealed three common strategies. 'Standing back' refers to teachers literally removing themselves from involvement in children's activities to observe emerging understandings. 'Profiling learner agency' describes teachers as resources that can advance children's thinking, by ensuring children have many opportunities to make choices about their learning. The authors also identified 'creating time and space', which is the ability of the teacher to 'stretch' time to allow deep immersion in the learning experience to ensure the physical space of the classroom affords opportunities for learning (Cremin, Burnard, & Craft, 2006, p. 115-116). The findings of these key studies contributed to the data analysis process in the present research.

Reggio Emilia

The constructivist approach of preschools in Reggio Emilia in Italy is perhaps the clearest vision of pedagogy that promotes children's imagination and creativity. The Reggio approach begins with the image of the child as 'strong, powerful and rich in potential and resources', and 'competent in constructing theories to interpret reality and in formulating hypotheses and metaphors as possibilities for understanding reality' (Gandini & Kaminsky, 2000, p 123, interviewing Rinaldi). This image of children's learning is nurtured by a 'pedagogy of relationships and listening', with a teacher who is a 'co-creator rather than merely a transmitter of knowledge and culture' (Gandini & Kaminsky, 2000, p 125, interviewing Rinaldi). In this way there is a shift in the traditional balance of power between teacher and learner to one in which all parties are equally engaged in a learning journey. Rinaldi (2006) speaks of 'creativity as a quality of thought' that occurs in the individual, through relationships in a supportive context. The learning process is seen as inherently creative as children and adults 'construct new connections between thoughts and objects that bring about innovation and change, taking known elements and creating new connections' (Rinaldi 2006, p.

117). The physical learning environment is considered the third educator in the Reggio approach as it offers opportunity for and regulates social interaction, autonomy and creative exploration (Strong-Wilson & Ellis, 2007). Reggio pedagogy has been developed in preschool settings and in a particular historical context and culture. The current study may, however, be able to identify if any of these pedagogies are useful in engaging five to eight year old children's imagination and creativity in Australian schools.

Pedagogy

Pedagogy is generally regarded as the 'art and science of teaching' (Ryan & Hornbeck, 2007, p. 596). Pedagogy encompasses the psychological, cultural, political and socio-emotional processes of teaching young children, and is not to be confused with curriculum (Ryan & Hornbeck, 2007). Craft (2005, p. 41) defines pedagogy 'as encompassing appropriate and defensible professional judgments about how teaching is undertaken and learning nurtured', implying that pedagogy requires a sound theoretical basis. Pedagogy is influenced by classroom and school contexts; the expectations and assumptions of administrators and parents about teachers and teaching; and changing ideas about the nature of teaching (Ryan & Hornbeck, 2007). In this study, pedagogy is considered in terms of relationships (O'Rourke, 2007). Pedagogy is seen as encompassing teaching strategies and learner responses; socio-emotional interactions between teachers and learners; the impact of teachers' educational philosophy on their teaching; and the mediating effect of the physical learning environment (O'Rourke, 2007).

Methodology

Child development research rather than research about teachers and teaching, has been the basis for knowledge about practice in the early childhood field (Genishi, Ryan, Ochsner, & Yarnall, 2001, cited in Ryan & Hornbeck, 2007, p. 597). Research on imagination and creativity has perhaps been limited because of the challenges of determining methodology combined with the seemingly nebulous notion of children's imagination and creativity. The current study focuses on teachers' perspectives about pedagogy across the curriculum, recognising their unique position in understanding the teaching and learning process. Video recording and analysis of typically occurring pedagogy has been found to be a useful way to study teaching and learning (Tobin, Karasawa, & Hsueh, 2004; Zellermayer & Ronn, 1999). Video recordings provide a rich source of data, capturing the gestures, facial expressions and emotions not conveyed in interviews (Marshall & Rossman, 2006, cited in Merriam, 2009). A reflective process using recordings of pedagogy provides insights into exemplary teachers' thinking and actions (Cremin, Burnard, & Craft, 2006; Stake, 2010). In this research context, the case could be defined as the pedagogies that were perceived to engage children's imagination and creativity. The methodology employed included teacher perspectives on their practice via videoing of that practice, thus addressing the commonly found gap between teacher beliefs and their actual practice (Cheung, 2012).

Children need to be engaged when learning (Laevers, 2000), and nurturing children's imagination and creativity offers much to the achievement of this goal. When children are engaged in learning, they demonstrate 'strong motivation, fascination and total implication; there is no distance between person and activity' (Laevers, 2000, p. 24). Many educators intuitively value children's imaginative and creative abilities but may not be clear about how to foster these abilities in the classroom (Gallas, 2001). The aim of this study was to identify the teacher pedagogies that promote children's imagination and creativity across the curriculum in the early years of school. Due to the constraints of this Honours study, an investigation of children's responses was outside its scope. The present study sought to answer the following question: What pedagogies do three exemplary teachers report as engaging five to eight year old children's imagination and creativity?

Method

Research design
This study was a qualitative, descriptive multi-case study (Stake, 2006).

Participants
A purposive sample of three classroom teachers in separate primary schools was invited to take part in the study. Each teacher had a reputation for demonstrating exemplary classroom practice in engaging five to eight year old children's imagination and creativity across the curriculum. Potential participants were recruited through fifteen initial recommendations by colleagues in the field from state, Catholic and independent schools in Adelaide, Australia. One researcher met potential participants in their class and observed their classroom practices. During the initial visit the researcher considered each teacher's strengths using features identified in the research literature, for example, open-ended questioning, fostering learner agency, pedagogical documentation of learning and planning for creativity. Teacher confidence, evident interest in the topic, willingness to be videoed in their practice and to engage in a reflective dialogic process with the researcher were also determined. The three participants chosen were supported by school leadership to employ these pedagogies. Participants were given pseudonyms to ensure confidentiality.

Research site 1. Julie had 19 years of teaching experience and taught 25 children who were five to six years of age. The school was informed by the Reggio Emilia approach to education and was located on the southern fringes of Adelaide in a rapidly growing region that rated lower than average on the Index of Community Socio-Educational Disadvantage (ACARA, 2014). The school valued the notion of the competent child by which children are defined by what they can do, not what they cannot do; by listening pedagogy; and by children and teachers as researchers.

Research site 2. Linda had 40 years of teaching experience and taught in a vertically integrated class of five to eight year old children with a total of 22 children in the class. The school was located in an area of eastern Adelaide rated as middle to high in socio-economic status relative to Research site 1. The school's educational philosophy was influenced by some of the core principles of the Reggio Emilia approach, for example the image of the child as competent and strong; and the central role of the community in children's learning.

Research site 3. Simone taught 25 six to seven year old children, and had four years of teaching experience. The school was located in a small town in the Adelaide Hills, and had a middle socio-economic status catchment relative to the other two sites. The school implemented the International Baccalaureate program. All three schools used the state-mandated curriculum.

Ethics
Ethical approval was gained in advance from the University of South Australia. Informed consent was gained from all participants, and a letter was sent to parents of children in the classrooms where teachers would be filmed.

Data collection
Once the initial participant selection processes were undertaken, data were collected in three stages over a school term, with each case taking a block of three weeks. The collection of data for each case took in total approximately eight hours.

Observation. The researcher collected three hours of non-participant observations in each classroom to gain information about the physical and social context of the class; to observe typical teaching and learning; review planning documents; and habituate the students to the video camera.

Video recording. Three hours of teaching and learning were video-recorded. To track teacher movements the digital camera was hand-held for flexibility of movement, and each teacher wore a lapel microphone for audio recording. Four children in one class did not have consent to be videoed, resulting in minor restrictions to the footage, which did not affect subsequent findings. In a first phase of analysis, the raw video data were edited to a length of 20 to 30 minutes by the researcher, who selected episodes of teaching and learning that she perceived to most effectively engage children's imagination and creativity. Burnard et al.'s (2006) features of 'possibility thinking' guided the editing process. These features were, posing questions, play, immersion, innovation, risk-taking, being imaginative and self-determination by children.

Video-stimulated review and interview. Audio-recorded, semi-structured, in-depth interviews were conducted with each teacher using video-stimulated review (VSR) (Cremin, Burnard, & Craft, 2006). During the approximately one and a half hour VSR interview, the researcher and teacher viewed short clips of the edited video footage. After each clip the researcher asked the teacher a series of questions:

Is the edited video an accurate depiction of typical teaching in your classroom?
Describe your thinking behind your actions, as captured in the video clip.
Describe the actions of your teaching in this clip that you believe engaged children's imagination and creativity.
When using this action(s) what responses do you see in children that demonstrate children's imagination and creativity?

In this way teachers reflected on their teaching practices and learner responses to them.
After repeating this process to the end of the edited footage, teachers were asked the following questions:
Do you deliberately set out to use methods that engage children's imagination and creativity across the curriculum?
What do you do at the beginning of the year to create a context for children to express their imagination and creativity?
Have any particular educational or developmental experiences influenced your teaching so that you value engaging children's imagination and creativity?
Do you have the support of school leadership for your pedagogy?

Data analysis
Within-case analysis. Following interview transcription, teacher responses were sorted against the interview questions. These data were then coded using themes from the literature. Emerging themes were also considered. Closely related themes were clarified and pooled to fine-tune the codes. The instances of recurring themes were tallied to determine the pedagogies most frequently used. The perceived strength of children's imaginative and creative responses to the pedagogies were also important in deciding which pedagogies most effectively engaged children's imagination and creativity. Transcripts were re-read and cross-checked with notes collected during the non-participant observations. The researcher sent teachers a copy of the interview transcripts for member checking. No alterations were deemed necessary. To check the reliability of the categories, a final year early childhood education program student also coded the data, achieving 85% agreement with initial coding of teacher responses against themes from the literature. The remaining 15% were agreed upon in a subsequent discussion.

Cross-case analysis. Once the within-case analysis was complete, the strongest five themes from each case were compared. The themes were organised in a mind map (FreeMind, 2010) to gain a visual picture of common pedagogical themes. Meaning was clarified within themes, as each participant brought to the research unique modes of expression, teaching practices and contexts.

There were four themes common to each teacher. Four themes were identified: 1) Supporting children to direct their own learning through play, which can be compared with 'profiling learner agency' (Cremin, Burnard, & Craft, 2006); and teachers valuing learners' 'ownership and control' (Jeffrey & Craft, 2003, cited in Craft, 2005). 2). Listening to children is consistent with the Reggio Emilia approach of a 'pedagogy of listening' (Rinaldi, 2006); and 'offering children the opportunity to debate and discuss their thinking' (Jeffrey & Craft, 2003, cited in Craft, 2005). 3) Provoking children's thinking and emotions is congruous with the Reggio Emilia idea of 'provocation' (Edwards, Gandini, & Forman, 1998). 4) Tolerance of ambiguity and mistakes is consistent with Sternberg's (2003) 'tolerance of ambiguity' and 'allowing mistakes'. These four pedagogies are now described in greater detail.

Findings and discussion
Supporting children to direct their own learning through play
All three settings offered children time each day to pursue their own learning interests, experiment with resources and collaborate with peers in play contexts. Teachers engaged children's imagination and creativity by valuing children's agency in, and ownership of their learning; engaging in play; and entering children's imaginary worlds. These pedagogies are illustrated in the following excerpts.

Julie showed how she valued children's learning through play through the use of 'work-in-progress' signs that children placed on current projects:

> *That is left there and all the whole school does those, as a sign that's [the] child's work for the week. Two things. One: they can go back to it so they don't have to pack it up, we're validating what they have done as really important. But it is also saying you know you can't just work at something and finish it in one lesson, you need to go back and build on it every day.*

Linda promoted a sense of children's ownership of their learning by allowing play to continue:

> *I was flexible, I changed the rules about if they could leave it out here so that they would create more and get more involved in it. I think it's really important that you can do that because...your flexibility is probably almost number one in it, because it means that you are listening to them and following their lead.*

Linda's description of children experimenting with an electronics set demonstrated a philosophy of respecting children's interests and therefore agency in learning, and also the serendipitous learning that occurs as a result of this pedagogy:

> *...you could see that they'd got that from observing older children. So they were learning from their mentors and that wasn't even something that I'd planned... And if they're interested in it, they will gravitate to it, and we're not stopping them doing that. They'd brought it in, they hadn't asked me... I don't know how they'd come by it, but it was perfectly appropriate and they were totally engaged in what they were doing.*

Simone was more structured in her approach to play. She explained her lesson about children constructing animal habitats, showing how she privileged children's agency in how ideas were represented:

> *It's allowing them to show their knowledge in different ways, rather than it's a cookie cutter, and everyone is going to make a habitat and they're all going to look like this... So it gave*

> *them the option, the freedom to... we can experiment with our ideas and we are not concerned with what the teacher's view is.*

Linda engaged in play with children by starting a shelter building project. She placed a large stick against a tree:

> *Oh, starting the play. Now that's typical that you engage, you do one thing. Sometimes they don't take [it] up. That's a typical type of activity but you don't always get the following. You know I could be there dragging a stick around and nobody would follow me. So it's all about their choice. But when I would get something going that I can see that I've got people with me, I just love it, I just want to play. And they want to play and you can tell from their enthusiasm that they're away and it wouldn't matter if I was there or not.*

Linda also co-constructed meaning with children by entering their imaginary world of fairy gardens:

> *Well I'm being very accepting of the fact that they [fairies] may or may not exist. I don't know. We certainly don't have judgments about it. I just ask questions. That's all I was doing, was listening and showing them that I listen by... I'd thought about it at home... I was taking their conversation seriously, I suppose.*

Supporting children to direct their own learning through play, draws on findings about pedagogy for creativity that privileges learner agency, ownership and control of learning (Cremin, Burnard, & Craft, 2006; Jeffrey & Craft, 2003, cited in Craft, 2005; Robson & Rowe, 2012). These teachers provided the time and resources for children to pursue what motivated them, and importantly engaged with children as they played, responsively co-constructing meaning. The level of teachers' involvement in children's play is contrary to the idea that in play teachers should 'stand back' (Cremin, Burnard, & Craft, 2006). Long ago recognised by Vygotsky (1967/2004) and supported by contemporary scholars (Bruner, 1986; Egan, 2005), this finding re-emphasises the importance of play as a context for the role of the teacher engaging in children's imagination and creativity. It also provides support for the re-assertion of the play curriculum as a central component of the curriculum in the first three years of formal schooling. Currently play is frequently marginalised or not used by teachers of five to eight year old children, due to the perceived constraints of curriculum outcomes, timetabling pressures, space and teachers' lack of knowledge about their role in play (Jones, Dockett, Perry, & Westcott, 2002; Olsen & Sumsion, 2002; Rogers & Evans, 2007). Play and teachers' responsive involvement in play to foster children's imagination and creativity builds on pedagogic practices established in highly regarded preschool contexts (Edwards, Gandini, & Forman, 1998; Goouch, 2008; Lindqvist, 2003a). This study provides support for the appropriateness of play pedagogy for young children at school.

Listening to children

A key feature of all three teachers' interactions with children was the act of listening. This pedagogy supported children's imaginative and creative learning by allowing teachers to hear children's thinking, observe learning, and co-construct meaning through conversation and questioning. Teachers listened to children debating and discussing their ideas, and encouraged children to listen to each other.

Julie used listening to learn from children and co-construct meaning:

> *[I'm] a teacher but I'm also a learner and a researcher, so I'm working with and alongside the children in my learning space to learn with them. And the only way really to learn is to*

> *listen, and really listen with... and it's not just listening with my ears... listening with my eyes as well and noticing...*

Simone supported children's imagination and creativity by listening, guiding peer collaboration, and problem solving in the animal habitat construction play:

> *By listening to them and then asking them questions and trying to just clarify why they were doing it... and the understanding that they were kind of on the right track, giving them that idea. And then I was going to come back and see how they had gone with it.*

Listening pedagogy was a deliberate decision that required a commitment to engage with children during play:

> *I know through the play and when you sit there and listen and especially when it relates to the units of inquiry... we're hearing the language, we're hearing them ask questions, we're hearing them grapple with ideas, we're hearing them creating new ideas, coming up with how they could do things differently. Yeah, that takes patience and yeah to trust the children, that they know what they're doing and that actually when you do that they actually probably know a lot more than we think. Rather than just presenting them with 'This is how it is, go do this worksheet', that's it. (Simone)*

Linda described a pedagogical stance of *'letting go and seeing what comes out'* as she listened to children, and *'allowing the time for the kids to debate, [I] sat back and watched them debating how they [Adelaide plains Indigenous people] would keep warm... and whether they would have knitting needles and things like that'*. Linda also contributed her own thoughts about the topic and asked questions to prompt children's discussion.

Teachers supported children to listen to each other to solve conflicts:

> *I was trying to get them to solve the problem without always relying on an adult to solve it and to try and hear each other's point of view... to consider how they could work together to solve it... (Julie)*

Teachers also said that collaborative learning through listening was important to engaging children's imagination and creativity in all settings:

> *...at the moment we've been doing a lot of group work and getting them... to share their ideas and listen to others and then actually reflect on what they think is the best idea... Because that often opens up... the possibilities of what they could do. (Simone)*

Listening to children is a pedagogy that engages children's imagination and creativity, shifting the balance of power towards children in the classroom (Gandini & Kaminsky, 2000). When teachers in this study listened to children they sent a potent message about how they viewed children, and also themselves as learners. Taking the time to listen to children's talk and observe learning was vital to the progression of teaching and learning in the spirit of co-construction (Rinaldi, Dahlberg, & Moss, 2006, p. 207). This finding is consistent with previous research where teachers offered children opportunities to debate and discuss their thinking (Jeffrey & Craft, 2003, cited in Craft, 2005). Teachers could see and hear children's learning and leave 'space' for ideas to emerge. This pedagogic stance required a level of trust in children and the ability to be 'in' the teaching moment. This finding is consistent with the Reggio Emilia 'pedagogy of relationships and listening' (Gandini & Kaminsky, 2000, p. 125; Rinaldi, 2006).

Provoking children's thinking and emotions

The term 'provocation', often associated with the Reggio Emilia approach to early years education, is described as providing stimulating interactions, resources and spaces to advance children's thinking (Edwards, Gandini & Forman, 1998). In this study, teachers provoked children's thinking and emotions by asking questions; engaging in role play; and encouraging children to view others' perspectives, to engage children's imagination and creativity. Teacher actions that provoked children's thinking and emotions were mostly preceded by the act of listening, however, there were also instances of planned provocation to elicit strong emotions in children.

The decision to provoke children's thinking was grounded in the act of listening to children, which demonstrated a process of co-construction of meaning:

> *I'm listening to see if there is a provocation that can come out. (Linda)*

Julie too, listened and observed children carefully to determine what their learning goals were, so that she could *'...project to them the next stage of their learning and bringing the resource that will excite them...'*.

Linda provoked children's imagination in a session about the development of a local park into housing estates by challenging children to take another's perspective through role play:

> *My thinking behind it was getting them to imagine and feel and walk in someone's shoes. I just think that action of role play engages imagination and creativity to a huge extent. Lots of opportunities to role play other people, it's especially important for little kids.*

Linda enhanced this strategy by taking on a role herself to engage children's imagination:

> *...instantly they just come in with you and you know they're there and you never have trouble getting them all in there. If you do you just have to throw in another little bit and feed them lines and bring them in and they love it and they play... Here they have to think, they have to feel, they have to engage their passions and it's fun.*

'Fun' was not the motive in a unit linking human responsibility and animal habitats, during which Simone described destroying children's collaboratively constructed habitats. She used provocation deliberately to elicit children's negative emotions, assisting them to connect to the topic:

> *So just to move them to kind of feeling uncomfortable, frustrated and upset. I felt that by doing that... they could... imagine from someone else's perspective what it would feel like and put themselves in that situation.*

Simone had a belief that *'sometimes learning is uncomfortable'* and it is important in some circumstances to *'have that kind of provoking to imagine something different for us to be able to move beyond what we know.'*

The strategy of provoking children's thinking and emotions offers evidence that engaging children's emotions, both positive and negative, is important to engaging children's imagination and creativity. As several scholars contend, emotion is central to learning and creativity (Bodrova & Leong, 1996; Egan, 2005; Vygotsky 1967/2004; Warnock, 1976). This finding about the importance of provocation has resonance with research in neuroscience which claims that creative learning is vitally connected to, and experienced through the emotions (Immordino-Yang &

Damasio, 2007). This study, concerned with teaching in the first three years of schooling, identified a range of provocations from simple questioning to dynamic interventions into children's learning. Intense provocations may be possible with school age children, whose developing social and emotional skills are more mature than those of preschoolers.

Tolerance of ambiguity and mistakes
Engaging children's imagination and creativity was grounded in a belief that mistakes are important to learning and that 'truth' is not always easily or quickly definable. Simone's implementation of a play curriculum was instrumental in creating a context that tolerated ambiguity and mistakes to promote learning:

> *And so we've had to work hard [to understand] that sometimes there isn't a right answer. And in the world they need to think for themselves and come up and be flexible in their thinking and make mistakes to encourage new learning and new knowledge.*

Linda said to her students, *'We don't have 'wrong'. We have learning'*. Linda also valued supporting children to commit to, and debate ideas and issues:

> *You don't praise that 'rightness' you praise the fact that you [the child] took a position more than anything and often you [the teacher] bring in how easily it could have been the other one, or 'Yeah, I can see why you [the child] might have thought that because... You [the teacher] just really encourage children to think.*

With this pedagogy, Linda encouraged children to take risks and engage their emotions:

> *Because taking risks is what it is all about. If you don't take a risk, you know you can't go with your passions, you can't do that.*

The finding of tolerance of ambiguity and mistakes as a pedagogy that engages younger children's imagination and creativity is consistent with Sternberg's (2003) research on the development of creativity in children over eight years of age. Teachers who take this pedagogical stance create openings for possibilities (Cremin, Burnard, & Craft, 2006), a necessary pre-condition for the full and free exercise of the imagination. The finding is also supported by Robinson's (2006) powerful critique of education systems that punish mistakes, and so 'kill creativity'. Teaching and learning without always having to be 'right' gives children permission to take risks with their thinking and creates a culture of excitement about what is possible.

Limitations and future research
The aim of this study was not to produce generalisable findings, but rather to describe pedagogies common to three exemplary Australian teachers that could provide a professional resource for educators. The depth and complexity of learners' imaginative and creative responses to pedagogy were not the focus of this study. It could be argued that any analysis of pedagogy cannot be separated from an equal analysis of learner responses. In the present study, children's imaginative and creative responses to pedagogy were identified by each teacher. An investigation with a broader scope could place greater value on children's responses to pedagogy.

Conclusion
The present study makes a contribution to knowledge about the pedagogies that exemplary Australian teachers use to promote children's imagination and creativity in the early years of school. Current literature focuses either on the preschool or later years of primary schooling, leaving a gap regarding the first three years of schooling. This study identified four pedagogies used

in three early years classrooms to promote creativity and imagination: ***supporting children to direct their own learning through play; listening to children; provoking children's thinking and emotions; and tolerance of ambiguity and mistakes***. The findings give support to the argument that imagination and creativity can be employed across the curriculum in early years classrooms with mainstream children. Fostering children's imagination and creativity is more than fostering opportunities for self-expression and the provision of open-ended tasks (Egan, 2005; O'Rourke, 2007). The findings suggest that teachers can successfully use pedagogies that engage young children's imagination and creativity, despite the perceived constraints of curriculum, timetabling and space. Moreover, elements of quality preschool pedagogy including play and quality adult-child interactions promote children's imagination and creativity, and are ideal for five to eight year old children. This study also highlighted the importance of emotion and uncertainty in imaginative and creative learning processes.

Some may ask whether the pedagogical practices described in this study are the preserve of especially creative teachers. Certainly, the participating teachers were perceived by their peers to be talented and sought to foster children's imagination and creativity in their teaching. The researchers argue, however, that the pedagogies described in this study are accessible to teachers willing to trust in children and in themselves to take sensible risks, and be open to the possible. Rinaldi (2006, p. 111) describes creativity as 'a quality of thought', developing in the individual and through relationships in an enabling context. This study describes pedagogy that is founded in the quality of teachers' relationships with children and in deep respect for the power of imagination and creativity in children's learning.

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