

Play Based Learning Investigation.

Gail Dewar, Makara Model School, Term 3 2018

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During my sabbatical I undertook an investigation into Play Based Learning. How it works, why it works, approaches different schools have taken, connections to pre-school/transitions, connections to brain development/student needs. As Reggio Emilia is the “home” of Play based learning I visited the Play Based learning centre there. I also visited schools in NZ to see how this system has been interpreted in NZ schools. I attended workshops based on learning through play and a lecture and workshop run by Nathan Wallis – How Brains Work/Develop – Frontal Cortex Development to further understand the development of young brains and the impact experiences of young children have on brain development.

The purpose of this investigation was to reflect on this learning and discovering and consider how I could implement the things I had seen and learnt successfully in my own school. Would these strategies/approaches work for our students and teachers? Would it be accepted by our community as a legitimate way of learning?

Our school has grown quite quickly from a roll of approximately 20 to a roll of 70. This has meant we have had to make changes to our school structure – we have more teachers, more classes and have had to adapt/modify the way we do things. This has meant a lot of thinking and reflecting on what works for us and what we want for our school. What do we want to keep? What is important to us?

Our physical environment is such that it is conducive to;

- a. co-operative teaching, each class is connected directly, sliding doors can be opened to allow for rooms to join.
- b. Outdoor education, we have lots of space outside and lots of opportunity for learning outdoors with extensive grounds, native bush, a beautiful stream, gardens and an orchard.

I have been looking for ways to combine all of this into a learning structure that works for us. Our students are enthusiastic, energetic, enjoy being outdoors and love school. Our teachers all get on well, like working together, are supportive and genuinely care for the students. Our community love the school, love the environment we have and really appreciate the great relationships between staff, students and families.

My methodology has been to visit other schools, attend workshops, visit the Reggio Emilia Centre and undertake research to find out about play based learning and assimilate/reflect on this with our school – what is it, how does it work, would it work for us, how would we implement it, where do we start? What issues might we have to face?

My **findings** have been many and very informative.

Kathy Walker’s publication – Play matters is very helpful in relations to how to set up classes for play based learning. I have taken extensive notes on this and plan to follow the methodology in the book to give us guidance to get started on our journey.

Notes are as follows:

Play Matters Kathy Walker Second Edition

WLA – Walker Learning Approach

‘It is paradoxical that many educators and parents still differentiate between a time for learning and a time for play without seeing the vital connection between them.’ Leo F. Buscaglia

Benefits noted – enhancement of oral language, behaviour, school attendance, engagement, literacy and numeracy. While both boys and girls have higher levels of engagement, it is particularly pleasing to see that young boys, who often display behavioural challenges, are strongly engaged and less prone to behavioural problems.

Aim – to set children up to be successful learners, to know how to learn, to love learning, to be resilient, to problem solve, to think laterally and to view life as an opportunity to learn.

WLA engages children in exciting, personalised and authentic learning experiences that reflect the needs, interests and strengths of the individual child. The emphasis of WLA is not on the ‘what’ (curriculum) but most importantly on the ‘how’ (pedagogy)

WLA emphasises that learning is much broader and deeper than just literacy and numeracy and focuses parents, teachers and children on the ‘whole’ child. It includes both explicit daily instruction of literacy and numeracy alongside personalised learning opportunities in active engagement investigations. (learning through concrete hands on experiences) The programme seeks to ensure that classrooms are filled with highly motivated children who are learning how to learn with a mix of active investigation and formalised instruction alongside opportunities for greater levels of decision making, choice, active participation and a wide range of mediums in which to explore, learn and acquire skills.

Consistent teaching and learning practices across a school community are vitally important. It is important for children and their families to be clear about the teaching and learning strategies and philosophies that are used across the school and that these strategies and philosophies are consistent, shared and consistently reflected upon. There is so much research that highlights the need for clarity of philosophy and consistent practices right across a school. (Livingston, McClain & DeSpain 1995; Weinstock, Star & Fazzaro 1974)

Children need to be provided with a solid foundation of skill acquisition and to develop a range of thinking and research abilities in order to learn how to learn. We can provide learning environments that offer lots of practice in how to make decisions, initiate ideas, persist, find out, try again, take risks, explore and research in a range of ways that relate to children’s own unique interests and endeavours; and to balance this with the areas of content and information that we as educators wish to introduce and provide.

Key Components required for successful learning to occur and be sustained. (Time, Learning and Afterschool Task Force 2007)

- Intrinsic motivation
- Relationship building and trust between students and staff
- Empowerment and ownership of learning
- Engagement through authentic and relevant interests of children
- Acquiring the skills of effective research, problem solving, risk taking and resilience
- An emphasis on skills rather than knowledge or content

- Learning how to learn
- A positive and realistic sense of self
- Resilience
- Working independently and interdependently
- Opportunities to contribute to their learning, to make ideas or offer suggestions that are taken up.

The WLA starting point is the authentic interests of the child alongside the learning intentions from the curriculum framework. By moving away from the starting point of a topic or unit of inquiry the WLA immediately opens up a greater range of opportunities for students to have their own interests embedded within the areas of information and skills that schools are required to meet. The philosophy and implementation of the WLA consistently demonstrate that engaging children is the first fundamental 'must' for successful teaching and learning.

Children develop best when they have secure, consistent relationships with responsive adults and opportunities for positive relationships with peers. Notably – positive teacher-child relationships promote children's learning and achievement, as well as social competence and emotional development.

Young children construct their knowledge and understanding of the world in the course of their own experiences as well as from teachers, family members, peers and older children and from books and other media. They learn from concrete experiences (manipulatives) and they are also capable of and interested in abstract ideas. (Slavin 1990) Children take all this input and work out their own understandings and hypotheses about the world. They try these out through interactions with adults and other children, physical manipulation, play and their own thought processes -

- Observing what happens
- Reflecting on their findings
- Imagining possibilities
- Asking questions
- Formulating answers

Play and active investigation develop self-regulation and promote language, cognition and social competence. Play gives children opportunities to develop physical competence and enjoyment of the outdoors, understand and make sense of their world, interact with others, express and control emotions, develop symbolic and problem solving abilities and practice emerging skills. Research shows strong links between play and foundational capacities such as memory, self-regulation, oral language, social skills and success in school (Copple & Bredekamp 2009; Jones & Reynolds 1992)

DAP - Developmentally Appropriate Practice. A teacher nurtures a child's social, emotional, physical and cognitive development by basing all practices and decisions on 1. Theories of child development 2. Individually identified strengths and needs of each child. 3. The child's cultural background Personalisation becomes a key component in making sure the needs and interests of each child are focused on. DAP is based on the idea that children learn best from doing: when they are actively engaged and build knowledge based on their experiences. DAP requires an environment offering content, materials, activities and methodologies that are coordinated with a child's level of development. DAP includes the following teaching strategies

- Active learning experiences (hands on direct experiences)

- Varied instructional strategies (process writing, skill instruction, guided reading, modelled writing, cooperative learning, independent learning activities, peer coaching, projects etc)
- Balance between teacher directed and child directed activities (teacher directed involves the teacher as facilitator who models learning strategies and gives guided instruction. Child directed allows the child to assume some responsibility for learning goals.)

WLA places a major emphasis on the maturity and development of each child. Developmental domains:

• Emotional	• Social	• Cognitive	• Language	• Physical
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The philosophy and pedagogy of the WLA is based on student empowerment, engagement, and ownership alongside teacher direction, scaffolding and instruction. Each school should have a strong philosophy which guides the practice of all staff working in the school. It is a set of key beliefs based on specific theoretical perspectives, research and values that underlie all practices in teaching and learning. An educational philosophy that has teaching strategies to match is an imperative for long term effective teaching and learning within a school. Strong and effective leadership will result in the core philosophy of the school being perpetuated even if there is a change in leadership.

Play Based Pedagogy – Play as pedagogy must be planned for, directed and facilitated by the teacher.

‘We want to give our children everything – but inadvertently they benefit less because we give them everything.’ Shona Bass

‘Play activities involve a wide range of behaviours and can be situated in different contexts which may have multiple meanings for children.....Play can be regarded as deeply serious and purposeful....It can be characterised by high levels of motivation, creativity and learning.’ (Wood & Attfield 2005)

Types of Play – Many skills are acquired through children’s active exploration and investigation of their world.

- Imaginative and socio-dramatic play. Fantasy, acting out, representing through play their thinking.
- Constructive and investigative play. Hands on concrete materials such as Lego, collage etc.
- Explorative play. Investigating the properties of things, finding out, exploring eg. Water play
- Sensory play. Experiences such as finger paint, clay, aroma, touch. Helps particularly with emotions.
- Directed and scaffolded play. Children are encouraged or prompted in their investigations by an adult or peer.

Stages of Play - Children’s play reflects different levels of maturity

- Onlooker play. Watching, taking information in, but not quite ready to engage.
- Solitary play. Child will play alone and attempt to stay removed from others.
- Parallel play. Alongside others, but predominantly work on their own project.
- Associative play. Reflects maturing cognitive development. Less egocentric and more aware of others. Can take particular roles and may work together with others.

- Cooperative play. Very mature aspect of cognition. Occurs mostly in children from year 2-3. Requires empathetic understanding and a wider range of perceptions of other's feelings/needs. We would not expect this from 5 year old students.

Characteristics of Play

Child initiated play

Symbolic play. Pretend, imagination or role play.

Play as a process. Does not have to result in an end product

Play is active and creative and avoids worksheets and cloned expectations. Play involves children creating experiences that reflect their own interests.

Play is owned by the child. The experience belongs to the child, adults may scaffold, intervene, extend, make suggestions or provide a direction. However the child views the project as theirs.

Play is purposeful. A constructive exploration or investigation that may be planned for, reflected on and linked to the child and their interests.

Play involves literacy and numeracy.

Play promotes social skills.

Play promotes oral language.

Viewing play as a learning tool. Active engagement and investigation is considered to be a normal and integral part of the work that takes place during the school day.

Play in the learning environment must:

- Be well planned and directed by the teacher
- Involve the adult in observation and scaffolding
- Occur inside and outside
- Promote creative opportunities
- Link with literacy and numeracy
- Include the arts, society and community
- Include assessment, observation and reporting
- Be integrated into the day as part of the learning
- Not be seen as the prize or reward for good work.

Neurological Studies: In order for early brain development to occur productively, children's brains need stimulation, including 2 major elements. 1. Human attachment 2. A rich stimulating environment. This is reassuring for the teacher when implementing investigative play into the learning environment.

Links between learning, teaching and play. Play provides the most natural and meaningful means by which children can construct knowledge and understandings, practice skills and immerse themselves in a broad range of literacy and numeracy through play.

The Walker Learning Approach

'It is becoming increasingly clear through research on the brain as well as in other areas of study, that childhood needs play. Play acts as a forward feed mechanism into courageous, creative, rigorous thinking in adulthood.' Tina Bruce.

WLA is an evidence based pedagogy. The approach was tested by independent researchers over a period of five years using an action research model. Data was collected every few months and results were used to develop the approach further. Although the approach has evolved and developed over time, the major aims remain constant.

- To build a bridge between preschool years and the early years at school – smooth transition
- For all children, particularly boys, to engage deeply and meaningfully with their learning environment
- For children to learn that the skills of literacy and numeracy are meaningful and useful parts of every day life
- For children to have more authentic opportunities to learn social skills, conflict resolution, problem solving, decision making and independence.
- For children to enjoy school
- For children to have opportunities that reflect their own culture as well as to have exposure to new concepts and experiences
- To move away from pre-planned sequences of predetermined topics
- For children to have more authentic and frequent opportunities to have their learning personalised and to build skills of personal reflection, intention and evaluation early in school life.

Key Principles

The WLA is a rigorous approach in education requiring teachers to recognise, plan for and implement a range of strategies that clearly identify learning and development objectives. The WLA is underpinned by research (Miller and Almon 2009) that demonstrates that from the beginning of school to year 3 children require active, concrete hands on experiences that are balanced and linked to formal instruction. When WLA is implemented children will be engaged in their learning, it will be developmentally appropriate and it will be authentically personalised. WLA attempts to reflect the 'whole child' – not just academic, but also, social, emotional and cultural.

- Childhood is a unique stage of human life and children especially from birth to 8 reflect unique biological characteristics that have implications in how they learn.
- Each child has their own rate of development and influences from home and society that impact learning
- Not all children will be able to learn the same thing at the same time in the same way.
- Development, while generally sequential, varies between children of the same age.
- Family, community and society are integral to learning and understanding

- Not all children will be interested, or able to engage in the same topic or interest, so learning environments must reflect opportunities for children to learn through their own interests as well as some introduced by the teacher.
- Learning is more meaningful when experiences reflect children's lives and reflect their stage of development.
- Learning involves skills and understandings and is heavily influenced by elements of development. (emotional, social, cognitive, language, physical)
- Development in one domain influences development in other domains.

Core Elements

Investigations – At least 4 mornings per week the day will start with active hands on experiences known as investigations. Each day there will be formal instruction in numeracy, literacy and specialist subjects. The experiences and teaching going on during investigations will springboard into the formal teaching of the day. The experiences will have been planned intentionally by the teacher, building on the children's interests and the core curriculum. Each investigation will have a reporter and a photographer and three focus children. Each investigation will begin and end with the teacher scaffolding and modelling. These 20 minute sessions are referred to as tuning in and reflection. The actual hands on investigating requires 45 mins.

Tuning in and reflection.

Tuning in: Welcome and admin, reflection and revision of literacy and numeracy intentions, focus children, reporter and photographer, intentional direction at dispersal.

During investigation the teacher;

Works individually with focus children, photographer and reporter, scaffolds children who need support and or extension.

Reflection

Scaffolding focus children, reporter and photographer, models particular skills and concepts from investigations, freebies (children who are chosen to demonstrate a particular skill), setting up and packing up ready for the rest of learning.

Focus children

Each child will be a focus child for one day once a fortnight in a term. A roster system is organised so teachers, parents and children know who will be a focus each day.

They stand at the front of the group for a few minutes during tuning in so the teacher can discuss what they may be working on during investigations. Children may ask questions or offer suggestions to the focus child. The teacher honours the authentic interests of the focus child and uses these interests as the platform for the learning.

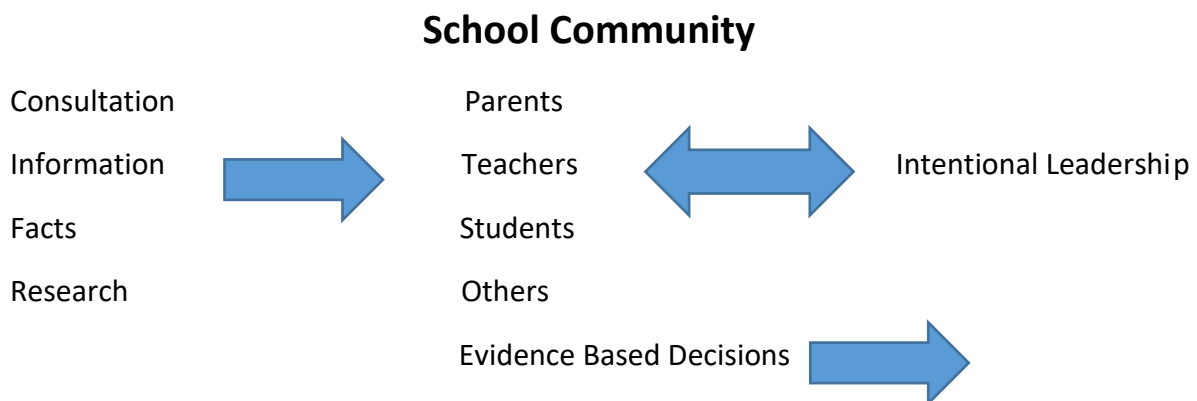
During investigations focus children spend a few minutes each on their own with the teacher. (relationship building, personalised scaffolding) Focus children report back at reflection time on their learning.

Reporter and Photographer


These are teacher directed roles. The teacher introduces the task and requirements at tuning in time in front of the other children. At reflection time they report back and share whatever their task was. Other children make comments, ask questions or make suggestions. The purpose of the reporter is to look on, talk with and respond to other children through the investigation time and to report back some of what they observe. Use a pen and paper on a clipboard to help document what they observe or report back on what they have been asked to find out. The reporter only has to carry out their role for part of the time. As children get older they can be asked to do more.

The photographer has a similar role. The task is set by the teacher. They may be asked to take time sequences of investigations, before and after photos, examples or particular skills being demonstrated. Early in the year they could have very simple tasks such as photographing the focus children or finding as many different shapes as they can.

Implementation



Leadership is everything, it is one of the most important, influential and empowering roles. Without strong, clear, visionary leadership a school will lack clarity of vision and philosophy and as a result lack consistent practices.

- Leadership** 
1. Sets clear goals
 2. Looks to the future and considers current perspective
 3. Identifies the direction, philosophy and pedagogy

Recommendations for leadership:

- Full knowledge and understanding of the approach
- In dialogue with teaching staff set the agenda and future direction of teaching and learning
- Ensure parents and school community are aware and have understanding of the direction and commitment of the school's teaching and learning

- Allocate time, funding and resources
- Meet regularly with staff and attend the PLD ensuring that they are aware of and understand the various stages, challenges and needs of the staff
- Provide information to other staff and support implementation so teaching staff do not face criticism or scrutiny from other staff during implementation
- Embrace the philosophy fully and back the process
- Ensure there is ongoing evaluation and assessment of the approach in relation to teaching and learning – action research – use data, discussions with students, parents, teachers, anecdotal observations.
- Attend initial fact finding PD so you are on board with staff and can work towards a shared understanding.

Implementation Plan

Fact Finding – leadership and staff have made a commitment to implement the approach.

Stage 1 (preparation)

- Visit other schools who are implementing the approach
- At least 6 months lead in time of preparation
- Whole school overview is conducted
- Parent information session to share plan with community

Stage 2

- Mentoring - a teacher who is experienced to mentor teacher implementing the programme. Assistance and information on planning, linking to literacy, numeracy, ensuring curriculum outcomes are met, learning environment set up, resourcing, modelling tuning in and reflection and room set up. A mix of discussions as well as modelling teaching, observations and debriefs.
- Regular updates with leadership
- Visit other schools to observe
- Sustaining the approach if there are any personnel changes

An anticipated timeline for implementation is 12-18 months.

Some approaches that can start straight away:

Don't use worksheets or expect all children to complete the same task, give students a range of materials and allow them to create their own understandings from whatever topic you are exploring.

Children don't need stickers or stamps as a reward for work completed – instead talk to children about what they have done, encourage and allow for reflection from them about their own work. Avoid student of the week awards, children come to expect these and they can lose authenticity.

Provide opportunities for children to explore, investigate and create. Incorporate more open ended tasks. Add in a dramatic play area such as a shop or post office that can link into oral language and literacy experiences.

Allow children to return to learning experiences, give them 1.5 to 2 hours for investigations and allow them to have a break and return to what they were doing.

Start the day with a short discussion about some of the investigations or play the children are planning or the teacher is directing them to. Have small groups 3-4 children from the whole group reflect and describe their projects at the end of the session.

Limit whole group time to 10-15 mins, and/or provide some choices for children so they don't all have to attend group times.

Experiment with different ways of conducting show and tell or do away with it.

Experiment with room set up – table configuration, breaking up the room with noticeboards or shelves. If you have an extra space outside the class try to set up painting easels, blocks or lego.

Parent Information

Run a parent information session to help set the scene about what teaching and learning needs to look like. Emphasis on – teachers will still teach literacy and numeracy, set limits and expectations and work with the curriculum. In addition we will provide greater opportunities for children to develop skills that are imperative for learning and life. (resilience, self-esteem, problem solving, risk taking, initiating, decision making, independence, creative and lateral thinking) Information about how the day and week works – key learning expectations.

Parent information notice board. Display plans for each fortnight of learning, photos and examples of student's work.

Explanations and descriptions of the approach

Document the Process

- Evidence of the processes and changes made
- Identification of the challenges
- Reassurance that progress is being made and tracked
- Ideas and suggestions to others
- Reminders of key areas that need to be addressed at particular times
- Staff reflections and discussions
- Parent discussions
- Class room set up – before and after photos
- Minutes of meetings
- Professional Development sessions
- Photos and videos of children, and staff PD, discussions

- Diagnostic tools – ASK-KIDS inventory for children (Dr Laurel Bornholt) The Hundred Picture Naming Test (John Fisher, Jennifer Glenister) Social Skills Improvement System (Frank Gresham, Stephen Elliot)

Setting Up the Environment

The learning space is both indoors and outdoors.

The environment must reflect individual spaces as well as contained and defined spaces that don't need to be dominated by tables. (tables are used in learning centres only – not the major feature of the classroom)

Ensure a full range of different experiences are provided for – dramatic play, sensory play, writing, reading and construction

Avoid too much visual stimuli – eg things hanging from ceiling

The provision of open ended materials to promote creativity

Cloned worksheets/colouring in are not used

Literacy and numeracy are linked to play through the provision of materials

Ensure children have access to materials so teacher is not interrupted.

The aim of the classroom is to promote a sense of wonder, exploration, investigation and interest in a range of materials, resources and opportunities in which the child can engage. It is referred to as a child centred classroom. The environment is described in Reggio Emilia literature as the third teacher. (www.thethirdteacher.com)

Practical Considerations

Authentic choices and belonging. Links learning outside and inside. Reflects and respects children's ideas, interests, strengths and needs. Creative and open-ended learning experiences, opportunities to work or play alone and alongside others. Children should have opportunities to self regulate and self select, act independently, pack up and set up, extend experiences into projects, choose from a range of materials, enjoy a sense of satisfaction.

Creating Investigations

Encourage children to keep track of their work – give opportunities to write plans, design briefs and lists. Easels, paper, pens, writing tables, clipboards, scrapbooks, journals.

The learning environment is set up with approximately 8 learning centres.

Dramatic play area – a major way in which oral language and a range of other literacy and numeracy skills are developed. There should be room for 4-5 children and often in a corner.

Sensory Play area – Can be set up outside the classroom. Clay, playdough, water, mud, sand, dirt, pinecones. Can be in small trays or buckets.

Collage/creating area – Rich opportunities for a never ending range of creativity. Natural materials, pinecones, leaves, flowers, pebbles, feathers, boxes, cardboard, paper, cotton wool, buttons, ribbons etc.

Writing – A table with pens, papers, scissors. Letter formations for students to model from.

Reading area- Relaxing, reading, researching, sharing information, story-telling. Quiet attractive and defined spaces. Netting, tents, cushions, sofas. Fiction, and non-fiction and books children have created.

Computers and technology – Not used for games – used creatively for designs and plans, for documenting work and writing stories, for reflection through power points, researching, animation and stories.

Construction and blocks – ensure there are resources such as lego or mobile and shelving or spaces for works in progress. Blocks can be used outside.

Individual mats – Mats approx. 1m X 1m help define spaces for individual children, they may wish to join them together to form larger groups. Each room could have 5-10 mats.

Individual spaces or cosy corners – a retreat or quiet space usually set up with just one small table and one chair or cushion to sit on. Could be a tinkering table or nature table.

Group time table – Children need time to meet together, share ideas, reflect and spend time talking to the teacher.

Some other things to consider – a noticeboard, pegs or letterboxes for children to write notes to each other. Clipboards, scrapbooks, displays at child level, signs that promote independence, responsibility and pride in work. Eg. Work in progress signs.

Workshop Notes: Igniting Play in the Early Years

The municipality of Reggio Emilia in Italy has 130+ remarkable preschools and infant-toddler centres. The broad educational paradigm that their educators work with is '**social constructivist**'. They see knowledge as constantly being constructed by adults and children interacting together - learning within and by learning groups.

For most of the 9-3 preschool day, children **learn through play** with considerable freedom to choose. Intentional teaching is added, & children learn how they learn. Educators guide the children's play toward deep learning via provocations. Often via the arts creative expression is valued for provoking thinking.

Invitation	Provocation
<ul style="list-style-type: none"> -based on <i>teacher</i> wonderings and ponderings. -gives an idea, urge or cause to do something -sparks children's interest. -provides children with new interests 	<ul style="list-style-type: none"> -based on <i>children's unique</i> wonderings and ponderings. -expands or extends children's own ideas, interests, and theories -deepens and nourishes children's unique thinking. -provides children with new experiences and connections inside <i>their own unique</i> ideas and theories

Dot story – is on you tube, effective to get people thinking. (use for staff meeting)

Social Constructivist – constantly being constructed by adults and children interacting together.

Learning from others – John Dewy – learning within and learning by, very social, not about silence in classrooms, lots of talking. Children learning through play, with considerable freedom to choose. Work in groups on investigations.

Children learn about how they learn. Arts based, creative thinking is valued. Deep learning attained through provocations. Often via the arts.

Observe children's play and see where the gaps are in their learning, eg knowledge of money. Observation: Students exchange one coin for one object, don't understand that money must equal the amount that the item is worth. Teacher must then work out a way of teaching children the value of money. Intentional teaching.

Class meeting to start the day – forecast what their **playful learning** will focus on. The culture of the class is that children will stay put and go deep – so to stay in chosen area of play for at least half an hour. Then discuss a **group learning experience** that will take around an hour.

At least one adult facilitated **group experience** will expand, children will construct deep learning.

Use of natural materials

"Children are capable of learning on their own, but adults extend and increase that learning and stimulate new learning through their intentional involvement. So while play can be child-directed,

adults' involvement can increase its value. In fact, research indicates that the least successful learning environments are those where children are regularly allowed to spend a lot of time in undirected free play.”

(Practical Principle Guide, Integrated Teaching and Learning Approaches, 2012)

Image of the child

Loris Malaguzzi the philosopher who shaped the features of the ECE system – began with the image of the **capable and intelligent child**.

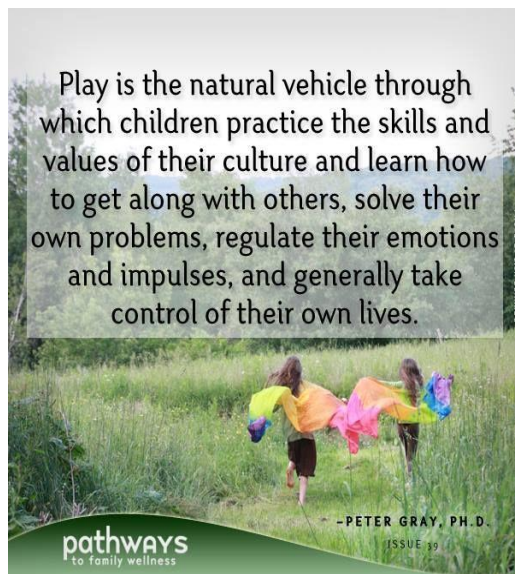
A **rich child** with infinite capabilities, a child born with 100 languages supported to express 100 ways of thinking.

The Reggio principle of **listening** is not simply listening to language, adults listen to what engages children as they play, passions, imagination, working theories, indoors and outdoors.

Reggio educators **strengthen children's investigative dispositions**, they focus on thinking. Looking out for open ended questions, big ideas that can be extended. Lots of learning opportunities.

Recognise the questions that have learning mileage in them.

Peter Gray – Free to learn p 156 Quote “Perhaps play would be more respected if we called it something like “self-motivated practice of life skills” but that would remove the lightheartedness from it and thereby reduce its effectiveness. So we are stuck with the paradox, we must accept play's triviality in order to realise its profundity.”



Benefits of play for students

Less stress and anxiety, communication with others at the level they are ready for, can join in when they are ready and able – at their pace. Motivated, choices, can act out or mimic what they see in their lives. Crosses cultural and social divides. Follow interests and passions. Fun, want to come to school. Self-directed. Exciting and active.

Benefits of play for teachers

Can get to know children better, less busy, can interact and observe children at play, see their needs, passions, their background, what goes on at home. Fun, motivation, less behaviour issues to deal

with. Creative, challenging follow up on children’s ideas. Interesting – never know what might happen each day.

Play clip – Peter Gray (Ken Robinson) Play – child is the leader of their own learning. Self-directed, self-motivated. Alert, active not stressed. Exactly the state of mind that is best for creativity, learning, problem solving. Natural conditions of learning – if we understood this better schools would be much better places. No play hinders children’s development.

Ken Robinson statement – could be a mantra for us.

Links to Te Whariki and NZC High expectations, Learning to Learn, Coherence. Children are competent and confident learners. Children learn to make sense of their immediate and wider worlds through exploration, communication and representation.

Te Whaariki	NZ Curriculum	Te Marautanga o Aotearoa
Well-being/ Mana atua	Managing self. Learning area: Health and physical education	Hauora learning area: ‘describe aspects of personal growth, safety
Belonging/ Mana whenua	Participating and contributing. They have confidence to participate in new contexts	Tikanga a-iwa learning area: Develop their knowledge of places and how people sustain environments
Contribution/ Mana tangata	Learning area: Health and PE	Hangarau learning area: students examine beliefs of other cultures
Communication/ Mana reo	Learning areas: English, mathematics,	Value: learners develop a desire to participate in learning activities
Exploration/ Mana aotuaoroa	Key competence: Thinking. Learning areas: Science, health	Learning areas: skills of research, investigation, problem solving

Inquisitive Play – curious critical and reflective learners

Interactive Play – collaborative and adaptable learners

Independent Play – empowered and active learners

Imaginative Play – creative and inventive learners

Set boundaries around play – what are the expectations for learners and teachers. Timing – a time set for play – a time for literacy, a time for maths (not mixing them) so teachers are not “taking”

reading or maths groups during play. Teachers will miss the benefits of play if they are not involved. Need to define what will go from the programme – the time is an issue, can't fit everything in, so decide what is to go or be reduced. Organise a timetable so play is in a defined time. Start at 8:30? Begin with play to get children engaged immediately. Play from 8:30 till 10:10 Then have literacy and numeracy blocks for planned teaching.

What do learning spaces look like? Which spaces have the most impact? Art area, writing area, construction area, home area (kitchen, bed etc) maths area, reading area. Outdoor areas? Troughs for water or sand, light box. Quiet space.

Environment as the third teacher.

Deepening play through projects Project zero Harvard Uni (research this)

Documentation – how is this organised? Main purpose is to make learning visible and to make learners visible. Daily diary. Pictures and captions to show what has been happening. A daily quote from a child/ren that has happened during the day. (could be an exchange between 2 children) These are powerful indications of learning/thinking that has gone on. It shows the depth and value of this – good to record it to show it in a tangible way for children, parents, other teachers etc.

LEARNING TO CREATE PEDAGOGICAL DOCUMENTATION

Educators learn new habits of mind in order to document. The first step is to make documentation a daily habit, in an ongoing process of inquiry. Learning to have the tools we need close at hand, learning to choose what to document because we see potential meaning arising for children requires practice judgement and reflection. (Wien, Guyevskey & Berdousis 2011)

It is unhurried and unstructured time to perceive things through all of the senses. This is vital if we are to find the magic and mystery in things with children. Ursula Kolbe 2001.

Documentation is a reflective process a pedagogical practice that provides multiple insights into children's thinking and engagement as well as teachers thinking.

Teachers are professionals of marvel because we have to keep in our own eyes the sense of wonder that is always present in the eyes and thinking of children. Veia Vechi 2015

Invitation Based on teacher wonderings and ponderings. Gives an idea, urge or cause to do something. Sparks children's interest. Provides children with new interests

Provocation. Based on children's unique wonderings and ponderings. Expands or extends children's own ideas, interests or theories. Deepens and nourishes children's thinking. Provides children with new experiences and connects to their own thinking.

Children are capable of learning on their own, but adults extend and increase that learning and stimulate new learning through their intentional involvement.

The role of the teacher: Planner, listener (with all your senses), observer, play partner, co-explorer, facilitator, researcher, recording some learning (meaningful documentation), teacher. (Sheet to expand on this.)

There needs to be a shift in emphasis from the child being ready for school to the need for the school to be ready for the child. We need to meet the child where they are at. Transition from early childhood to primary school needs to be thought about – what links have been made? How much do we know about the child before they come? Can we visit them in their EC environment?

Reporting – how are you going to report children’s learning and progress? Important to show the richness of learning that is going on. <http://www.messaggiplanetari.it/?lang=en>

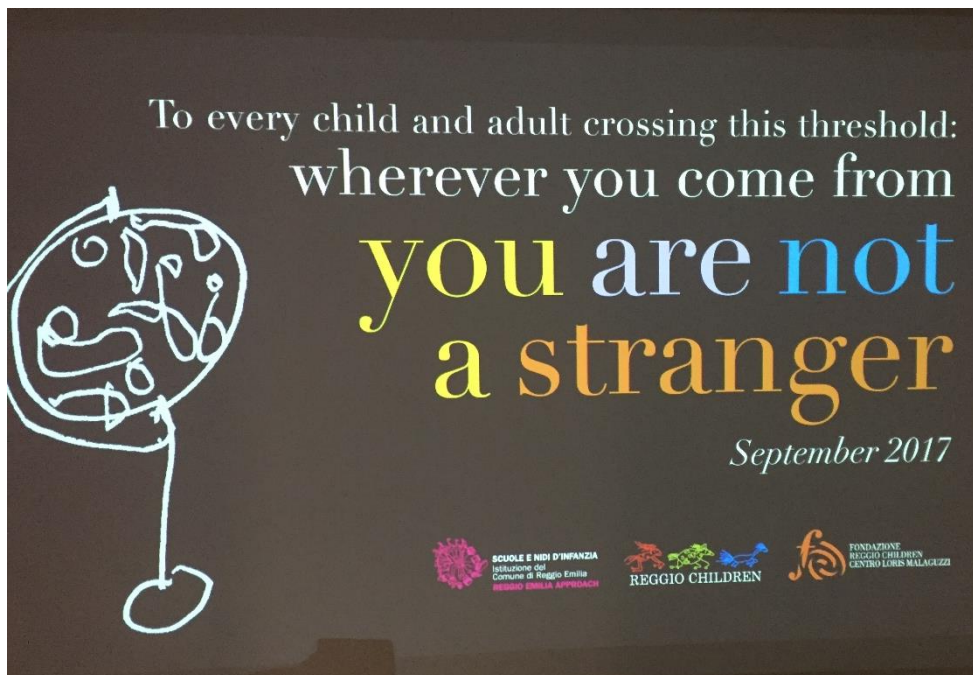
Involvement in real life – children taking part of contributing to the community in some way. Art, innovations, projects. Children see themselves contributing to the community, their work is valued.

Reggio Emilia



At the entrance

The visit to the Reggio Emilia, Loris Malaguzzi International Learning Centre (Centro Internazionale Loris Malaguzzi) was really interesting. It was very spacious and modern looking, in complete contrast to the village surrounding it. One of the things you see on entry is a big display board stating





The centre is set up thematically with examples of materials provided to students spread over several levels and many rooms. The materials/experiences are very much theme based. One area was completely dedicated to light. There were a large number of experiences and interactive displays set up around the concept of light. The way it was arranged invited participation and experimentation. There were extensive explanations of the learning that could be gained from the investigations and the challenges that children could be invited to take on

ray of light atelier

luce

La luce è una presenza essenziale alla vita, ha una forte valenza metaforica ed è un elemento di grande fascino.

L'Atelier permette di incontrare ed esplorare la luce attraverso l'interazione con diversi ambienti e materiali.

In particolare è possibile indagare fenomeni in cui il raggio di luce è: scomposto, rifratto, riflesso, diffratto, emesso, propagato.

light

The presence of light is essential for life, it has a strong metaphorical value and a great fascination.

The atelier offers the possibility to explore light through interaction with different environments and materials.

In particular it is possible to investigate phenomena in which a ray of light is: split, refracted, reflected, diffracted, emitted, propagated.

scienza

La sfida è quella di proporre un approccio alla scienza che inviti i bambini, i ragazzi, gli adulti a guardare le cose in maniera del tutto nuova; ad interrogarsi e incuriosirsi di ciò che non si spiega con il solo dato percettivo, a ricercare e riprovare, a costruire ipotesi e teorie cercando di verificarle con la sperimentazione.

Nel raccontare le teorie e i pensieri scientifici che si formano attraverso l'esperienza ci si avvale della sinergia tra i diversi linguaggi. Parola, disegno, costruzioni, simboli, suoni permettono di creare forme diverse, forme ricche e più facili da trasmettere e scambiare nel gruppo.

science

The challenge is to propose an approach to science that invites children of all ages and adults to ask questions and feel curious about what cannot be explained by the senses alone; to research and re-try; to construct hypotheses and theories and try to verify them through experimental means.

When recounting scientific thoughts and theories formed through experience we use the synergy between different languages; words, drawings, constructions, symbols and sounds all enable us to create different forms; rich forms which are easier to communicate and exchange in a group.

Other examples of themes I saw paper, sound, identities, creative accidents, animals, life cycles, natural materials, dried vegetation, combinations of everyday items and art

Inside the paper

The paper has lots of skins, in the paper there are some hairs, some wrinkles that we can't even touch.
Lucia, 4 years

In tearing and revisiting the experience with the digital images, the children have grasped the possibilities for investigating the material qualities of the paper, to feel it, know it, go through it in its *skins*, in its *caresses with the hands*.

These strategies reveal, in a different way, the individualities, the identities, and the vital characteristics of paper: its voice, tenacity, delicacy, and strength in empathy with the gestures of the children.

equipment.

Winter transformation – a big sheet of paper, left for some days in the park, offered to snow, to rain, to wet, soil and weather. What is going to happen to paper material in this unusual encounter? What are going to be the reactions of children? What are going to be the reactions of paper?

A further area showed what students had done with materials after being given an idea or concept. The photo below – Migrations in freedom showed what students had done with everyday items to make them into animals.



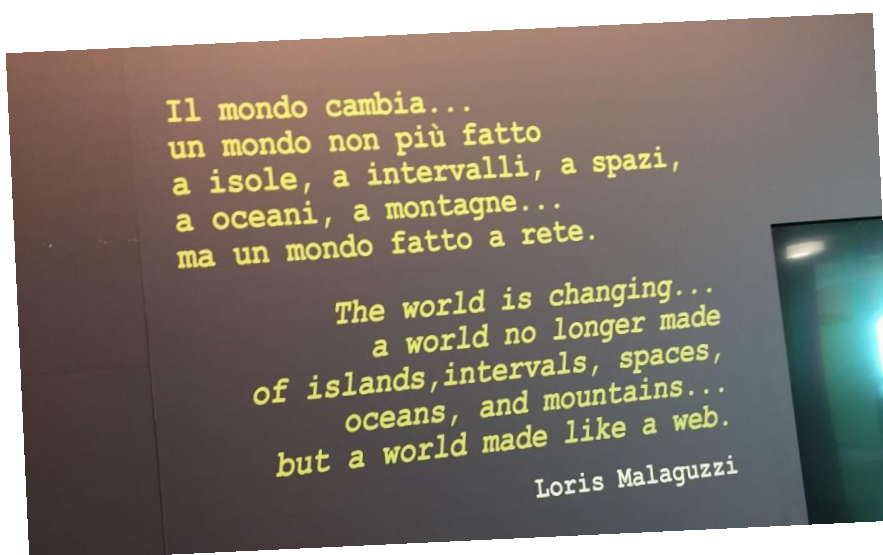
There was a display showing what young children had done with a large flexible pipe, including videos of what they said about what they had been doing/learning about.



There was also a range of materials supplied for responding and reacting to the materials there. There are also examples (both digital and concrete) of students work or responses to the materials or provocations provided. It was inspiring to see the work done and the joy

the students have in their learning. The creativity on display from very young students was inspirational. An example - the crowd made of clay was just delightful.

There is an extensive area dedicated to the history of Reggio Emilia Play Based learning – how it came to be and why. This was very interesting and informative also.



All through the exhibition were inspiring messages and ideas from those taking part in the programme. It is great to have this rich background knowledge and this will undoubtedly help when setting up and implementing this in my own school. To actually go there and be immersed in the programme and see what is possible was invaluable.

“Creativity seems to emerge from multiple experiences, coupled with a well-supported development of personal resources,

including a sense of freedom to venture beyond the known.” ~
Loris Malaguzzi

The town of Reggio Emilia was also very interesting to visit and stay in. It is very old world with narrow streets and there was a beautiful little town square just a block from where we stayed. There were concerts there at night and markets during the day with outdoor eating areas set up. The buildings were all very old and ornate and there were beautiful statues in the square.



Nathan Mikaere-Wallis Lecture and Workshop How Brains work/Develop. Frontal Cortex Development.

This learning should be mandatory for anyone dealing with children. The developmental impact of what goes on for children in the early years is huge and has long lasting effects on how they interact with the world and how they learn. As such everyone should have this knowledge so they are aware of how important early learning experiences are.

A key learning from Nathan was the fact that if you are in survival mode you cannot learn. As soon as you go into survival mode the brain stem takes over and no learning can occur. Survival brain does not allow for learning. Trauma sends the brain into survival mode. Looking at the brain in simple terms – if we are functioning in the brain stem (survival) then our frontal cortex (higher intelligence) has little or no activity and therefore no learning is occurring.

MINDFULNESS – able to calm brains into the cortex and out of the brain stem. We need to be RELAXED in order to learn. Students in the “tail” are often in trauma due to home situations. RELATIONSHIPS are the number one way to calm brains into learning mode. Relationships are totally key. If students are frightened of the teacher, the learning will be reduced. The more trauma a child has been exposed to leads to a quicker transition into survival mode. (less incremental) Teachers need to recognise this in their students, meet the needs of “survival brains” (nurture/soothing/fun/trusting) – the more quickly this can be done, the faster they are back into the cortex and they begin to develop the ability to self sooth. Children who are not nurtured spend far more time in the brain stem and learn to be there mostly – which results in less time to learn. The first 18 months are key, survival is far more developed in children who are not nurtured in the first 18 months. By the time you are 3yrs your ability to access your cortex is already established. However we must not be discouraged by this – neuro-plasticity is the ability of the brain to repair and improve given the right environment. This means that school environments can be the place where children can come out of survival mode and into the cortex so learning is possible despite the environment they may be coming from.

How do we calm brain stems?

1. Basically we have to make sure children feel SAFE. We can do this through – kaumatua, touch, sensory pathways, predictability, autonomy, kai and wai, developing dyadic relationships (the first one on one relationship you have is hugely important, this is usually your mother) In terms of teachers – the longer they can have ONE teacher, the better they will do, as the trust/relationship will make a big difference. The quality of this teacher/student relationship has the most impact – the whaea/matua relationship as a teacher is hugely valuable. Number one impact on brain function is the one to one relationship the student has with their teacher. This of course needs to be taken into consideration when organising classes each year. One consistent, long term teacher is a huge help to students.
2. Another calming technique is rhythmic patterning – the need to be rocked. To implement this into the class situation - Regular singing, music, rhymes, swinging (we have swings in our playground and a basket swing) A rocking chair in the class – could be used as a reward. Predictable schedule, they know the basic rhythm of the day.
3. Positive disposition to yourself – belief in yourself as a learner. If they are in the zone of proximal development they are thinking – “I can do this on my own” or “I need help to do this, but I can do it”
Once outside the proximal development zone they will be thinking “I can’t do this, even with help” If they are pushed into this they can become disengaged, think they are stupid, won’t try, feel humiliated and can then become a behaviour problem as well as not learning anything.
4. Executive brain (frontal cortex) Improving memory, self- control, meta-cognition, cognitive flexibility. Once you improve these, numeracy and literacy will improve.

Once the first 3 of these are established then the 4th can function and grow.

School Visits

The school visits were important to see play based learning in action. I was able to arrange for my junior teachers to visit **Tawa School** junior syndicate where they run a play based learning programme. They have been running this programme for 3 years, so were well able to share their experiences with us. They shared many resources with us which will be very helpful as we begin our journey.

Student Centred Learning essence statement:

At Tawa School student centred learning experiences are the roots of the Tawa tree where inquisitiveness, creativity, passion, respectfulness, responsibility and reflectiveness are grown.

Student centred learners have choice in what they learn, how, where, and whom they learn with, steered by the NZC.

Teachers are facilitators, guiding learning through the passions of our tamariki so that they are engaged, motivated, active learners.

What we won't see at Tawa School in 2018

Passive students No ICT in use No singing, movement or dance Monday to Thursday ORS students isolated Not doing what others are (within reason) No evidence of child's culture in the classroom. Groups displayed showing levels No discussions happening Teacher's voice dominating the room Lack of hands on equipment - students at all year levels No PB4L lessons taught or reinforced when needed. Teachers not accepting input from the students e.g. I'm the teacher, so I'm right Learning limited to the classroom. Making up stuff as you are going along not based on any curriculum AOs or knowledge of children All children quiet for long periods of time Closed activities that have a "right" answer and set end point for everyone! No sharing back of the students' learning to their classmates. No oral language opportunities to share thinking. Wall displays for teachers/adults rather than students Teaching just reading writing and maths Limited choice Too much teacher directed "talk". Negative differentiation of students, e.g. Marc is working on something easier today because he can't do what you're doing. No extension for higher ability students. Students being quiet for long periods of time All academic learning with no PE or other opportunities for movement and exercise! Classes full of stuff that has little relevance to students. Remembering some of our children can become over stimulated. Randomised tasks with no point/link to the NZC No active movement Blank walls! Teachers trying to set up lessons and resources while class is waiting ie not prepared prior to lessons. Dry, boring lessons Low expectations of self and children Unorganised chaos...organised chaos is great Children not communicating with each other. Teachers just sitting doing very little (nothing!) while kids are working - not engaged with the kids Lots of worksheets! Isolation from the outside world Messy, unorganised, lacking in purpose resources and equipment Same ability groups working with other all the time. Children sitting for long periods at desks in hot stuffy classrooms. Rows of desks Children sitting and listening all day - not actively engaged Activities that have no challenge Talking down to students. Children working on busy work Lack of teacher planning so teacher is just 'guessing' where they are going or what to teach next Children not having a voice Planning done in isolation - not related to this particular group of

students Punitive classroom. Teacher being the sage on the stage rather than the guide on the side... No differentiation Teachers in the same place/teaching spot all day Ability groups all day, every day Same groups e.g I'm always in the cabbage group for reading. Students only listening and not have the chance to question and respond Teacher doing all the talking. Children sitting on the mat for long periods of time listening to instructions (15 mins max!) Whole class instruction all day.

The visit to **Rolleston School** in Christchurch was also very helpful as they have experienced rapid roll growth and so have faced many of the same issues we have. Their learning through play programme is called Mangopare – Hammerhead Shark – to have determination. They also shared resources and allowed me to observe play based learning in action. Their outdoor area was interesting to observe also, while I was there I saw students planting a vegetable garden and planning out a bee friendly garden. They were obviously very involved in the outdoor environment and used it as another learning area. They had a large “mud play” area where students could go and dig and move dirt around and involve water. Indoors I saw lots of imaginative play and many items of provocation and grouped materials for students to explore and manipulate.

Reggio inspired practice (Rolleston School) Presented by Jade and Andrew

Visible thinking – Project based approach to integrated curriculum.

Underlying Principles -

1. Image of child as being ABLE, THOUGHTFUL
2. Children have a say in their own learning
3. Listening to children, ears, head, heart, eyes
4. 100 languages – language of clay, dance, music etc
5. Potential of environment being third teacher
6. Want to utilise natural curiosity and enthusiasm
7. Careful documentation of what is happening
8. No unit plans, listen to children, allow them to drive learning

Rather than use the road, use the compass, this way we end up in unusual, unknown places, see new things rather than just travel on the same road every time. Deliberate provocations, invitations. Items put out and children decide what to do with them. This requires high teacher energy because the T doesn't know where it's heading.

Documents – Integrated curriculum, skills matrix, key competency coverage, teacher reflection, individual comments for children twice a year, AO's map to show coverage, use of scrapbooks to document what is happening.

Children critiquing each other's work is more powerful than teacher comments.

Teacher noticing what students are interested in/passionate about.

Teachers share projects with each other and walk around twice a year to see what each class is doing.

Linked learning experiences. Still have maths, reading, writing, PE programmes

Flexible timing needed – some projects can be fully integrated, others not so much, up to teacher and can depend on level of class.

Planning tends to happen at the end of each session – preparing for the next session depending on where students want to go next/what is it leading to/lending itself to?

REANZs – organisation for NZ schools wanting to engage in Reggio Play based learning.

Recommended Book – 100 languages of children

Children give us “gifts” every day – platforms to learn from. Eg. Eels, insects

Interruptions from children – USE THEM

The GIFT of TIME - Allow time to investigate, find out, notice. Walk with the children, notice things.

The implications of my investigation are many and will have a positive impact on the school.

The development and introduction of a play based learning structure in our two junior classes for 2019. This has been made much easier because of the knowledge gained and the support/resources I am now aware of and can tap into it.

The use of more natural materials and the natural environment surrounding us for learning programmes.

School Structure – allowing students to stay with the same teacher for as long as practical. For example in 2019 our students from year 4 up from 2018 will remain with the same teacher, students in year 1 and 2 from 2018 will remain with the same teacher. We have 2 new teachers starting in 2019, so their students will be starting fresh and teachers will be focusing on building those trusting, strong relationships. At the end of 2019 we will look at how best to transition classes/students to try and optimise time spent with the teacher they have built a relationship with. This will be a whole staff consideration.

The development of mindfulness and the importance of trusting relationships and a calm environment, embedding these in our everyday school culture. The importance of rocking/swinging/rhythm/predictable school systems for young students and those with trauma. Helping students to feel SAFE at school.

We will be following this mantra next year to guide our school culture:

School Rules: Be respectful. Be responsible. Be kind.

School Focus: **M**indful **A**ttitude **K**ind **A**ttitude **R**espectful **A**ttitude

The benefits of play based learning are many and are documented within the body of my report. These coupled with the information from Nathan Wallis about brain development lead me to the conclusion that the implementation of play based learning, along with thought given to class organisation and use of outdoor spaces and the knowledge that the relationships between teachers and pupils are key will have a positive impact on learning at MMS. Creating a less stressful, more

interactive environment where students feel that they have more agency on their own learning will create a school where students can and will learn effectively and deeply, developing a true love of learning.