# Age-appropriate pedagogies Implementation Report 2016

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## **Director-General's Foreword**



Young children show enthusiasm and excitement for learning when they start school. When we build on this passion, we have the opportunity to set children on a path of ongoing success. This enthusiasm for learning emerges from children's natural curiosity and desire to explore their surroundings and connect new information to their personal experiences. Building on this curiosity, schools introduce the concepts, knowledge and skills outlined in the Australian Curriculum and provide learning experiences

that enable children to apply their knowledge and demonstrate understandings. When teachers take the strengths and capabilities of each child into consideration as well as the curriculum expectations, they create more opportunities to maximise learning outcomes. Teachers can use this knowledge of the child and curriculum as they draw on their repertoire of teaching strategies to support new learning.

In 2016, schools across the Queensland Department of Education and Training's (DET) seven regions were engaged in critical reflection of their practice. School staff considered how to embed age-appropriate pedagogies in teaching and learning to enhance children's outcomes. They started with a focus on an identified school-improvement priority, supported by evidence gleaned from a range of school-based, systemic and community data sources. They then determined how the characteristics of age-appropriate pedagogies, and the approaches to teaching could be utilised to respond to the improvement priority.

The department continued its partnership with Griffith University in 2016. Participating schools continued to be leaders in this research, with a focus on ensuring curriculum, pedagogy and assessment were aligned. By documenting and reflecting on their practice, teachers and school leaders have contributed practical, school-based evidence about the impact of age-appropriate pedagogies on school and teacher decision making, as well as children's learning and development. Teachers and school leaders also enhanced learning outcomes by using a range and balance of teaching approaches.

Strong collaboration between schools, regions, central office and the university researchers was central to the successful implementation of age-appropriate pedagogies in 2016. This collaboration positioned age-appropriate pedagogies as a rich resource and evidence-based framework for teacher pedagogical decision making within a curriculum and performance-focused school improvement context.

In 2017, we will see a change to the implementation strategy for age-appropriate pedagogies, with each region determining and managing a plan that reflects local ways of working and priorities. The research undertaken by Griffith University in 2015 and 2016 has provided the ground work for future implementation. Regional coaches will continue to support schools and encourage communities of practice in 2017. The department remains committed to monitoring the impact of age-appropriate pedagogies on leaders and leading, teachers and teaching and learners and learning.

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Dr Jim Watterston Director-General www.det.qld.gov.au/ageappropriatepedagogies

# Introduction

The 2016 Age-appropriate pedagogies (AAP) program builds on the success of the pilot phase, which commenced in April 2015. It ensures children's social, physical, emotional, and cognitive development, as outlined in the Melbourne Declaration on Educational Goals for Young Australians (MCEETYA, 2008), along with their academic learning, are considered in the early years of school. Current DET policies, including the Ministerial Portfolio Priorities Statement (2015), DET's Strategic Plan 2016-2020 and the *Supporting successful transitions: School decision-making tool*, identify the importance of age-appropriate pedagogies in the early years.

Contemporary research emphasises the importance of providing opportunities for children to be active, collaborative, and creative in early years classrooms. Queensland remains committed to improving learning outcomes for children, as well as the quality of teaching and learning in state schools. These commitments focus on ensuring programs address all aspects of the Australian Curriculum and that assessment practices are rigorous and aligned to the curriculum content being taught. This emphasises the need for a range of teaching approaches that are effective in supporting the learning of young children. Age-appropriate pedagogies ensure children are engaging with the required curriculum in ways that support their learning, and demonstrate their knowledge and understandings through relevant assessment tasks.

The purpose of the AAP program is to promote and support the use of age-appropriate pedagogies in the early years of school, when teaching the Australian Curriculum. Its design was informed by a Foundation Paper (Flückiger, Dunn, & Wheeley, 2015), developed from a review of key research literature, in which it became apparent that teachers who draw on a rich array of age-appropriate pedagogies in their teaching of the Australian Curriculum maximise opportunities for children to develop socially, physically, emotionally, and cognitively.

# Program design

As in the pilot phase, an innovative research design was used for the 2016 program, ensuring it was research informed and research led. The successful implementation can be attributed to the innovative program design and the commitment of participating school teams. Key elements of the design that supported the successful implementation were:

- Strong informing research base drawing on contemporary literature relevant to effective pedagogical practice in the early years of school.
- Tri-level leadership and support based on a shared commitment and understanding of the intent of age-appropriate pedagogies at a system (central and regional), school (leaders and teachers) and university level.
- **Philosophical alignment** the alignment of teacher philosophies with the research theory, supported through their application to practice.
- School-based action research schools as leaders of local research, based on their context and relevant to their cohort of children and teachers.
- Supportive environment in which to take risks acknowledging for teachers, as well as children, that learning comes from taking risks, reflecting on outcomes and working towards further change.
- **Tailored professional learning** supporting teachers and leaders from the point of their current understanding and practice.
- **Communities of practice** valuing and establishing opportunities for school teams to learn from, and share with, colleagues as they work to implement age-appropriate pedagogies.
- Individual and/or collective coaching using site-specific and individual coaching to deepen understanding, make connections to school- and system-level priorities and provide feedback to inform reflection.
- Wrap-around academic research drawing out the impacts and findings to strengthen the evidence-base for age-appropriate pedagogies.

Grouped broadly under three components — professional learning, an action research project undertaken within each school, and wrap-around research conducted by the Griffith University research team (the research team) — the program design and related key activities are reflected in **Appendix A**. The data and subsequent findings from these action research projects, along with data collected by the research team, inform this report. The research from 2015 examines the efficacy and impact of the AAP program on leading, teaching and learning. The research design was underpinned by three principles: the importance of research-informed practices, the value of action research as a vehicle for both informing and leading change processes, and an appreciation of the potential positive impacts which can be generated when there is collaboration between systems, schools, and universities. These principles continued to be embraced in all aspects of the 2016 AAP program.

The research conducted by Griffith University in 2016 was framed by the question: *How has the implementation of AAP* 2016 impacted on leaders and leading, teachers and teaching, and learners and learning?

The research team employed a multi-layered mixed-method approach to investigate the participating teachers' and leaders' change processes and practices within schools. Data informing the research was drawn from statistical analysis of questionnaires from school leaders and teachers, content analysis of the multiple AAP School Reports and transcripts of interviews with key stakeholders.

Although these data privilege the perceptions of individuals, triangulation of multiple data sources, using a range of methods, ensured a robust and comprehensive examination of multiple data sources and strengthened the validity of the research. When considering the qualitative data that informed this report, it is important to note that in phenomenological research, the perceptions of participants are prioritised. In this case, teachers and school leaders are the closest observers of pedagogical practices and the impact of these practices on children. Such perceptions have been informed by individuals' professional expertise; professional engagement with the research process; discussions with the research team, regional colleagues and other teachers and leaders during the various cluster sessions; and robust and collaborative discussions at a school level. Therefore, these data are highly significant and should not be considered as being of lesser value than the quantitative material reported. It is worth noting that the 2016 AAP School Reports generally showed a more consistent approach to data collection and reporting than those created in 2015.

In determining the focus of their action plans, schools first considered their school improvement priorities and used the School Improvement Hierarchy to guide and inform their decision making. Taking a school improvement focus gave credence to the pedagogies as a tool to support ongoing improvement. It also reinforced the principle that pedagogy must be considered alongside the teacher's knowledge of the learner and systemic curriculum and assessment expectations; that pedagogical decisions don't occur in isolation, rather they are one aspect of the teaching and learning process. Figure 1 shows the spread of focus areas across school action plans in 2016. These focus areas were examined through the content of specific learning areas.

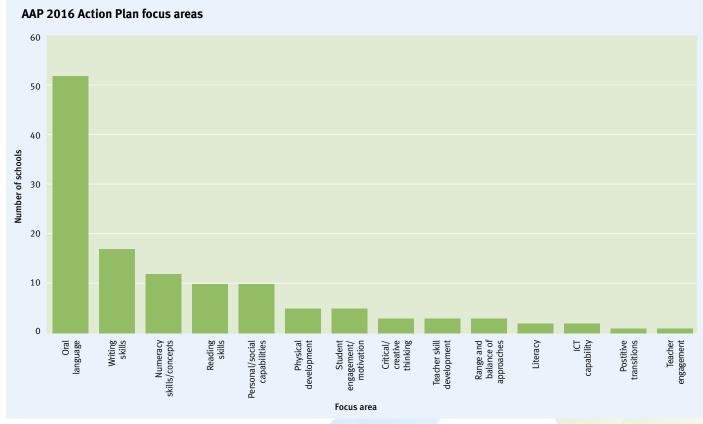


Figure 1 2016 Action Plan focus areas

# **Building capacity**

A key learning from the pilot phase highlighted the essential role that engaged and knowledgeable leaders play in initiating and sustaining change agendas. In relation to the implementation of age-appropriate pedagogies, the 2016 design included a focus on building the capacity of regional and school teams to manage expansion of the program.

Working collaboratively with the Early Childhood and Community Engagement Division, the State Schools Division was instrumental in providing guidance and leadership to schools and regions about how to best position age-appropriate pedagogies in the context of supporting continuous improvement. School teams were encouraged to utilise DET's School Improvement Hierarchy as the framework for determining the focus of their school-based age-appropriate pedagogies action research project. This ensured that age-appropriate pedagogies were being applied to identified priority areas and were targeted as a tool to support the school's improvement agenda. It also enabled schools to connect a number of key DET initiatives and embed age-appropriate pedagogies in the general work of schools.

The Griffith University researchers organised support for regionally determined clusters of participating schools. The cluster model encouraged 'communities of practice' to form around the driver of age-appropriate pedagogies implementation, and assisted in maintaining program and content fidelity. Three cluster meetings were scheduled across the year, as determined by regions, each with a specific focus. Table 1 provides an overview of the focus and goals of each of the cluster sessions.

Cluster session	Focus	Goals
1	Enacting the pedagogies and creating reflections.	• To support teachers and leaders in the implementation of their AAP Action Plans.
		<ul> <li>To provide support that enhances and extends teacher understanding of characteristics, approaches, and relevant aspects of the Australian Curriculum.</li> </ul>
		• To support the ability to engage in reflective practices.
		• To build a community of practice where diverse school contexts, practices and plans are shared.
		• To provide support for the development of teacher and school leader progress reports.
2	Understanding the relationship between AAP and learner outcomes.	• To support teachers and leaders to continue to build strong professional learning communities to effectively implement age-appropriate pedagogies.
		• To strengthen understanding of the pedagogical approaches.
		• To strengthen understanding of the connections between the various approaches and learner outcomes in relation to the Australian Curriculum.
		• To extend understanding of data sources, recording
		processes, data collation, analysis and interpretation, and how these processes can inform practice.
3	Reporting on leaders and leading, teachers and teaching, and learners and learning.	• To create a shared understanding across school teams of their collective data across the three report areas.
		• To provide support for the creation and/or refinement of the School Reports and presentations.
		• To support teachers and leaders in the implementation of future Action Plans.

Table 1 Cluster session focus and goals

Data from the wrap-around research, conducted by the Griffith University research team, indicates that 93.2 per cent of teachers found the cluster sessions and workshops, facilitated by the research team, useful in:

# Helping to create a learning community that supported implementation of age-appropriate pedagogies.\*

Through the cluster sessions, participants had the opportunity to:

- raise and address any challenges or concerns encountered during implementation
- reflect on the progress of their implementation plan to date
- share and discuss artefacts (for example: reflection tools, practice ideas, data analysis processes) and any processes and practices found to be useful in supporting implementation
- participate in professional learning in relation to pedagogical practice (for example: characteristics, approaches, reflections) and action research (Action Plans, data gathering, analysis, reporting findings).

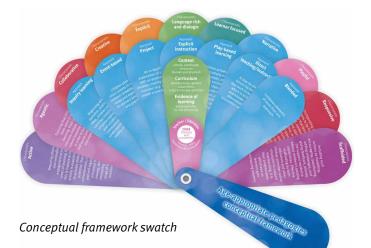
Capacity development within regional teams was also prioritised in 2016. The research team collaborated with regional teams to develop shared understandings of the importance of a range and balance in relation to children's engagement, holistic and academic development, and longterm success, as well as professional conversations relating to the support required in schools to implement age-appropriate pedagogies. The approach to capacity building within regions was flexible and responsive to regional and system priorities. Central to this aspect of the work was a desire to ensure regions maintained agency in leadership and decisionmaking about how the support offered by the researchers was operationalised in their region, while maintaining the key objectives associated with implementation and the integrity of age-appropriate pedagogies in action. The researchers drew on the theoretical framework from Fullan's (2007) theory of action for educational change and Thoonen, Sleeger, Oort, and Peetsma's (2014) conditions for building school-wide capacity for improvement to guide discussion with regions.

There is clear evidence of the value that Age-appropriate pedagogies coaches (coaches) provided by supporting schools. Coaches mentored leaders and teachers through professional conversations and activities related to: understanding the practical application of characteristics and approaches, planning, reflections on practice, and teaching. Coaches also supported school leaders in monitoring school action plans, and engaged in professional conversations about the impact of age-appropriate pedagogies for the school, teachers, students and families. Data from School Reports suggest 85 per cent of leaders in schools commencing AAP in 2016, and 71.5 per cent of continuing leaders, agreed that regional coaches had provided essential support for the implementation of age-appropriate pedagogies in their school context. More than 89.7 per cent of teachers indicated that the coaches provided essential support. The value of the coaches was reiterated by regional leaders, with one reporting:

# The regions have really loved having those coaches. There's someone local that's building their knowledge and expertise and is a key contact for support.

A range of professional resources were developed in 2016 to further strengthen teacher understanding of age-appropriate pedagogies and their application in the classroom. Perhaps the most accessible resource was the Age-appropriate pedagogies conceptual framework swatch. This pocket-sized tool allowed teachers to reflect on the elements that informed their pedagogical decision-making in conjunction with school-based curriculum plans. All resources were shared with regional coaches for use with school teams and to support professional conversations. One school leader noted:

It just all came together with the conceptual framework and it became an easy tool to use for a unit format. It allowed teachers to show the reasons and thinking behind their decisions on how the students in their class can best attain the achievement standards and content descriptions.



\* blue text throughout this document indicates comments made by AAP Program participants.

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# Findings and key messages

Building on the evidence gathered during the 2015 pilot program, data informing the 2016 research was organised using the consistent framework of leaders and leading, teachers and teaching and learners and learning. This framework enabled the researchers to gather data on the impact of age-appropriate pedagogies for each of the key players in the implementation process. In terms of leaders and leading, the perspectives of system leaders (regional and selected central office leaders) and school leaders were sought. This provided valuable data to inform both systemic and school-based decision making.

# Leadership

The importance of system leadership in effecting change is highlighted in the leadership literature (Maughan, Teeman, & Wilson, 2012). Whilst pedagogical change is most effective when led close to the site of change — the classroom — all levels of the organisation have key roles in leading change: system leaders, school leaders and classroom teachers. System leaders reported that the main aim of AAP, related to DET's Strategic Plan 2016-2020, was to establish a strong foundation for the continuity of children's learning, with children participating in learning experiences that are ageappropriate and giving them opportunities to be active, engaged, and successful learners. One system leader noted:

The broad aims were to raise awareness of quality pedagogy; to ensure that the pedagogy implementation did not detract from the high-quality curriculum implementation; and to provide good quality professional development for teachers so that the children who were involved in AAP would get the very best of teaching.

There was generally a deep level of participation, engagement, and buy-in to AAP, and belief in its worth. Most system leaders articulated the view that almost all participating schools and classroom teachers have been open and accepting of the associated change necessary to enact age-appropriate pedagogies.

I think we've seen a change there. We're seeing teachers really engaged, and having agency and valuing that opportunity for greater input in the design of their pedagogies, with that increased knowledge they have of how to broaden the range and balance. Systems leaders noted that in continuing schools, age-appropriate pedagogies had a positive impact on children's transition-to-school experiences. The transition to school was seen as being easier for children because there was more consistency between pedagogical approaches in Prep, early childhood education and care centres, and kindergartens. The gap between approaches in early childcare settings and Prep was now viewed as "not so big."

#### Some schools are reporting to us that the parent body are actively asking that age-appropriate pedagogies remain part of the Prep program, because they've noticed the difference it's made for children transitioning into school.

Engagement with the age-appropriate pedagogies research was perceived by system leaders as having a notable impact on teachers' knowledge and practices. The identified impacts were increased capability; greater freedom to select approaches; increased motivation and confidence in implementing a range and balance of pedagogies; increased knowledge of current research; increased knowledge of the Australian Curriculum, its intent and associated achievement standards; and increased reflection and dialogue around their practice. The professional learning opportunities provided within AAP were perceived by many system leaders as high quality, and a strong model of professional learning. They were also viewed as having a positive impact on the professional learning of school leaders and teachers. For example, teachers and school leaders working with academics and participating in action research were described as inspiring confidence. One school leader noted:

#### I think doing a research plan has been a real professional learning. Some people might have found it a bit challenging, but I think it actually makes us look at the big picture.

The role of school leaders was seen to be highly influential in achieving positive outcomes. Leaders who established clear priorities and boundaries, within which teachers could work freely and autonomously, were seen to produce the greatest change in teachers' practices.

Principal involvement is absolutely essential to the success of AAP in a school setting. I'd have to say the engagement of the leaders has been variable, but where principals have been really well engaged, one of the impacts has been certainly that they're far more across the learning processes that occur in the lower part of their school than perhaps they ever were before.

Several system leaders also recognised the importance of investment and leadership at a regional level, and the role regional priorities play in providing context for driving change initiatives. One explained:

So even if the principal has the buy in, we still need that regional framework sitting over the top.

The leadership model and actions of school leaders were identified as crucial to the successful implementation of age-appropriate pedagogies. A system leader reported that when school leaders were engaged, owned the work, understood the work, and wanted to do the work, there was a whole-school change:

When school leaders are learning side-by-side with the teachers, it gives it a greater importance. I think when the school leadership team are there at the professional learning opportunity, they're there at the planning sessions with teachers, and I think they bring in an understanding in terms of their strategic direction of the school.

Teachers who experienced such leadership reported feeling empowered to experiment and trial new practices, which they found very encouraging.

Involving leadership with this project has enabled alignment with existing pedagogical approaches and also demonstrates support of the project to the wider school community. I also believe leadership involvement is essential to establish sustainability for the project.

In terms of leadership for successful implementation, the research indicates that strong school leaders engaged in strategic visioning with staff; strengthened the change culture and climate; aligned age-appropriate pedagogies with the strategic context; mobilised leadership expertise; established clear priorities and boundaries within which teachers could work autonomously; provided adequate resources; invested in building professional capital; and monitored the impact of change.

I think the program went a long way towards building expertise within our early childhood team. There was a degree of psychological safety built up, which allowed them to experiment and have conversations about their practice and pedagogy.

School leaders noted that engagement with age-appropriate pedagogies in 2016 was just the beginning of a longer implementation process. They acknowledged that the change in pedagogies in Prep would have implications as the children moved through the year levels. This data suggested some school leaders were positioning themselves to continue leading the change process:

#### It has been a fantastic journey, however, as a principal I need to continue researching, sharing, and supporting teachers who will deliver AAP at our school.

While positioning their schools to continue researching the impact of age-appropriate pedagogies, many school leaders reported strategies for monitoring change that included team meetings, reflective journals, and professional conversations with one school leader reporting:

The Age-appropriate pedagogies program has been central to the Annual Professional Development Plan process to ensure professional capital is built and impact of change monitored.

# Teaching

Perhaps most evident during 2016 implementation was the impact of the adoption and application of age-appropriate pedagogies on teacher practice, motivation and engagement with the process of aligning curriculum, pedagogy and assessment. Teachers reported that being involved in work that is informed by a strong research base invigorated their work and improved their confidence in articulating their practice. One school leader noted:

For teachers who are effectively using age-appropriate pedagogies in their classroom, they believe that this approach has enhanced their teaching and made their job exponentially more enjoyable.

Teachers placed high importance on being able to enact pedagogies and practices that are in line with their personal philosophies. In almost all reports, there were comments on alignment between beliefs and practice. For these teachers, age-appropriate pedagogies provided such an alignment. This led to professional empowerment, enjoyment and well-being.

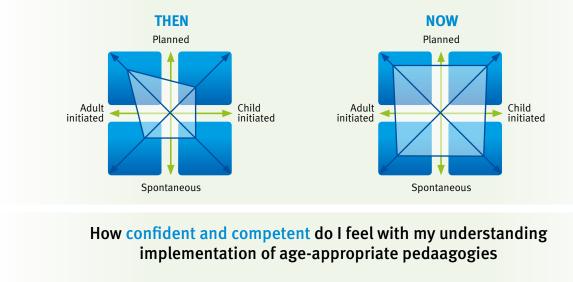
The implementation of AAP most definitely impacted on my own personal well-being and how rewarded and successful I felt leaving school each day. The gap that originally existed between my own personal philosophy on early years learning and my actual practice within the classroom has lessened. I actually get to utilise my skills, knowledge and expertise within my classroom, and this I truly enjoy.

Teachers noted that the support from a consistent authorising environment influenced their endeavours to change their pedagogical practices. They commented that the endorsement at a system level, by a regional director or other regional leader, reinforced that DET was completely supportive of the program. Typical of teacher comments was:

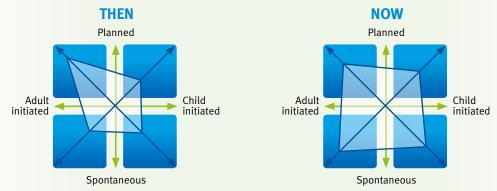
#### We had confirmation and support from the Department of Education and Training, right through to our admin team, and this has helped us in feeling secure about the changes we were about to implement in the classroom.

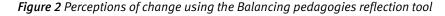
The data indicates all teachers believed that a deep and comprehensive knowledge of the Australian Curriculum was essential for successful implementation of age-appropriate pedagogies, and saw it as a precursor to achieving range and balance. A majority, 81.3 per cent of teachers considered they had achieved an in-depth understanding of the Australian Curriculum, and 90.5 per cent considered that participation in the program had contributed to their enhanced understanding of the Australian Curriculum. This knowledge of the curriculum assisted teachers to ground decisions around the enacted and experienced curriculum in their classrooms and enabled them to work more effectively.

It is very easy to justify decisions we make with the class program at every minute of the day with a good knowledge of the Australian Curriculum. It is evident the characteristics of age-appropriate pedagogies are highly influential in shaping teaching and learning interactions, classroom organisation, management decisions and professional dialogue. Data showed 92 per cent of teachers reported that embedding the characteristics in their teaching enhanced their motivation and enjoyment of teaching. They also considered agentic, language rich and dialogic, and playful to be the characteristics which had the greatest influence on engaging children in learning. Age-appropriate pedagogies strives for a range and balance of pedagogies. The program suggests eleven characteristics, seven approaches and a balance among planned, spontaneous, teacher initiated and child-initiated learning. By the end of 2016, teachers reported a reasonably balanced use of the full range of pedagogical approaches. In light of this increased confidence, and use of a wider range of approaches, it is interesting to note that teachers considered inquiry learning as the approach which makes the greatest difference to children's learning, followed by project and event-based approaches, as well as play-based learning. The Balancing pedagogies reflection tool was developed to assist teachers in monitoring range and balance over time with a specific focus on teacher-initiated and child-initiated learning — both planned and spontaneous opportunities. The tool fulfils two functions: one, it shows evidence of growth and change, and two, it is a powerful motivator of further change, when the distance travelled is so clearly evident at a glance. Figure 2 shows the result of reflections on individual teacher progress, and data relating to the beginning of Term 2 and the end of Term 3 in one particular school. Additionally, similar evidence was provided in more than three-quarters of reports.



How am I implementing age-appropriate pedagogies?





The research also indicated there is a reciprocal relationship between teacher engagement and children's engagement. Teachers' engagement rose when they saw evidence of increased engagement, enhanced achievement and improvements in behaviour and attendance in children. Evidence of this reciprocal relationship was noted in comments by teachers, indicating artefacts that children produced during the teaching and learning process *have been of a higher standard than those previously created*. The teachers reported great pleasure in recognition of this enhanced learning.

In summarising the impact of age-appropriate pedagogies on teachers and their practice, one large school described their key learnings. Interestingly these learnings were reflected in the comments of the majority of teachers in schools across the state.

- We learned that in order to achieve a range and balance of AAP we need to be mindful that we are allowing all characteristics to be present – it won't just happen by itself, there is an element of planning and monitoring needed.
- We learned that we enjoy and need (as much as the students perhaps) opportunities for collaborative learning with each other and with input from our Head of Curriculum and AAP Coach.
- We learned that knowing our students as learners strengthened our approach to aligning curriculum, pedagogy and assessment.
- We discovered it is imperative that all professionals teacher aides, relief staff, Advisory Visiting Teachers (AVTs), Support Teachers – Literacy and Numeracy (STLaNs), parent helpers and others – involved in the classroom also need to be informed and educated about the importance of AAP and how to enact them.

- We learned that age-appropriate pedagogies are not an add-on it blended in well with our everyday teaching.
- We understand that comprehensive knowledge of the Australian Curriculum and achievement standards is vital if we are to make the best of opportunities for learning. We need to know the curricula as a year, not just term by term.
- We did not anticipate that incorporating a range and balance of AAP approaches and characteristics would so quickly become pervasive in our teaching practice.

## Learners

Central to the intent of age-appropriate pedagogies is to support children to be successful and engaged learners, to be motivated to engage fully with the curriculum offered through a range of appropriate teaching and learning practices. In 2016, schools were invited to give consideration to data that captures the impact of age-appropriate pedagogies on children's learning outcomes, including motivation and engagement, attendance, behaviour and achievement.

In 2016, a broader range of data sources was used to identify the impact and outcomes of age-appropriate pedagogies on learners and learning. There was also an increased use of system data to support statements relating to outcome and impact. Figure 3 provides an overview of the most common data sources used to support School Reports and presentations. It includes data used in relation to the identified school Action Plan focus, and additional data reported to support discussion of outcomes not included or specifically identified. In regards to the latter category, by far the most commonly used data sources were OneSchool behaviour and attendance data. These data were employed in various ways, including comparisons within the same cohort (over time) and across cohorts (2015 and 2016 data).

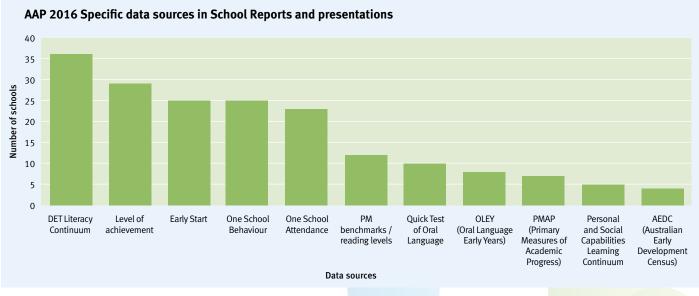


Figure 3 Specific data sources used in School Reports



Data indicates that 98.5 per cent of leaders and 95.5 per cent of teachers who responded to questionnaires believed that age-appropriate pedagogies had a positive influence on children's motivation and engagement, particularly when children are given opportunities to exercise agency in their learning. The following comment was provided by a school commencing implementation in 2016:

AAP also appeared to have a huge impact on the children's ability to concentrate and complete a task. It was noted that through giving the children agency within particular learning tasks they engaged in, their concentration levels improved markedly. Children were able to concentrate and attend to a task for much greater periods of time than prior to its implementation.

What appears evident from the comments of teachers is that age-appropriate pedagogies have a positive impact on all learners. One teacher noted the impact for his/her cohort of children:

With a class of extremely high needs, both academically, socially, behaviourally and physically, the beginning of the year was quite challenging. As we started to implement AAP, I saw such growth in every student. Each child was better catered for and communication and interaction skills quickly improved.

Further, teachers noted how specific characteristics of age-appropriate pedagogies directly impacted the engagement, participation and outcomes for groups of learners:

We often have new students who are new to the area, new to the country, and some are here temporarily while they stay at a women's shelter. The use of AAPs seemed to make it easier for these students to join our classes. Of particular help to them were the playful, agentic and collaborative characteristics.

Schools reported that application of age-appropriate pedagogies had a positive impact on the quality of dialogue in classrooms.

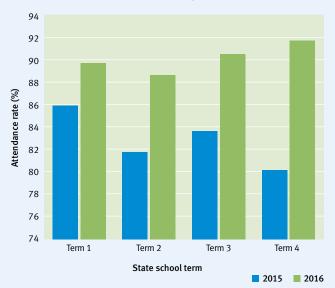
Children were more readily motivated to engage in conversation with adults and peers and noted a willingness to share ideas.

One of the most noticeable impacts, identified by all stakeholders, would be the active participation and high involvement and engagement of our learners. This is in direct correlation to the more language-rich dialogues that have been observed over the course of this project. Because of their investment in the project, a greater number of children became involved in, showed enthusiasm for, and enjoyment in both the setting up of the area and the use of the completed space. Conversations were plentiful during these times. The children's desire and confidence to suggest and explain creative ideas and thoughts within a planned learning episode was also very encouraging. Their willingness to question, and to happily be questioned (What would happen if? How did you?) also became evident.

A number of schools chose to examine school-based data in relation to attendance and behaviour. In a significant majority of these schools, there was a noticeable increase in children's attendance at school and a decrease in behaviour incidents. A school noted in its final report:

Evidence of behaviour data taken from OneSchool demonstrates a decline in major behaviour incidents throughout the duration of 2016. This decline correlates with the gradual implementation of the AAP project within the four Prep classrooms. Therefore, the data suggests that students became more engaged with the curriculum as an increasing use of age-appropriate pedagogies were used, and they were less likely to act out.

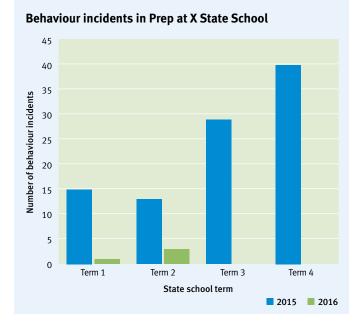
Figure 4 highlights attendance data between 2015 and 2016, showing an increase in attendance in 2016.



Attendance data from a School Report

Figure 4 Comparison of Prep attendance data 2015-2016

Figure 5 shows the number of behaviour incidents recorded at one state school during each term. The data reflects the comparison between 2015 and 2016 data.



#### Figure 5 Behaviour incidents in Prep 2015-2016

Teachers noted the connection between children's increased engagement and motivation and the flow on effect this has on their confidence and willingness to have a go at learning tasks. Additionally, they noted the links to improved learning outcomes. One teacher reported:

There has been an increase in learner confidence and children seeing themselves as competent learners and achievers, willing to have a go, take risks and participate with enthusiasm. I found that my change in approaches has empowered the children to be engaged in their learning and see themselves as active participants in their learning journey. This has been reflected in their engagement, independent learning with writing and reading, and improved reading growth.

In almost every report submitted at the end of 2016, schools provided qualitative data about the impact age-appropriate pedagogies had on children's learning, with many providing quantitative evidence of achievement. This included making comparisons with previous cohorts of children to demonstrate accelerated achievement. Table 2 shows movement across achievement levels for four years. It shows a school committed to continuous improvement and indicates a marked increase in movement in 2016.

# Achievement of Prep children in mathematics at X State School

Percentage AP-BA	AP%	MC%	WW%	EX%	BA%
2013	18	15	30	30	7
2014	27	20	30	21	2
2015	30	19	21	24	6
2016	36	33	22	7	2

#### Table 2 Mathematics achievement

Data from the research indicates that 87.8 per cent of leaders and 84.7 per cent of teachers from schools who commenced in 2016, and those who are continuing their implementation from 2015, agreed that children involved in age-appropriate pedagogies had achieved or exceeded expected academic outcomes. In addition to academic achievements, 98.5 per cent of leaders and 95.2 per cent of teachers perceived benefits beyond those focused on academic outcomes. This relates specifically to outcomes in the affective domains such as social and emotional development, physical development and creative and critical thinking:

Children involved in AAP this year have achieved, and certainly exceeded expected developmental outcomes, as per the Personal and Social Capabilities learning continuum in the Australian Curriculum, and at this age, that is equally important.

### Parents and community

As was noted at the end of the 2015 pilot, implementation of age-appropriate pedagogies also had an impact on parental and community involvement and engagement. Several schools reported on the flow-on effect of children's engagement to parents, and to the wider community. Parents exhibited greater interest and supportive involvement in classroom practice, as this quote from a commencing school indicates:

The unforeseen impact was the enormous success of getting parents and other family members into the classroom. On the morning of the Poets' Café, the room was full of extended family members (there were over 30 adult family members in the classroom).

Parents also commented favourably on children's increased confidence and enthusiasm for learning:

I have seen my daughter working co-operatively with her peers and she is given more opportunities to develop her social skills. I think that this type of learning allows kids to think outside of the box, be risk takers and self-motivated.

I care about my whole child, her self-esteem and how she sees herself as a learner, as a person. I truly believe my youngest child's Prep year would not have been as positive and successful if it was not for the change in delivery of the curriculum.



# **Key learnings**

The research identifies eight key messages from the findings. These findings summarise the factors identified as contributing to the successful implementation of age-appropriate pedagogies, and assist in informing school and system-level decision making. In addition to the key messages, a series of enablers and barriers to the successful implementation of age-appropriate pedagogies have been identified. The enablers and barriers describe the conditions at a system, regional and school level that support and promote future implementation.

## Key messages

- 1. Clear, consistent, aligned, and informed messages around AAP in relation to system, regional and school priorities and agendas create the climate and impetus for school leaders and teachers to effect pedagogical change.
- 2. Timely decisions and communications about AAP facilitate forward planning and action.

- 3. The research-informed and research-led design of the AAP program model contains the elements to support successful change.
- 4. Strong, supportive, and strategic leadership by invested principals enables the successful enactment of the AAP program.
- 5. There is a reciprocal relationship between teacher engagement and children's engagement.
- 6. Collaboration, teamwork, and opportunities to engage with communities of practice enhance teacher confidence, creativity and well-being.
- 7. The AAP program accommodates diverse learners (interests, capabilities, development), motivating and engaging children in learning.
- 8. The evidence suggests the AAP program contributes to improved outcomes in academic achievement and general capabilities.

Area	Enablers/Barriers	Enabling conditions and supports
Motivation and willingness to change	<ul> <li>Enthusiasm, motivation, seeing the need for change.</li> <li>Leadership and sense of ownership.</li> <li>Buy-in by leaders and teachers.</li> <li>Shared beliefs and understanding.</li> </ul>	Motivation and willingness to change were influenced positively when there was strong alignment between personal teaching philosophy and practices; a shared understanding about young children's learning and development; evidence of increased engagement and enthusiasm for learning by children; endorsement to change from leaders at a system and school level; and clearly established strategic priorities and boundaries within which teachers could engage autonomously.

Area	Enablers/Barriers	Enabling conditions and supports
Professional learning	<ul> <li>Access to initial workshops, cluster sessions, and additional context-specific professional learning.</li> <li>Knowledge and experience in action research processes.</li> <li>Co-constructed professional learning communities.</li> </ul>	Engagement in professional learning supported deep understanding of AAP. Access for all participants (leaders, teaching teams and teacher aides) to the professional learning (PL) opportunities (regardless of distance) was seen as a strong enabler, as this assisted in developing essential understanding of the AAP conceptual framework in practice. Additional PL supports were the ongoing mentoring of teachers in each region by coaches with in-depth knowledge of AAP and coaching models; ongoing support for schools to design, enact and reflect on Action Research cycles; and collaboration, and professional support for, and personal agency in, the establishment of sustainable internal and external communities of practice for all teachers.
Professional knowledge, processes, and practices	<ul> <li>Australian Curriculum.</li> <li>AAP conceptual framework, characteristics and approaches.</li> <li>Awareness of range and balance.</li> <li>Alignment of curriculum, pedagogies and assessment.</li> <li>Structures and processes.</li> </ul>	Informed professional knowledge, processes, and practices supported enactment of AAP. A comprehensive understanding of the Australian Curriculum was seen as essential, along with an understanding of the AAP conceptual framework; expertise in the use of the AAP characteristics and approaches in practice; awareness of balances (and imbalances) within enacted pedagogies related to teacher- and child-initiated, planned and spontaneous learning opportunities; flexibility of school structures and routines; support and scaffolding of professional conversations; a supportive climate/environment within the school; and opportunity to adapt school processes and resources to support AAP.
Leadership	<ul> <li>Pedagogical framework and related school documents.</li> <li>Strategic planning.</li> <li>Visible involvement.</li> </ul>	Strong and consistent leadership actions enabled the enactment of AAP. These included alignment and inclusion of the AAP conceptual framework and approaches within the school pedagogical framework; strategic decisions and actions supporting implementation, including resourcing, flexible timetabling, selection of staff (with training and/or experience of teaching in the early years); and committed and involved leadership teams who actively engage with, and promote AAP with parents, other staff and the broader community.
Resources temporal, physical, financial, human	<ul> <li>Age-appropriate resources and storage for easy access.</li> <li>Classroom and other environments for AAP.</li> <li>Teacher aides and other involved school staff, access to professional learning, knowledgeable and supportive of AAP.</li> <li>Changes to teaching and leadership staff.</li> </ul>	The following resourcing considerations supported enactment of AAP: resources and environments that support the 11 characteristics and 7 approaches in action; storage facilities that ease children's access to physical resources; furniture suitable for flexible purposing; free-flow access to indoor and outdoor learning spaces; financial support for access to professional learning opportunities, for example teacher relief, travel, accommodation (especially in remote and rural schools); ensuring all members of teaching and leadership teams are able to access professional learning opportunities related to AAP and their school's AAP focus area; and facilitation of access to professional learning for entire teaching/leadership team, especially including newly appointed teachers and leaders.

 Table 3 Enablers and barriers to the successful implementation of age-appropriate pedagogies



# Further implementation in 2017

There is no doubt that the research conducted to date by the research team and participating schools indicates embedding age-appropriate pedagogies in teaching and learning practice has a significant positive impact on children's learning and development, teaching quality and teacher motivation. The evidence suggests that engaged and motivated teachers lead to engaged and motivated learners. As a system, we know that engaging students in learning, and maintaining the motivation to learn, is one of the most significant factors in supporting successful learning outcomes.

The strong evidence-based groundwork for age-appropriate pedagogies, established through the partnership with Griffith University and articulated in the Age-appropriate pedagogies Foundation Paper and school-based research program in 2015 and 2016, sees DET well placed to maintain the positive momentum associated with implementation to date. The contribution of the Griffith University research team in shaping this work is acknowledged as being highly influential in broadening pedagogical thinking and action in the early years of school.

Given the success of implementation to date, the number of schools engaging with age-appropriate pedagogies will continue to grow in 2017. Having established communities of practice, and strengthened understandings of age-appropriate pedagogies, DET regions are taking leadership of implementation at the local level. This will enable each region to embed age-appropriate pedagogies within their local priorities and make timely decisions about the model of implementation that best suits their local context. Continued collaboration at a system-level provides support for future implementation that maintains consistency with the age-appropriate pedagogies conceptual framework and departmental priorities.

This collaborative approach reinforces the purpose and intent of age-appropriate pedagogies as a means of strengthening quality teaching practice to support holistic development and enhance learning outcomes of children in the early years of school.

## References

Flückiger, B., Dunn, J., & Wheeley, E. (2015). *Age-appropriate pedagogies for the early years of schooling: Foundation paper*. Brisbane: Queensland Government Department of Education and Training.

Fullan, M. (2007). Change theory as a force for school improvement. In J. M. Burger, C. Webber, & P. Klinck (Eds.), Intelligent leadership: Constructs for thinking education leaders (pp. 27-39). Dordrecht, The Netherlands: Springer.

Maughan, S., Teeman, D., & Wilson, R. (2012). What leads to positive change in teaching practice (NFER Research Programme: Developing the Education Workforce). Sough: NFER.

Ministerial Council on Education, Employment, Training and Youth Affairs. (2008). *Melbourne declaration on the educational goals for young Australians*. Melbourne: MCEETYA.

Thoonen, E. E. J., Sleeger, P. J. C., Oort, F. J., & Peetsma, T. T. D. (2012). Building schoolwide capacity for improvement: The role of leadership, school organizational conditions, and teacher factors. School Effectiveness and School Improvement, 23(4), 441-460. doi: 10.1080/09243453.2012.678867

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# Appendix A

### AAP 2016 Research-informed and research-led collaborative process

