



creative schools

deep learning, hard fun



Report on the Impact of the FORM Creative Schools Pilot Program 2018

By Mathilda Joubert

Director of Excellence & Innovation,
Sheridan College, Perth, Western Australia





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Executive Summary



The Art of Learning Program

FORM's Art of Learning Program is a learning program that aims to enhance outcomes for young Western Australians by activating creative learning strategies through the establishment of meaningful partnerships between teachers, creative (arts) practitioners and young people. In 2018 the program was piloted in 10 classes (2 per school) in 5 Western Australian schools: Bentley Primary School, Kinross Primary School, Merriwa Primary School, Mundaring Christian College and Scotch College.

The Art of Learning was designed to provide pupils in selected schools with an intense arts-rich intervention. This program builds on robust international evidence that engagement with the arts improves the quality and impact of general education. Using arts as a pedagogical tool for learning cultivates a unique set of academic, social and personal skills.

The aim of the Art of Learning is to make a positive impact on student academic, social, emotional and creative learning through establishing partnerships between teachers and creative practitioners/artists. The defining characteristic of the program is the collaborative partnership between artists, classroom staff and learners, and the ways in which this partnership helps to bring the curriculum to life. It's about providing new ways for learners to engage with subjects.

After an intense training program in March 2018, facilitated by international experts Paul Collard and Paul Gorman, artists were paired with teachers in the 5 case study schools. Each teacher-artist pairing chose an area of the curriculum to target each term and they work together to plan a series of learning activities to co-teach the chosen curriculum areas in creative ways. The artists then visited the school once a week during Terms 2 and 3 to co-facilitate a 60-minute learning experience with the teacher to their own class of students. Time was also built into the program design for a weekly plan-do-reflection cycle between the teacher-artist pairs.



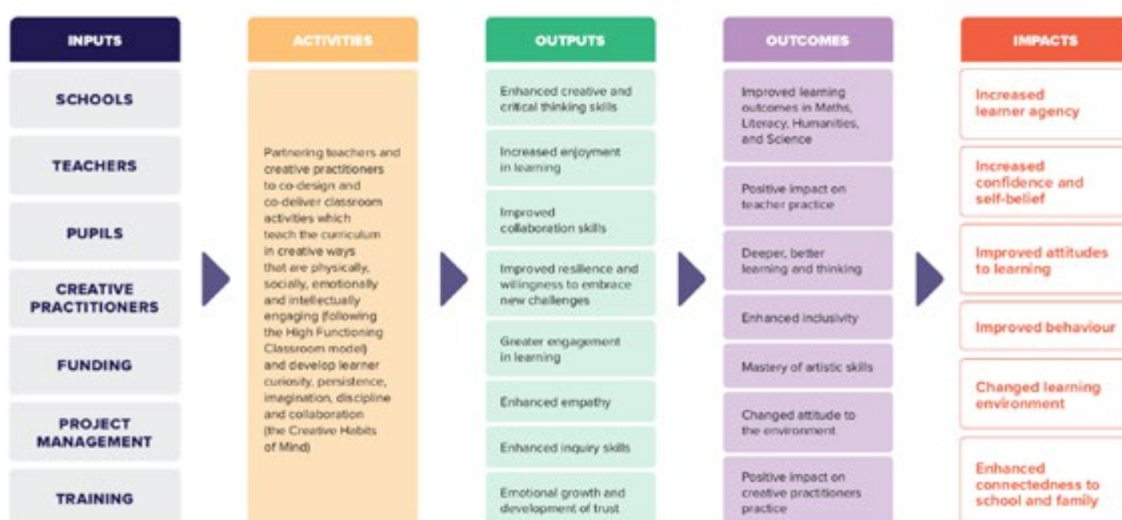
Evidence of Impact

The project had significant positive impact on children's learning, engagement, wellbeing, creativity and connectedness to school, community and family. Artist and teacher practice also became more creative, thus achieving all intended project outcomes.

Impact Model

creative
schools

Impact model depicting the intended impact of the Creative Schools Program on stakeholders



A total of 21 triangulated impact effects were identified in the five case study schools during the Art of Learning Pilot program in 2018 as summarised below:

5/5 schools

1. Improved subject learning outcomes in Maths, Literacy, HASS, Science
2. Enhanced creative thinking skills
3. Increased enjoyment of learning (linked to wellbeing)
4. Increased agency and ownership
5. Improved collaboration/teamworking skills
6. Enhanced connectedness to school and/or family
7. Positive impact on teacher practice
8. Positive impact on artist practice

4/5 schools

9. Improved resilience and willingness to embrace new challenges
10. Greater engagement in learning
11. Deeper, better learning and thinking
12. Increased confidence, self-belief and pride in achievements

3/5 schools

13. Enhanced inclusivity

2/5 schools

14. Improved attitudes to learning
15. Improved behaviour
16. Mastery of artistic skills

1/5 school

17. Emotional growth and development of trust
18. Enhanced empathy
19. Enhanced inquiry skills
20. Changed attitudes to the environment
21. Changed learning environment

The breakdown of impact factors per school is presented below.

Bentley (12)

- Better learning; deeper thinking
- Increased engagement in and enjoyment of learning
- Improved subject learning outcomes
- Improved behaviour and pride in achievements
- Enhanced creative thinking skills
- Enhanced personal and social capabilities
- Increased sense of belonging and improved student-teacher relationships
- Enhanced student agency
- Inspired teaching practice
- Artists growth and learning
- Changed learning environment
- Enhanced community cohesion

Kinross (13)

- Greater engagement through changed attitudes to learning
- Increased enjoyment of learning
- Deeper, better learning and thinking
- Improved subject learning outcomes
- Improved collaboration skills
- Emotional growth and development of trust
- Enjoying new experiences, embracing challenge and developing resilience
- Enhanced creative thinking skills
- Enhanced connectedness to school and family
- Increased confidence and self-belief
- Increased agency and ownership
- Positive impact on teacher practice
- Positive impact on artist practice

Merriwa (12)

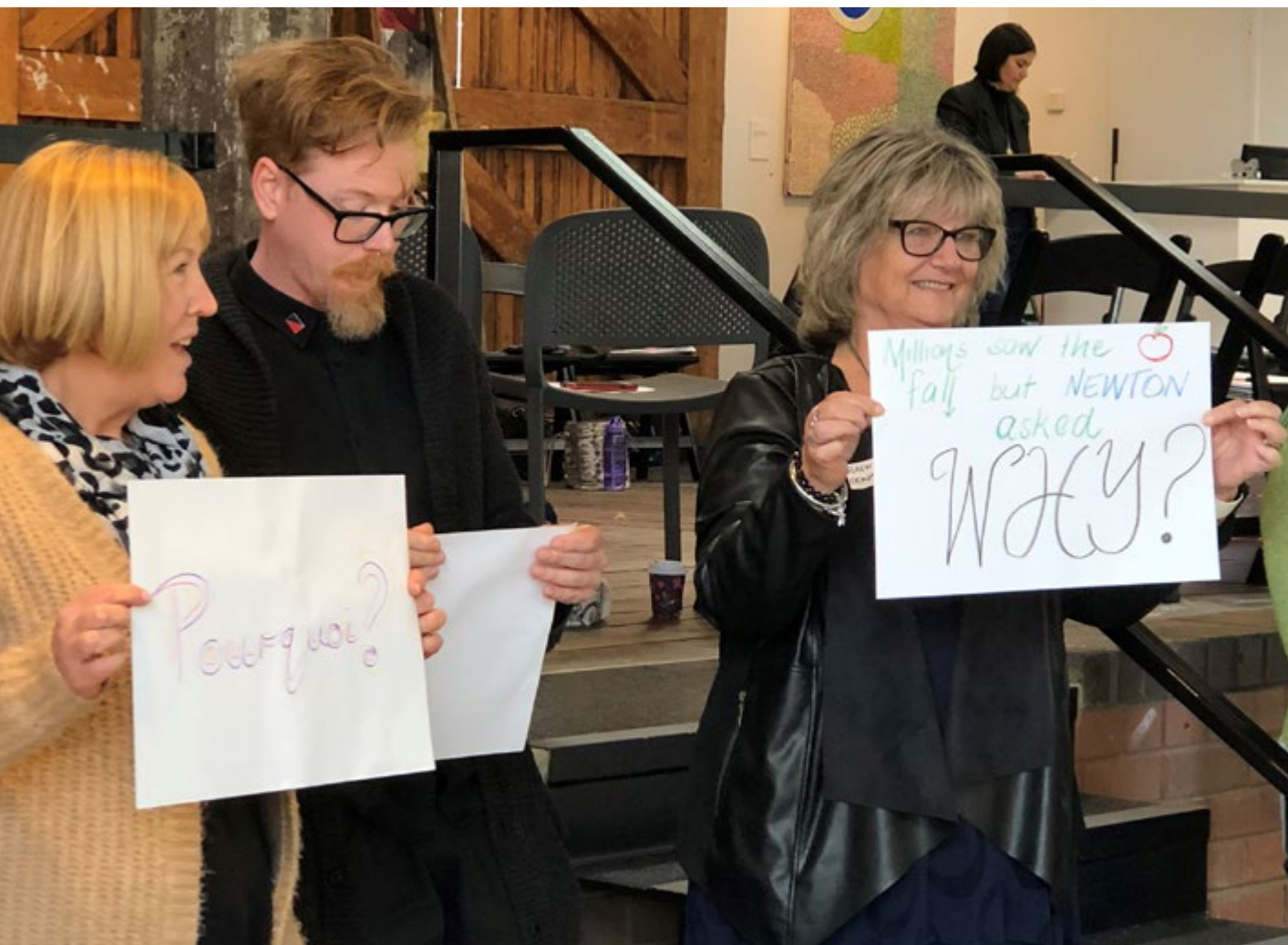
- Enhanced capacity to learn
- Improved subject learning outcomes
- Increased enjoyment and engagement in learning
- Enhanced collaboration skills
- Improved behaviour and attitudes to learning
- Enhanced student voice, ownership and agency
- Increased confidence and pride in achievements
- Improved creative thinking skills
- Enhanced questioning skills
- Enhanced inclusivity and school connectedness
- Positive impact on teacher practice
- Positive impact on artist practice

Mundaring (12)

- Enhanced creative thinking skill
- Increased enjoyment through hands-on learning
- Enhanced student agency
- Improved teamworking skills
- Enhanced subject learning
- Mastery of arts skills
- Deepened understanding and changed attitudes about the environment
- Increased willingness to take a risk and persevere
- Enhanced inclusivity
- Improved connectedness to school
- Positive impact on teacher practice
- Positive impact on artist practice

Scotch (13)

- Enhanced engagement and motivation to learn
- Deeper thinking, better learning
- Increased enjoyment of learning
- Improved subject learning outcomes
- Enhanced student agency and ownership of learning
- Improved cooperation and collaboration skills
- Enhanced empathy
- Enhanced creative thinking skills
- Increased confidence
- Developing resilience
- Enhanced connectedness
- Impact on creative teaching practice
- Artists growth and learning



Suggestions for improvement

The Art of Learning was a pilot project in 2018. Whilst the project had powerful impact, there was valuable feedback from project participants that will enable FORM to make improvements to the program for a wider roll-out in 2019.

1. Provide continuous mentoring for artists.
2. Build in time for artists to get to know the children before starting the sessions.
3. Work more closely with school leadership teams to collect a full data set from all classes involved.
4. Collaborate more closely with the school leadership around teachers and artist selection.
5. Create opportunities for earlier planning between artists and teachers.
6. Extend classroom time to 1.5 hours per week.
7. Create more interim meeting opportunities for artists from different schools to share practice.
8. Provide greater clarity on roles and responsibilities to ensure true teacher-artist collaboration and co-delivery of workshop sessions.
9. Encourage more visible involvement from the school leadership, e.g. to drop in on sessions.
10. Clarify all expectations on teacher time commitments up front.
11. Ensure parents understand the program.
12. Encourage a leadership member as project coordinator in each school with all communication coordinated through the coordinator.
13. Adapt evaluation instruments to reduce the load on classroom teachers.
14. Work more closely with school leadership teams to include school-based data sources in the evaluation, e.g. attendance data, behaviour data, diagnostic test data, etc.
15. Revisit project teachers 6 -12 months later to evaluate long-term impact.
16. Collect evaluation feedback from school leadership teams.
17. Encourage deeper action-research reflective framing around project teams to document student learning throughout.
18. Encourage artist/teacher teams to make the central AoL frameworks (Creative Habits of Mind & High Functioning Classroom) more visible in classrooms and planning documentation.

Key success factors

Analysis across the individual case studies indicate that the key success factors that contributed to the positive findings included the hands-on, creative learning strategies employed by artist-teacher partnerships to engage students cognitively, physically, emotionally and socially in their learning.

The powerful impact on student learning can be understood in the context of John Hattie’s Visible Learning research (Hattie, 2008; Hattie, 2011). The artist-teacher partnerships employed high impact strategies with effect sizes well above the hinge point of 0.4 (Hattie, 2008; Hattie, 2011).

| Strategy | Impact Size |
|---------------------------|-------------|
| Self-efficacy | 0.92 |
| Classroom discussion | 0.82 |
| Evaluation and reflection | 0.75 |
| Deep motivation | 0.69 |
| Creativity programs | 0.62 |
| Mata-cognitive strategies | 0.60 |





Conclusion

The world of work is rapidly changing. Gone are the days of working 40 years in one career for 40 hours a week. The typical 15-year old today may have up to 17 different jobs in 5 different careers throughout their lifetime. Globalisation, automation and rapid shifts in the job market requires a vastly different skill set. The knowledge economy requires confident individuals who can think and work for themselves, who can solve problems, who can create their own work opportunities, who are self-driven, who can collaborate with other people and can create something out of nothing as entrepreneurial thinkers.

The only certainty about the future is uncertainty. The most important skill for the future has become creative thinking: The ability to develop original solutions, to cope with unpredictability, to respond positively to change and to display flexibility of mind. We Need a nation of innovators. The Art of Learning is helping us achieve that goal.



FORM Creative Learning Strategy

FORM's mission is to build a state of creativity where creativity is regarded as a catalyst for positive change. The organisation works towards this goal through a range of strategic project streams. One of these streams is the Creative Learning stream which is focused on bringing about positive change for children and young people in Western Australia through the application of creativity.

Aims of FORM's Creative Learning Programming

- The positive changes that FORM wants to see in WA are:
- Young people who are “successful learners, confident and creative individuals, and active and informed citizens” ;
- Economic regeneration through job diversification;
- A thriving arts sector;
- An inspired education sector;
- Social and emotional wellbeing for all;
- Breaking isolation through access to arts & culture;
- Community cohesion through the celebration of diversity.

The intended outcomes of FORM's Creative Learning programming for children and young people are summarised in the diagram to the right.

FORM Creative Learning Strategy Outcomes for Young People

What?

(Intended outcomes for children and young people)

Why?

(Economic, technological & social drivers for change)

How?

(FORM programs contributing to these positive outcomes)

| | | |
|---|--|--|
| Engagement in Learning | Engaged learners learn better | Creative Schools Residencies in Schools |
| Core Educational Outcomes (e.g. literacy & numeracy) | Literacy and numeracy are the gateway skills for future success | Scribblers Literature Festival |
| Creativity Skills | Jobs of the future demand creativity and entrepreneurial skills | Public Arts Programming Creative Learning Workshops |
| Visual Literacy | The digital age demands digital and visual literacy | Creative Learning Consulting |
| Student Agency | Young people deserve to have a voice and choice | Professional Learning Events |
| Social and Emotional Wellbeing | High rates of anxiety and depression amongst young people | Regional Arts Programs |
| Access and Opportunity | Limited opportunities for many due to geographic, cultural or social isolation | |
| Community Cohesion | A sense of identity and belonging benefits community engagement | |



Ways of Working

All of FORM's creative learning projects are designed to make a contribution to the positive change areas identified above. This is achieved through a commitment to:

- Creativity: FORM is focused on building creative thinking capabilities of children, teachers and artists
- Access: FORM is committed to provide access to arts & culture for all
- Partnership: FORM establishes fruitful partnerships between education and arts & cultural partners
- Excellence: FORM aspires to artistic and educational excellence in all programming
- Capacity building: FORM actively builds capacity of creative artists and creative educators
- Being research informed: FORM engage in rigorous research and evaluation

FORM's Art of Learning Program

Central to FORM's Creative Learning Strategy is the Art of Learning Program, a learning program that aims to enhance outcomes for young Western Australians by activating creative learning strategies through the establishment of meaningful partnerships between teachers, creative (arts) practitioners and young people.

The Art of Learning was designed to provide pupils in selected schools with an intense arts-rich intervention. This program builds on robust international evidence that engagement with the arts improves the quality and impact of general education. Using arts as a pedagogical tool for learning cultivates a unique set of academic, social and personal skills.

The defining characteristic of the program is the collaborative partnership between artists, classroom staff and learners, and the ways in which this partnership helps to bring the curriculum to life. It's about providing new ways for learners to engage with subjects. With careful planning, appropriate professional support to teachers, and inspiring opportunities for children and young people to learn through the arts, we believe that the Art of Learning program can bring about significant improvements in motivation, engagement, confidence, behaviour and academic attainment.

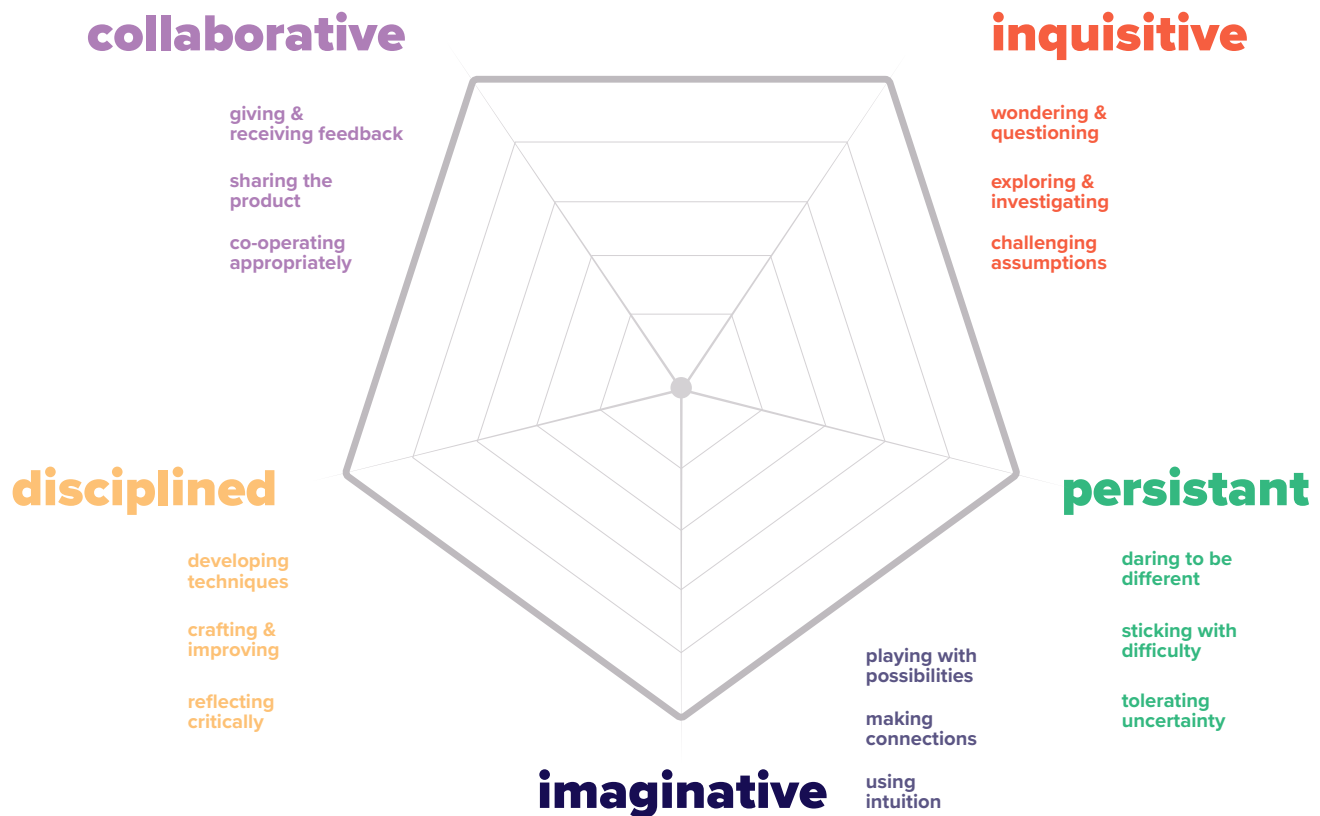


Background to the Art of Learning

The Art of Learning (AoL) was devised and delivered by a partnership between Creativity Culture and Education (CCE), the international foundation for creativity, and FORM, one of the leading agencies for creativity and artistic practice in Western Australia. It builds on work that was generated in part in a 4-week residency in WA in 2016, during which a range of ideas were developed and tested with children and teachers by CCE and FORM. It was also subsequently piloted in a group of 11 primary schools in south west Scotland by a partnership consisting of Creative Scotland (CS), Education Scotland (ES) and Creativity, Culture and Education (CCE). This was supported by the Paul Hamlyn Foundation (PHF) through their newly established Teacher Development Fund. The program is designed to provide pupils with an intense arts-rich intervention. Artists work with teachers to deliver a range of engaging activities, culminating every week in the delivery of an activity which builds on those that preceded it but has been developed by the artist and teacher. It is essential that artists and teachers have the opportunity each week to plan together, partly to ensure that they have time to develop their own workshop plan, and partly to ensure that all the activities are adapted to meet the needs of the curriculum.

‘Education is most effective when young people are actively involved in leading and shaping it, taking responsibility for their own learning and playing an active leadership role in school life. Creativity brings with it the ability to question, to be curious, make connections, innovate, problem solve, communicate, collaborate and to reflect critically, the skills young people will need if they are to take responsibility for their own learning ...’

Creativity, Culture And Education’s 2012 Report ‘Changing Lives’



Art of Learning Program Aims

Through training teachers and creative practitioners to collaborate creatively in service of children's learning the program aims to:

- Enhance student learning through increased engagement and motivation;
- Improve academic attainment across all subject areas including literacy, numeracy, STEM and HASS;
- Better prepare students for the future by nurturing their creative habits of mind: being collaborative, persistent, inquisitive, imaginative and disciplined.

Central Frameworks

Two key frameworks were central to the Art of Learning project: The Creative Habits of Mind Framework (Lucas, Claxton & Spencer) and the High Functioning Classroom Framework (Lucas, Claxton & Spencer). The program aims to develop the dispositions of the Creative Habits of Minds within program participants and teacher/artist pairings aim to design high-functioning learning spaces in AoL workshops.





Creativity and Executive Functioning

The program also intended to explore the link between arts engagement and the development of pupils' executive functions. Paul Collard explained that executive functions of the brain lie at the heart of a pupil's capacity to learn. Executive functions are generally defined as having three aspects; inhibitory control, working memory and flexibility of mind. In combination they provide pupils with the skills that enable them to become successful learners. The executive functions can be seen as the 'operating system' of the brain, much as one finds in computers. When you acquire a computer, it comes pre-loaded with an operating system. The user then loads software to enable the computer to undertake the tasks required. However, if the operating system doesn't work, none of the software will. Children in school face a similar challenge. Schools focus on loading software, mathematics and reading for instance. If however the children's executive functions do not operate effectively, then the ability to read or do maths will also suffer. AoL explored whether engagement in arts activities impacts directly on executive functions and consequently leads to an improvement in academic attainment.

Evaluation Methodology

A range of qualitative and quantitative data was collected throughout 2018 to capture the impact of the Art of Learning partnerships on students, teachers and artists. Data sources included classroom observations, interviews with teachers, artists and students, questionnaires administered to teachers, students, artists and parents, pre-and post-intervention wellbeing surveys, pre-and post-intervention student narrative writing samples and analysis of teacher/artist planning and reflection documentation. This wide range of data sources enabled triangulation of findings, thereby reducing internal biases and increasing the robustness of the findings. Some effects can only be measured over a longer time scale. The program evaluator will aim to continue working with the school's leadership team to continue tracking the impact on student learning over a longer period of time. Although not all data sets were collected for each class, sufficient data sources were available to enable triangulation for each finding reported in this report.

The evaluation was carried out in accordance with the codes of practice of the Australian National Statement on Ethical Conduct in Human Research and the Sheridan College Ethics approval process. Students, teachers, parents and artists participated in evaluation activities by choice and were informed that they could withdraw at any time. All student names have been anonymised or changed to protect their privacy.

It is important to acknowledge the limitations of the project evaluation. The Art of Learning program is only one of many variables operating within the school environment and artists only worked directly with students for 1 hour a week across 16 weeks in Terms 2 and 3. Schools are busy places with numerous different initiatives intersecting. It is impossible to isolate the effect of a program like Art of Learning from everything else that is simultaneously happening in the school without experimental design conditions. This report can merely point out correlations without any claims of causality. Caution should also be applied around the interpretation of statistical data due to small student numbers.

The central evaluation questions were:

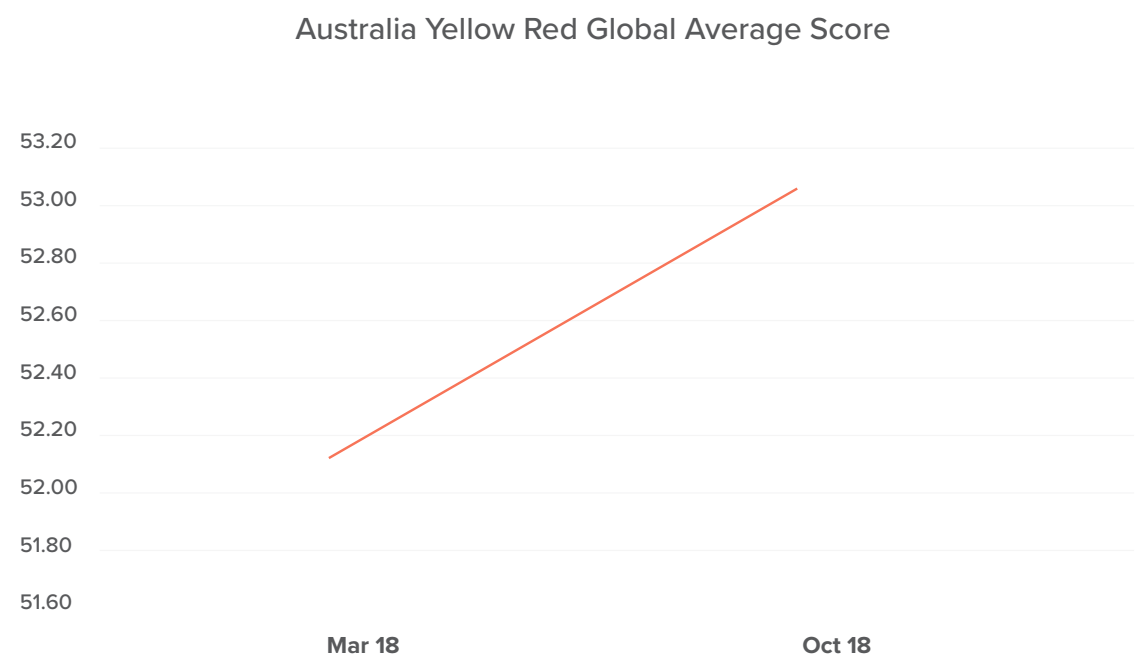
1. How does participation in the Art of Learning program impact on development of student academic outcomes, e.g. in Literacy and Numeracy?
2. How does participation in the Art of Learning program impact on student social and emotional wellbeing?
3. How does participation in the Art of Learning program impact on student creativity, engagement in learning and executive functioning skills?
4. How does participation in the Art of Learning program impact the collaborative efficacy and practices of teachers and artists?
5. How does participation in the Art of Learning program impact social cohesion within participating communities?

| Impact On | Impact Areas | Evaluation Instruments |
|-----------|----------------------------------|--|
| Students | Academic learning | Analysis of school-based academic data (e.g. Naplan, PAT testing, running records, class assessments, Brightpath assessment software, SAIS data, etc.) |
| | Social and emotional development | Wellbeing and engagement survey Analysis of school-based data, e.g. behaviour incidents |
| | Creativity | Creative Habits of Mind Instrument Teacher, student and parent surveys |
| | Engagement in learning | Observation of student engagement Analysis of school-based data, e.g. attendance |
| | Community cohesion | Student interviews Parent survey Teacher survey |
| Teachers | Changes in teaching practice | Creative Habits of Mind Instrument High Functioning Classroom Instrument Teacher reflective journals Teacher interviews School staff survey Observation of teacher practice |
| Artists | Changes in artistic practice | Creative Habits of Mind Instrument High Functioning Classroom Instrument Artist reflective journals Artist interviews Observation of artistic practice |

Executive Functioning Data: Digital Test

CCE conducted testing on random groups of children in four of the five schools in the programme; Kinross, Mundaring, Merriwa and Scotch using the Cideti Executive Functioning App. The same children were tested before and after. Because some pupils were unavailable on the day of retesting, we ended up with 55 valid pre and post tests. We were unable to test pupils uninvolved in the programme in control schools. We did consider creating control groups from within the same schools but previous experience showed that such results are unreliable. We did some testing of pupils in Bentley after the programme had ended, but had been unable to test children in the schools prior to the programme beginning, so we have not comparative data on that school.

The scores are presented below.



This shows that between the start and the end of the programme there was a significant improvement in the executive functions of pupils in the programme. While this is a significant improvement, in the absence of comparative data from children in other schools not involved in the programme, it is impossible to infer whether this improvement is caused by the intervention itself. The numbers of children involved in each school were too small to be able to make valid comparisons between the schools involved.

Overall, this evidence is heartening, although not conclusive.



The Art of Learning 2018: Bentley Primary School Case study



Background context

In 2018 two classes in Bentley Primary School participated in FORM's Art of Learning program. The aim of the program is to make a positive impact on student academic, social, emotional and creative learning through establishing partnerships between teachers and creative practitioners/artists. Each teacher-artist pairing chooses an area of the curriculum to target each term and they work together to plan a series of learning activities to co-teach the chosen curriculum areas in creative ways. The creative practitioners visit the school once a week during Terms 2 and 3 to co-facilitate a 60-minute learning experience with the teacher to their own class of students. Time is built into the program design for a weekly plan-do-reflection cycle between the teacher-artist pairs.

In 2018 the Year 1-2 classroom of teacher Barbara Del Fante worked with two artists, Lydia Thompson and Clare Griffin and Year 3-4 teacher, Thalia Hurst, worked with artists Jo Aks and Maxxi May.

In Term 2 the Year 1-2 partners (Clare, Lydia and Barb) chose Mathematics as their focus area, addressing concepts of number, classifying, 2D and 3D shape, groupings and measurement through an arts integration approach. In Term 3 the same year 1-2 partners worked with the children on an integrated learning project to transform the classroom environment through addressing aspects of the technologies (processes and production skills), Visual arts (making ideas & skills), Science (understanding & enquiry skills) and PATHS (community & belonging) curriculum. It was also a specific focus of this Term to target social and emotional skills like resilience, sense of self, identity, feelings, friendship, respect, kindness and group work.

The Year 3-4 focus for Term 2 (with Jo and Thalia) was English Language, focusing on topics like descriptive language, persuasive language and onomatopoeia, before introducing a science topic on the properties of materials. An overall emphasis on communicating ideas was retained during the science topic to fit with the school's Talk for Writing approach. In Term 3 the Year 3-4 partnership (Maxxi and Thalia) targeted Mathematics. Specific topics included formal and informal measurement (length, area, perimeter, diameter, radius, volume, capacity), time (digital and analog) and problem solving.

Individual School Case Studies

The Art of Learning 2018: Bentley Primary School Case Study

Evaluation Methodology

A range of qualitative and quantitative data was collected throughout 2018 to capture the impact of the Art of Learning partnerships on students, teachers and artists. Data sources included classroom observations, interviews with teachers, artists and students, questionnaires administered to teachers, students, artists and parents, pre-and post-intervention wellbeing surveys, pre-and post-intervention student narrative writing samples and analysis of teacher/artist planning and reflection documentation. This wide range of data sources enabled triangulation of findings, thereby reducing internal biases and increasing the robustness of the findings. Some effects can only be measured over a longer time scale. The program evaluator will aim to continue working with the school's leadership team to continue tracking the impact on student learning over a longer period of time. Although not all data sets were collected for each class, sufficient data sources were available to enable triangulation for each finding reported here.

It is important to acknowledge the limitations of the project evaluation. The Art of Learning program is only one of many variables operating within the school environment and artists only worked directly with students for 1 hour a week across 16 weeks in Terms 2 and 3. Schools are busy places with numerous different initiatives intersecting, e.g. Bentley Primary School is also implementing the Talk for Writing literacy program, the PATHS social and emotional learning program and the school participates in the Fogarty Edvance school improvement program. It is impossible to isolate the effect of a program like Art of Learning from everything else that is simultaneously happening in the school without experimental design conditions. This report can merely point out correlations without any claims of causality. Caution should also be applied around the interpretation of statistical data due to small student numbers.

What made the project unique?

Before discussing the evidence of impact that the program had in Bentley Primary School, it is important to aim to articulate what was unique about the Art of Learning ways of working, to use as a lens for interpreting the impact data. Students were asked to reflect on how Art of Learning sessions were different to other lessons. Whilst the student comments focused on the unique contribution of the artists in the classroom setting, it is important to recognise the potential power of the project lies in combining the curriculum and pedagogical expertise of a teacher with the creative engagement expertise of an artist and not for the one to replace the other.

Students described the sessions as more creative and fun. Deeper prompting helped to identify the specific characteristics that made the lessons more creative and fun. A strong theme that emerged from the data is the interactive nature of the sessions: students were engaged in physical learning, not being desk-bound, book-bound or classroom-bound and thus learning-by-doing. The novelty of meeting different people and doing different activities than they have ever done before was another key feature. Students also identified how the activities challenged them to think differently.

"It is more creative and more fun than normal lessons." (Student)

"The differences to [normal] lessons are: the Art of Learning lives to its name and you can bring the fun back into learning!" (Student)

"It is different to normal lessons because we had fun doing it." (Student)

"It was different to normal lessons because in our school we use books, we don't use drawing." (Student)

"It was different to normal lessons because we normally work on sheets, we don't represent it like this having lots of fun." (Student)

“It was different to normal lessons because we did go outside with chairs and the bus type of thing.” (Student)

“I think it was more fun than normal lessons because we got to meet different people around the community.” (Student)

“It was different to normal lessons because we never did that before.” (Student)

“It was kind of different because we don’t do creams in our class and we don’t do the train in our class.” (Student)

“It was different because we have to answer challenge questions different and it’s fun.” (Student)

Impact of the Art of Learning in Bentley Primary School in 2018

The project evaluation aimed to capture the impact of the program on students, teachers, artists and the wider school community.

Impact on students

Numerous positive effects on student learning, thinking, creativity, behaviour and agency were reported and are outlined below.

Better learning; deeper thinking

Teachers, artists, parents and students have reported how the more hands-on approach to learning has resulted in better understanding, easier learning and longer-lasting learning.

“The students have retained learning better.” (Teacher)

“Being involved in hands on learning experiences developed the children’s understanding of math concepts.” (Artist)

“I would like to learn like this more often because it makes me learn easier.” (Student)

“I would like to learn like this again because it made me learn more.” (Student)

“He found it to be an easy way to gain understanding of the concepts, e.g. time.” (Parent)

“My child learnt new ways of learning other than rote learning style – I think it clicked better with him. I think interactive activities always help.” (Parent)

There was also triangulated evidence of positive impact on student deep thinking skills like inquiry, questioning and problem solving. This has also had a positive impact on student confidence in their own learning abilities.

“These activities have made the students more inquiring and active learners.” (Teacher)

“Much more interesting questions are being asked.” (Teacher)

“I learnt to take your time to think.” (Student)

"It has been a pleasure to observe students change and grow in confidence in their maths. They also know they are doing better and have proudly said "I get this! I am getting the answers right!"" (Artist & Teacher)

"The students have enjoyed the manipulative approach to maths and request it more often in class time to try and work through a new concept. They are more willing to use the maths resources such as blocks and tapes to solve a problem, rather than a rote learning approach of pencil and paper." (Teacher)

"Problem solving [was an outcome] – the activities have increased in difficulty with each session (as was the plan) and the students have needed to apply known maths strategies in order to solve applicable maths problems." (Artist & Teacher)

"This is a highly capable class. They want to be better but lacked confidence. The creative learning approach helped their confidence. Now they're all contributing." (Teacher)

Increased engagement in and enjoyment of learning

Students definitely enjoyed the Art of Learning sessions which led to better engagement in learning. Students, parents, teachers and artists reported this effect.

"Having the artists in our class has been fun for our learning." (Student)

"The students were so engaged with everything they did." (Teacher)

"The children were always very pleased to see us and excited to hear what we would be doing with them. They got used to the fact that we arrived with something interesting for them to do." (Artist)

"My child enjoyed the project because it made learning a lot more fun." (Parent)

"Once trust was established, the students started looking forward to the classes. When asked, they really liked the hands on approach to learning new concepts." (Teacher)

"It was a joy to see the class engage, explore and enjoy most sessions." (Artist)

"This is so good to see them engaged in maths like this." (Teacher)

"He seemed happy and excited when he spoke about it." (Parent)

"I enjoyed participating in the Art of Learning project because there is no banal moments. Not a millisecond." (Student)

Overall 100% of parents surveyed reported that their child had enjoyed the program and 85% of children did. It is worth acknowledging that there is a small percentage of children (15%) who didn't enjoy the sessions. For some children this was attributed to the fact that they don't like the association of the program with art:

"I didn't enjoy it because I'm not an Art person that means I don't like Art." (Student)

The flipside of this position was also present. Other children liked the program specifically because of its association with the arts.

"It was special that we used arts in learning." (Student)

At other times lack of enjoyment was mostly due to social dynamics. The artists conducted student evaluations at the end of each session. They reported:

“When children hadn’t enjoyed a session it was for reasons such as: ‘I missed a turn’, ‘I didn’t have a partner’, ‘I was hungry’, ‘Someone knocked over my building’, ‘I was confused’, ‘Someone was annoying me.’
(Artist)

Whilst students found the sessions very enjoyable, there was definitely understanding that it was not enjoyment at the expense of learning, but enjoyment in the service of better learning.

“I enjoyed Art of Learning because it helps me understand better and it makes learning fun.” (Student)

“I enjoyed participating in the art project because we did learning as well as having fun.” (Student)

“We had fun and we learnt at the same time.” (Student)

“I would like to learn like this more often because at the same time as learning you are having fun.” (Student)

“The Art of Learning lives to its name and you can bring the fun back into learning!”
(Student)

The learning that resulted through enjoyment was also a highlight for teachers and parents:

[A highlight was] “seeing the students not want to finish an activity. They loved play acting to persuade with words (Jo) and seeing the kids master time with Charlotte’s Web (with Maxxi).” (Teacher)

“Where can children do more learning like this?” (Parent)

Improved subject learning outcomes

Apart from better generic learning strategies, teachers, artists, parents and students all reported improved learning outcomes in the subjects targeted by each teacher-artist pairing.

“Students are showing a faster uptake of maths concepts and I think the fun approach to learning has helped this.”
(Teacher)

“Being involved in hands-on learning experiences developed the children’s understanding of math concepts.” (Artist)

“I learnt that measurements doesn’t have to be feet or metres but can be measured using informal measurements.” (Student)

“My children have learnt how to read the time properly.” (Parent)

“I enjoyed it because it helped me understand a bit more about time, language, maths and science.” (Student)

“I found that the learners were great at developing their vocabulary orally, and that the next step is to try and translate this into more written work.” (Artist)

“She learnt some new concepts like the nature of a circle’s circumference related to the area of the circle.” (Parent)

“Walking through the school, I observed some stories and illustrations by class displayed in the school offices, most of which used onomatopoeias not only in the text, but in the illustrations also. They seemed to have been quite inspired by the onomatopoeia activity in which they played with various objects to make sounds, from which onomatopoeic words were formed together as a group and as individuals. I also had several learners identifying onomatopoeias in conversation in later sessions, somewhat out of the blue, which I believe was evidence that the learned material was consolidated.” (Artist)

“The children’s writing ability excelled from their work with Jo and their understanding of measurement and time was lifted with Maxxi. They are so much better now.” (Teacher)

The children are better at verbalising their learning.” (Teacher)

Narrative writing samples were also collected for the Year 1-2 class before and after the intervention and were blind marked according to the Brightpath narrative ruler scale. Once again, it is worth stating that the improvement cannot be isolated to the Art of Learning program and the statistical variance can be huge on such a small sample size. Nonetheless, it appears that the class made significant improvements in narrative writing skills across a 6-month period.

Improved behaviour and pride in achievements

Improvements in behaviour and attitude were reported by artists, teachers and parents.

“Many of the children have developed more self-regulation as the year has gone on.” (Artist)

“They have proven to be more responsible, more cooperative and more confident to solve a maths challenge by themselves.” (Teacher)

“They are more responsible and respectful” (Artist)

“The teacher found the children to be more engaged in their learning, on task for longer and that their behaviour as individuals and as a whole group had improved through the experience.” (Artist)

“I have noticed a new attitude.” (Parent)

The children are happier, calmer, more confident in their new space.” (Teacher)

Parents and artists also reported a sense of pride in their work that students developed:

“They had such pride in their achievements” (Parent)

“My son was proud. He was really happy. Moments like this are captured in the children’s heart. I think it will stay with him for a long time after this.” (Parent)

“They have expressed pride in their changes, creations ...” (Artist)

Enhanced creative thinking skills

Students and artists recognised how the regular opportunities to apply creativity had a positive impact on their creative thinking skills.

“We used our imagination more.” (Student)

“I would like to do it again because it makes us creative.” (Student)

“They have shared ideas, developed a plan, acted on it and reflected on it. They have all been flexible in how they have embraced and adapted to change.” (Artist)

“I am learning imagining, dreaming up things, having ideas. They make my brain more good.” (Student)

“This is my imagination. It is alive in the classroom.” (Student)

Parents also identified creativity as an outcome that their children could transfer to different contexts, e.g. the home environment:

“It keeps them calm and creative.” (Parent)

“He’s more creative at home, e.g. he likes drawing a lot more.” (Parent)

“He always had a creative side and this enabled him to showcase it.” (Parent)

Enhanced personal and social capabilities

Students, teachers and artists recognised enhanced personal and social capabilities demonstrated by pupils, particularly emphasising teamwork and resilience.

“I think I learnt teamwork and creativity.” (Student)

“Their willingness to take up others’ ideas improved.” (Teacher)

“I learnt that we all have to work like teamwork.” (Student)

“The best bits were teamwork and having fun.” (Student)

“Group Work – the activities have allowed for excellent group work and students have responded well to both small group work and paired work.” (Artist & Teacher)

“Many of the children have developed more self-regulation as the year has gone on.” (Artist)

“... social skills such as sharing, understanding others point of view, resilience, persistence, problem solving, working with others, listening and turn taking.” (Artist)

“The experience provided opportunities for resilience to develop, how to deal with disappointment, how to work with others, to keep a positive mind set & that its ok to ask for help.” (Artist)

“Their willingness to try something challenging is now so much better than they were before.” (Teacher)

The pre-and post-intervention wellbeing survey (see Appendix) indicated an interesting finding regarding social competency in the Year 1-2 classroom. There was a 12.5% increase in children's agreement with the statement "Other children help me at school", which is externally focused on recognising the actions of peers. At the same time there is a decrease in children's agreement with the statements: "I can cheer up someone who is sad", "I always take turns and share with others" and "I have at least one friend who cares about me". These statements are all internally focused, possibly suggesting growing self-awareness. It is worth reiterating the reminder to apply caution around the small sample size and the inability to attribute these effects purely to the Art of Learning program.

Increased sense of belonging and improved student-teacher relationships

The wellbeing survey (see Appendix) indicated that, across the 6-month period of the intervention, there was an increased sense of belonging and improved student-teacher relationships.

Student agreement with the statement "I look forward to coming to school" increased from 56.3% to 87.5%; agreement with "I feel safe at this school" increased from 75% to 87.5% and agreement with "If I have a problem I can talk to my teacher" improved from 68.8% to 75%. This means that by the end of the program, all the statements related to engagement with school and teachers were rated above 75% agreement.

Again, we must remember that the sample size was small and this finding may be attributed merely to strengthening of connections due to the passage of time. However, when read in conjunction with other data, e.g. the parental views about increased connectedness to the school community outlined below, a pattern of impact does emerge.

Enhanced student agency

Empowering students to take ownership of their learning, to develop their voice and thus enhance student agency was an important objective for all the artists working in Bentley Primary School, yet the impact of this approach was also captured in teacher and parent feedback data.

"Our aim was for the children to notice their surroundings and develop an awareness of how they respond to different stimuli in the world around them, reflect on how this makes them feel and to empower them to make decisions and changes based on their feelings, ideas and reflections." (Artist)

"Our goal moving forward is instead of having purely artist and teacher reflection influencing the direction of the work that the children's voices, thoughts and reflections along with our reflection will guide our direction and future provocations for learning." (Artist)

"This project lent itself to the children's ideas being listened to from the very beginning, creating a sense of community and agency in Barb and the children. They have constantly reflected on changes that have been made in their room. They have expressed pride in their changes, creations and ownership of their classroom." (Artist)

"We think a key success is having children's voices heard. In a world of educational programs and worksheets children's ideas, opinions, previous experiences and understandings is often ignored." (Artist)

"As this term's project and our confidence to try things with the project grew we felt like we were able to loosen the reigns and just work as we know how letting the project evolve in a more organic way with the children's voice at the heart." (Artist & Teacher)

“They will keenly let me know if something is not making sense to them whereas, in the past, they would simply lose interest and willingness to give it a go.” (Teacher)

“This fills my heart. It is so beautiful. The children have choice of where they can work. It’s more like how we work in our home...and that they can play and learn is important.” (Parent)

Wider impact

Apart from the impact on children, the program also had a positive impact on the wider school community, including teachers, artists, parents and the environment.

Inspired teaching practice

The Art of Learning program had a transformative impact on teacher pedagogy, practice and attitudes. It challenged teachers, encouraged them to give students more agency, increased their resourcefulness to use more creative, hands-on teaching strategies in the classroom, it enabled them to challenge students more and it re-inspired them to fall in love with teaching again. Both teachers and artists could see this change, which was sustained in other lessons when the artists were not there.

“.. it sparked my creativity and has helped me out of a teaching ‘rut!’” (Teacher)

“I am now setting more problem-solving extension activities for the children based on ideas brainstormed with the artist.” (Teacher)

“It has also encouraged me to ask for the opinions of the students in matters that concern them more (and act on these where practicable).” (Teacher)

“Many of the changes were made by Barb and the children independently of us.” (Artists)

“Their creativity helped bring life and excitement to [my] skillsets and the learning focus.” (Teacher)

“I have brought a hands-on, creative learning station into our maths rotations. The kids look forward to it and always want to be first to do it. In all areas of learning, I am making sure the kids are moving, manipulating and creating with their ideas and processes. I know the FORM program has reinvigorated me to not be so dull in my lesson planning!” (Teacher)

“I have now designed a hands-on, manipulative Maths Challenge (each week) for the students to rotate through, focusing on the learning intention of that week. They have responded well to this and it is a direct result of the Art of Learning Influence. Previously, I would have been hesitant to leave them unattended.” (Teacher)

“She finds our creative way of working/ using materials exciting and the experience has been beneficial to her and has challenged her current teaching practice.” (Artists)

“You have inspired me to look beyond what I know and to explore the boundaries I put on both myself and my teaching. You have given me my teaching mo-jo back and reminded me of why I am a teacher!” (Teacher)

Artists growth and learning

The essence of the Art of Learning program is the dynamic partnership between the teacher and artist, co-creating new learning activities to engage students creatively in curricular learning. This means the artists cannot enter the project with a pre-conceived idea of delivering pre-planned arts activities; they have to think creatively, branch out to work with and in different art forms and subject disciplines than their training. This can be challenging, but also a great opportunity for learning and growth. The artists working in Bentley Primary School in 2018 embraced this opportunity to learn and grow. They learnt new subject areas, new artforms, new ways of planning, they learnt about their own creativity. It re-connected them to different forms of practice and opened their eyes to new career opportunities in the creative learning field.

“through the art of learning we have reconnected with the Perth Reggio Emilia network, begun reading research again and plan to participate in a research project with a mentor of ours from Curtin university. It has also ignited in us a possible career path in that we would like to educate teachers about the power of the environment as the 3rd teacher and help to create positive change to people’s teaching through the environment they create & educate in.” (Artists)

[I learnt] *“creativity can be used to facilitate other learning areas other than art.”*

“The ability to develop activities that involve movement, drama, engagement, activity, colouring, map making, graphs, play, drawing.” (Artist)

“I needed to recall basic maths concepts to understand and facilitate students.” (Artist)

“Planning the entire term and then relooking, engaging in feedback and restructuring for each week is a great way of planning.” (Artist)

“We have been reminded of the need to be prepared with transitions and the importance of providing sensory learning options for this age group to deepen their learning experience.” (Artists)

“As we have been planning for the children with the creative habits of mind we have also been experiencing them for ourselves. Building our understanding and confidence but also reconnecting to our teaching passion.” (Artists)

“We have realised how innovative we are and how adaptable we are as people and teachers.” (Artists)

“I feel like my brain is turned on again.” (Artist)

Changed learning environment

A physical legacy of the Art of Learning program in 2018 at Bentley Primary School was the transformation that took place in the Year 1-2 learning environment. Students, teacher, artists and parents all reported the impression this made.

“The best bit was making our classroom nice.” (Student)

“Barb and the children have grown in their awareness of their environment and observations of the world around them.” (Artist)

“It has made me challenge my assumptions about what a classroom is and how it affects students’ learning.” (Teacher)

“A highlight has been witnessing other teachers coming to sit in Barb’s room after school because they like it.” (Artist)

“I never knew there were other people out there who thought like this, creating a beautiful space for children.” (Parent)

Enhanced community cohesion

The Art of Learning project had a wider impact beyond the lives of children, teachers and artists involved; it created an opportunity to connect the school to its wider community. Parents and family were engaged through experiences created during the project:

“It was wonderful seeing so many parents engage.” (Project coordinator)

“Moments like this are captured in the children’s heart. I think it will stay with him for a long time after this.” (Parent)

“What was incredibly moving and surprising to us was that the work we have been doing with the children had been so appreciated and understood by the families and the school community.” (Artist)

Through the strong relationships that were forged between the project teachers and artists, the school expanded its connection to the local artistic community.

“The art of learning project, like a successful classroom, is all about relationships and the success or failure of the experience is a result of the effort put into a positive working relationship.” (Artist)

Success factor: “My artists! Clare and Lydia – what a wonderful pairing! They went above and beyond what was expected of them, put in more hours I’m sure! ... Their enthusiasm for this project was evident in everything they did. Plus, being teachers themselves they also understood the limits and boundaries that I have to adhere to and made allowances for these.” (Teacher)

“The relationship with the children, teacher and other staff is a reward.” (Artist)

Finally, in the words of one of the parents, the project became a “celebration of multiculturalism” as a sense of community cohesion was developed through the project celebration.

“The day was full of emotion. It was a joyful, rewarding and humbling experience. A day that touched our hearts and brought community together.” (Artists)

“I used to think ‘who is going to listen to that one parent who thinks there shouldn’t be desks and chairs in the classroom?’ it filled my heart to know that somebody shares my ideas and cares. You have that hope – it’s a beautiful hope that individuals can change things.” (Parent)

“This project lent itself to the children’s ideas being listened to from the very beginning, creating a sense of community and agency in Barb and the children.” (Artist)

“This is so special for the children to have had this opportunity.” (Parent)

“Today, this space, this celebration proves multiculturalism works.” (Parent)

Suggestions for improvement

Feedback from the pilot program has enabled FORM to make improvements to the program for a wider roll-out in 2019. This is discussed in more detail in the overall project report to FORM. Specific recommendations that were identified in the Bentley data include:

- Don't change artists mid-way through.
- Clarify all expectations on teacher time commitments up front.
- Plan for planning and reflection time between artists and teachers.
- Improve communication and coordination of evaluation methods for small schools.
- The name of the program (Art of Learning) creates the impression it is an arts, not a creative learning program.
- Provide mentoring for artists.
- Run a session for parents at the start.
- Build in time for artists to get to know the children before starting the sessions.
- Work more closely with school leadership teams to collect a full data set from all classes involved.

Final words

The Art of Learning 2018 was a pilot program. Whilst there is room for improvement on project coordination, delivery and evaluation, triangulated data from the evaluation indicates that the program had a profoundly positive impact on students, teachers, artists and parents. There is strong desire from students and parents for this work to continue in Bentley Primary School. I hope that the Bentley-FORM partnership will continue to expand opportunities for enhanced engagement, creativity and learning; to benefit other students, teachers and parents within the school community.

"I would like to do it again because it makes us creative." (Student)

"I would like to do this again because it makes work easy." (Student)

"Where can children do more learning like this?" (Parent)

"This is magic!" (Student)



Appendix: Kids Matter Wellbeing Survey Data

| Bentley Year 1/2 Pre | | Pre (%) | |
|---|----------|---------------|-----------|
| Statement | Not true | Somewhat true | Very true |
| 1.1. I like this school. | 0.0 | 0.0 | 100.0 |
| 1.2. I look forward to coming to school. | 18.8 | 25.0 | 56.3 |
| 1.3. I feel happy at school. | 0.0 | 18.8 | 81.3 |
| 2.1. My teachers care about me. | 6.3 | 12.5 | 81.3 |
| 2.2. I feel safe at this school. | 12.5 | 12.5 | 75.0 |
| 2.3. If I have a problem I can talk to my teacher. | 0.0 | 31.3 | 68.8 |
| 3.1. I can cheer up someone who is sad. | 6.3 | 12.5 | 81.3 |
| 3.2. I listen when other people talk. | 6.3 | 12.5 | 81.3 |
| 3.3. I always take turns and share with others. | 0.0 | 12.5 | 87.5 |
| 4.1. Other children help me at school. | 12.5 | 18.8 | 68.8 |
| 4.2. I have at least one friend who cares about me. | 6.3 | 12.5 | 81.3 |
| 4.3. I have friends to play with at lunch times. | 6.3 | 12.5 | 81.3 |
| 5.1. I like myself. | 6.3 | 6.3 | 87.5 |
| 5.2. I always try my best at school. | 0.0 | 12.5 | 87.5 |
| 5.3. I feel happy most of the time. | 0.0 | 18.8 | 81.3 |

| Post (%) | | | Difference (%) | | |
|----------|---------------|-----------|----------------|---------------|-----------|
| Not true | Somewhat true | Very true | Not true | Somewhat true | Very true |
| 0 | 6.25 | 93.73 | 0.0 | 6.3 | -6.3 |
| 0 | 12.5 | 87.5 | -18.8 | -12.5 | 31.3 |
| 0 | 25 | 75 | 0.0 | 6.3 | -6.3 |
| 6.25 | 12.5 | 81.28 | 0.0 | 0.0 | 0.0 |
| 0 | 12.5 | 87.5 | -12.5 | 0.0 | 12.5 |
| 6.25 | 18.75 | 75 | 6.3 | -12.5 | 6.3 |
| 6.25 | 25 | 68.75 | 0.0 | 12.5 | -12.5 |
| 6.25 | 6.25 | 87.5 | 0.0 | -6.3 | 6.3 |
| 0 | 25 | 75 | 0.0 | 12.5 | -12.5 |
| 12.5 | 6.25 | 81.25 | 0.0 | -12.5 | 12.5 |
| 6.25 | 31.25 | 62.5 | 0.0 | 18.8 | -18.8 |
| 0 | 12.5 | 87.5 | -6.3 | 0.0 | 6.3 |
| 6.25 | 12.5 | 81.25 | 0.0 | 6.3 | -6.3 |
| 0 | 18.75 | 81.25 | 0.0 | 6.3 | -6.3 |
| 0 | 18.75 | 81.25 | 0.0 | 0.0 | 0.0 |

The Art of Learning 2018: Kinross case study



Individual School Case Studies

The Art of Learning 2018: Kinross case study

Evaluation Methodology

A range of qualitative and quantitative data was collected throughout 2018 to capture the impact of the Art of Learning partnerships on students, teachers and artists. Data sources included classroom observations, interviews with teachers, artists and students, questionnaires administered to teachers, students, artists and parents, pre-and post-intervention wellbeing surveys, pre-and post-intervention student narrative writing samples and analysis of teacher/artist planning and reflection documentation. This wide range of data sources enabled triangulation of findings, thereby reducing internal biases and increasing the robustness of the findings. Some effects can only be measured over a longer time scale. The program evaluator will aim to continue working with the school's leadership team to continue tracking the impact on student learning over a longer period of time. Although not all data sets were collected for each class, sufficient data sources were available to enable triangulation for each finding reported here.

It is important to acknowledge the limitations of the project evaluation. The Art of Learning program is only one of many variables operating within the school environment and artists only worked directly with students for 1 hour a week across 16 weeks in Terms 2 and 3. Schools are busy places with numerous different initiatives intersecting. It is impossible to isolate the effect of a program like Art of Learning from everything else that is simultaneously happening in the school without experimental design conditions. This report can merely point out correlations without any claims of causality. Caution should also be applied around the interpretation of statistical data due to small student numbers.

What made the project unique?

Before discussing the evidence of impact that the program had in Kinross Primary School, it is important to aim to articulate what was unique about the Art of Learning ways of working, to use as a lens for interpreting the impact data. Students were asked to reflect on how Art of Learning sessions were different to other lessons. Whilst the student comments focused on the unique contribution of the artist in the classroom setting, it is important to recognise the potential power of the project lies in combining the curriculum and pedagogical expertise of a teacher with the creative engagement expertise of an artist and not for the one to replace the other.

Integration, novelty, fun, self-expression, physical, social, emotional, cognitive, activities, variety, teacher-artist partnership.

"It made the project special that I have never in school done stuff like that when you put subjects together." (Student)

"It was different because normally we have to be silent, but now because of this project we can speak to one another!" (Student)

"I love art of learning so much. I have learnt so many things and I enjoyed it SOOO MUCH!" (Student)

"Everything is different to normal lessons. I think you get to have fun make new friends and enjoy doing artwork." (Student)

"I would like to learn like this more often because it is interesting and it is fun and because it is about expressing yourself." (Student)

"It was different to normal lessons because we weren't repeating the same thing each week."

“It is different to normal lessons because we learn different things and enjoy it because it has all subjects in a different kind of way.”

“I liked all the different fun activities we did.”

“It made the project special that I have never in school done stuff like that when you put them [subjects] together.”

“Our AoL teacher [artist], Vanessa, was working really well with our teacher Mrs Davies. Mrs Davies would sort of give us an idea and then Vanessa would make us think creatively. I think they just worked really well together.”

The nature of the program is to take the students out of their comfort zone and get them learning in new ways. For me the key success factors of the project were:

- The students were engaged.
- They participate in their own learning.
- They made new discoveries.
- They learned new things about themselves (we all did) (Artist).

Impact of the program

Changes in attitudes to learning & behaviour

“I don’t normally like maths, but I liked it this term because it is being done in a fun way.” (Student)

“We learn new stuff. We do different things. People are trying harder. They are trying new things and believing in themselves more. I hope it continues after the Art of Learning project.” (Student)

“More people like art and history now.”

“I love learning about how the convicts got transported and how many people died of sickness. I loved making the big ships. That was really fun.” (Student)

Student investing own time to type script at home

“I’ve seen a number of transformations in students. The most rewarding transformations for me have been in those students who for whatever reason find conventional learning and school in general difficult. This program gave those students a different way of learning and it was rewarding to see the students come out of their shell and contribute in ways that were new for them.” (Artist)

Highlight:

“So many.... Seeing the transformation in the most disengaged students in both classes. Seeing the light go on in them.” (Artist)

“A highlight was seeing the lights go in in children who find going to school difficult.” (Artist)

Improved Behaviour

"This class can be challenging, particularly some of the boys, but they are behaving better because they have ownership."

(Teacher)

"We learnt to be super kind."

"I learnt that it's really really important to get along with people. Because when you grow up and you do normal work, the thing is that you are probably gonna be with people that you don't know and who you don't get along with, so you have to learn to get along with people that you don't know and don't want to get along with. [or social]"

Increased engagement and enjoyment

Most enjoyed 22/25 (88%) – 3 not (Seth, Ronan & Noah)

"I have noticed he has enjoyed going to school more and learning through this method of teaching." (Parent)

"I enjoyed it because I got to try brand new things." (Student)

"It is a really really really fun way to learn." (Student)

"I would like to learn like this more often because I think it is fun to learn like this." (Student)

"It was different to other lessons because it was more fun and exciting." (Student)

"I would like to learn like this more often because it's funner than other normal activities." (Student)

"They were fully engaged and enjoyed this "Play" way of doing maths. They are blooming." (Artist)

"It was special being able to do it when we would be doing class work normally."

"It is fun, different. It gets you out of doing normal work."

"I didn't learn much. It just seemed like fun. Some activities I found quite boring. I did enjoy the sock puppets as they were fun." (Student)

"I didn't enjoy it because teams did not get along."

"It was special that an artist came into our class to teach us Art but the downside is I thought we going to learn how to draw."

"It has been a wonderful start and thought provoking, particularly in the Year 6 class. We had a really interesting discussion based on the student's reaction to the human numberline activity. The kids love it!" (Principal)

Deeper, different learning and thinking

"She loved all the different ways of learning." (Parent)

"I have noticed he has asked more questions to his grandparents about it as he is more interested about the 'olden days.'" (Parent)

"It is really interesting doing maths this term. It is making maths fun and it is making me better at fractions." (Student)

In fact, it helped me learn in a completely new way." (Student)

"It was different to normal lessons because you reflected on your life and do art."

(Student)

"I loved how we created and taught things and it made me learn and really think."

(Student)

"We are finding out new, deeper things about each other."

(Student)

It is different because you are actually having fun instead of having to do maths tests and everything. You get to learn way more. It is way funner.

(Student)

Improved subject learning outcomes

"It is making me better at fractions."

(Student)

"I just watched his interview. Amazing! He explained everything so well. This is a new level of oral language for him. The process really did impact him."

(Teacher)

"The puppet plays were interesting because we learned to write plays and act."

"I learnt about our school CARE values. Care and Compassion, Acceptance, Respect and Resilience, Excellence."

"I learnt how to show all of the care values and focus on one of them to learn most about."

"It works to learn History through art and literacy."

(Student)

"Many students lacked confidence in maths at the beginning of Term and felt they couldn't understand concepts or complete tasks. By the end of the Term they fully understood and used what they had learnt to teach their younger buddies about fractions."

(Artist)

"The level of sophisticated language the students were using in the description of their portraits and the symbolism was amazing."

(Teacher)

"The writing they completed at the end was just fantastic, much higher than we expected."

(Teacher)

"The oral language in the puppet show was amazing."

(Teacher)

Improved collaboration skills

Year 4, 5, 6 comments

"Their collaboration skills were terrible at the start of the project. It was amazing to see how quickly it improved."

(Teacher)

"My child learnt acceptance and relationships with others younger than he is."

(Parent)

"She enjoyed working together when she usually works on her own and was good to do something different."

(Parent)

"I learnt to incorporate people's ideas into group work even if you don't like it."

(Student)

"I enjoyed it because I usually work on my own and it was a change working in a team for the whole entire time!"

(Student)

"I learnt how to work as a team and show all the CARE values including growing together!"

(Student)

"I feel very nearly uncomfortable with teams, but I got used to it in the Art of Learning."

(Student)

"It was a little bit difficult [working in a team] because not everyone would get what they wanted but then in the end we got to learn more about each other. We got to work as teams." (Student)

"I learnt that working in a group is harder than I thought." (Student)

"My child learnt working together with other kids and coming up with ideas together." (Parent)

He enjoyed it as he got to know more about the other kids by working as a team and it was fun learning new things. (Parent)

I learnt to be able to work in a team and it not always being about one person. (Student)

It was a little bit difficult [working in teams] because not everyone would get what they wanted, but then in the end we got to learn more about each other and we got to work as teams. (Student)

"It was sort of hard because some people could really be bossy. You might come up with an idea and they might say oh no I don't like that idea. Some groups needed to work more together." (Student)

"We had to work together as a group, even though some of us have never ever worked together before, but now we have started working together with the people and started to get along with them. And it's really really important to work together as a team, because if you don't work together as a team and you don't decide on something it will never work."

"One of the biggest changes that the Teacher and I noted was in the student's ability to work in teams. I created art of Learning groups so that we could look at how they collaborated. To start with I would set up group activities and they found it really challenging. As the program progressed this changed. They became much better at sharing ideas, respecting the ideas of others, negotiating and working as a team." (Artist)

[Noticing each other's giftings]

"Yes. Well this person in my group called Mitchell he is really really good at spelling and writing. He has really really neat handwriting. This other person in my group called Mitchell he was the one that was helping make the stuff and then also there was another person in my group called Maddy. She also helped to make everything. She was the one that came up with Mitchell with the idea of making what we made."

"Because everyone comes from different places. Not everyone likes doing art. Not everyone is good at art. People come in oh so different shapes and sizes and different ways."

Students at this school get along with each other.
Improved 15.8%

Improvements in trust/emotional maturity/growth, self-expression

"I would like to learn like this more often because you can speak to one another and share your feelings and trust people!" (Student)

“It has been tough to talk about your personal life. Tough is good, because then you get to learn new stuff.” (Student)

“It was different to normal lessons because you reflected on your life and do art.” (Student)

“And also sometimes they were a bit sad when we had to reflect back when we were like sad times, but I thought it was good to write them all down so like if people didn’t know what my past was they would know if they read it.”

“How did you feel about sharing those sad times with your group?”

“I didn’t. Well they shared some of their sad times, so instead of just missing out I thought it would be best to do it with them. So we all persisted. And we all explained what happened in our past.”

“Is that something you often do at school?”

“Not really. But sometimes I tell it to my best friends. Because they have told us something sad about their past I thought I would tell them something about my past.”

“[One workshop was really hard for the students. They were asked to reflect on challenges, mistakes and reasons for gratitude in their own lives.] “They found it really hard, there were tears, but it was really powerful. They opened up more than they have ever done.” (Teacher/Artist)

Blake’s story:

It was interesting to see the various reactions within the class when we put them into new Art of Learning groups. Some were excited others not so. Blake’s reaction stood out for me. He found himself to be the only boy in an all girl group. He made a big show of being very unhappy. He stormed around the room making it known that he ‘hated his new group’. When that didn’t get a reaction he sat down at his desk and tore small pieces of paper and stuck them to his face - paper tears.

When we did the warm up activity I asked him to lead his group across the ‘dangerous swamp’. A bit of grumbling but he did it.

We then started the brainstorming activity and to his amazement his group came up with the most creative ideas and won the challenge. He didn’t seem to notice that he was the only boy by the end of the workshop.

Resilience & challenge

“It was funner and more challenging than other lessons.” (Student)

“I learnt to be resilient” (Student)

“I enjoyed it because it was fun, interesting and challenging.” (Student)

“It has been fun and challenging. That is a good combination.” (Student)

I would like to learn like this more often. Because it’s fun but difficult at the same time and also like work.

"We got a bunch of random materials and had to make something out of a random bunch of materials. At the start we actually thought, oh my goodness, this was going to be impossible and then in the end it really worked." (Student)

"The back to back drawing was hard because the person you were working with was trying to describe it, but if they didn't give you the right direction where to go you would probably get it wrong. So it was hard. When you were finished drawing you compared it to the picture and it looked very different and it was hard." (Student)

"I made a sock monkey. I've made one with my mum sewing because I kept on stabbing myself. But the next I said: Nope, I'm not going to have any help. I'm just going to do it all by myself. And I did, even though I kept stabbing myself I kept on doing it. [Persistence]"

New experiences

[Learnt to embrace, not shy away from new experiences. - HoM]

"Any chance at learning new things and having new educational experiences I see as a positive thing for my child's growth." (Parent)

"I loved it because I was learning something that I would never learn at school." (Student)

"He enjoyed the making of something new and using this as a tool to teach younger kids while learning himself." (Parent)

"I enjoyed it because I got to try brand new things." (Student)

"It was different to normal lessons because we weren't repeating the same thing each week." (Student)

"Everything was interesting because we learnt new stuff."

Enhanced creative thinking skills

"It has brought out a more creative side, using things around the house to make different projects." (Parent)

"She's wanting to make things at home, wanting to get creative rather than play on technology." (Parent)

"I learnt to have more creativity and to be a better artist." (Student)

"I would like to learn like this more often because it gets me awake and I get more creative each time." (Student)

In lesson 1 they almost couldn't bear the idea of something outside a textbook and pen, they could not think outside the box. Now they are proposing things and activities to make! So so exiting!" (Artist)

"It was different to normal lessons because it helps the students learn in a creative way." (Teacher)

"Through scaffolding they became better at divergent thinking and coming up with new ideas." (Artist)

"It is very different to normal lessons because you can make different creations and be yourself." (Student)

"She learnt to be more creative and have a go at more craft and art things at home like making her sock monkey." (Parent)

“It is fun to be creative and the thing that was most fun was making the puppet shows.”

“I learnt something new about myself because I am not that creative at home, but I like making, like sewing. So, I didn’t think I would be able to make anything else. And then I had Art of learning with you [artist] and I have made a lot more stuff at home than anywhere else.” (Student)

[Did all these other creative things outside of school sparked by activities done during AoL, e.g. special holiday project collecting Naidoc Colours objects with family]

“The program had an impact on the student’s skills in the area of critical thinking, resilience, flexibility, imagination

and problem solving. They asked a great deal of questions, provided feedback and were engaged in the tasks which were designed to invoke a sense of wonder. It was wonderful to see the impact on the students. Their faces would light up when they saw me arrive and they were eager to know what we would be doing that day. They were enthusiastic to share their own ideas of things they had thought about since the previous workshop. They were excited to learn and curious about what challenge I would present each week.”

(Artist)

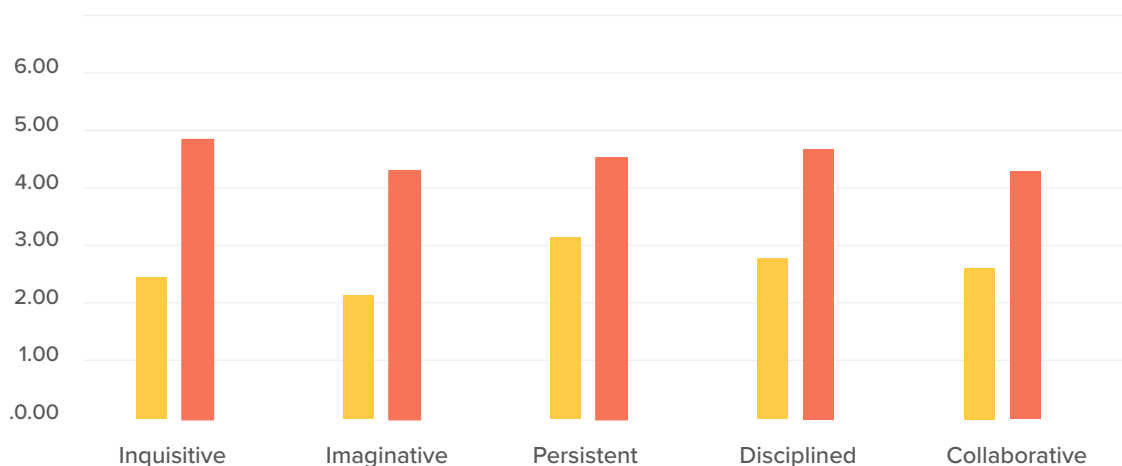
“The habits of mind were at the heart of all the workshops and we were very mindful of it in our planning.” (Artist)

[Student awareness of HOM – articulated throughout]

Student Creative Habits of Mind Reflection

● Normal Class Mean

● AoL Class Mean



Family connections & belonging

"I liked doing that project because I got to spend more time with my family. Because my dad's working in the week and sometimes he has to work weekends."

What did you do>

"We done lots of big walks around lakes and drove around."

"Artist encouraged students to look in nature for colours."

"We even went four wheel driving just for that project."

What did your family think about doing this project?

"They thought it was really fun. And my sister, because she is usually reading or something, she actually got excited and a bit dirty and like trying to find these flowers and petals and things like that."

You put it together as a beautiful presentation.

"Yeah, my mum helped with that and my dad helped me with my planning of it and my sister helped me find all the colours for it. So we were playing in the car. We were playing a game who can spot a colour for the NAIDOC week."

Connection to school

"I feel that I belong at this school. Improved 14.9 points from 51.7% to 66.7%"

"My school cares about me as an individual down 20.6% point for very true (from 55.2% - 34.6%) – mostly moved to somewhat true."

"I would go to a teacher if I needed help down 20.6% point for very true (from 55.2% - 34.6%)"

"Teachers and students at my school respect each other up 19.7% from 32.1% to 51.9%."

"I talk to someone when I have a problem that I need help with. Up 9.5% [internal locus of control]"

Increased confidence (including in communication), self belief

"I learnt that I can do more really than I actually thought I could." (Student)

"He gained confidence in talking to others." (Parent)

"Sock puppet making was awesome. He explained this was used to build confidence in himself and learn communication skills." (Parent)

"She learnt confidence in performing and standing up in front of class." (Parent)

"It has been simply amazing. Comparing the first session to the last of the term showed me that this teaching approach gives a boost in confidence and higher esteem as well as overcome blocks of thinking differently." (Artist)

"He has become more confident in his overall communication with siblings, parents and friends. He enjoys teaching us things that he thinks we don't know where before he was a little shy." (Parent)

"She is now more confident." (Parent)

"I learnt that I was more creative than I thought." (Student)

"The students were so proud of what they have achieved." (Teacher)

Impact on teacher practice

“The high functioning classroom concept was very confronting at the professional learning workshop. I wanted to be on the right, but felt on the left. The project has had a lasting impact on my practice to move me further to the right.” (Teacher)

“I followed up each artist workshop with work, feeding off it in class for the rest of the week.” (Teacher)

“I was inside the lesson rather than directing the lesson. It gave me real quality time with a range of students, working with the students at a different level.” (Teacher)

“Doing things in a different way is exciting. Last year felt very robotic for me, very time pressured, very program-focused. Art of Learning has been a great opportunity for me to diversify, to use different means of representation.” (Teacher)

“I have enjoyed how it has broken down barriers between me and some of the students. It has enabled me to develop a different relationship with some children because I get to collaborate with them when Vanessa is leading an activity. It is building relationships and trust.” (Teacher)

“I am going to create new AOL teams in term four to keep him interested and motivated. Might tackle maths :) !” (Teacher)

“The Art of Learning has forever changed the way I plan my lessons.” (Teacher)

“I am loving joining in with the crazy activities.” (Teacher)

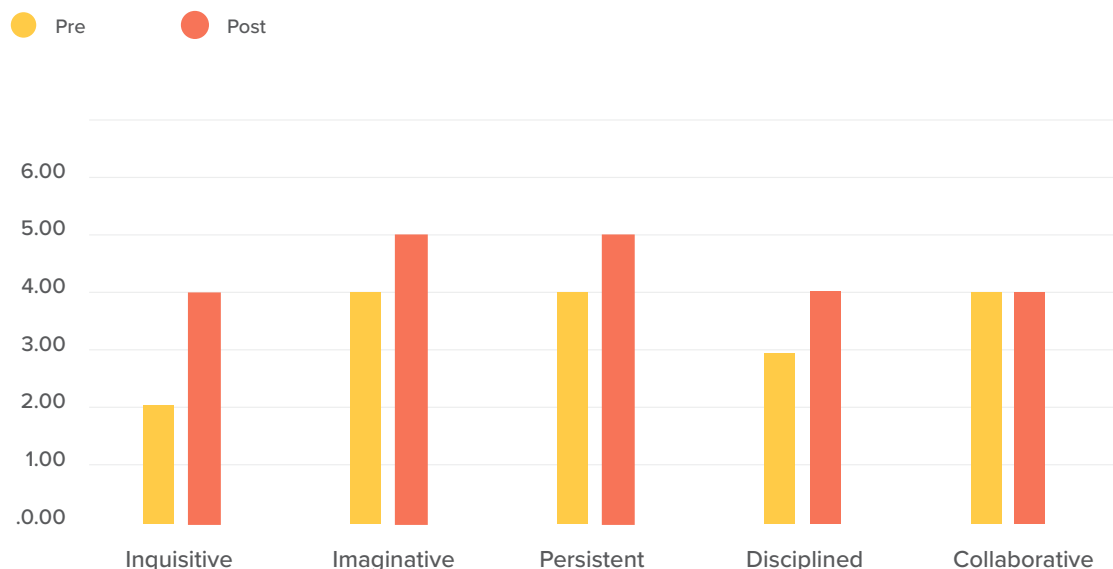
Mel took the drawing task one step further and had the students come up with 3 facts and 1 opinion about the boat. Mel is really embracing this more creative approach throughout the week which is a positive outcome for our project. (Artist)

“Both teachers are thoroughly enjoying working with their artists and are learning a lot working with them.” (Principal)

“One of the highlights was that Mel got to take part in the activity. She worked with a student who she’s been having conflict with and she spoke of how good it was to spend one on one time with him and to have that disruption to the power base that goes with teacher/student relationships.” (Artist)

“Mel finds it difficult not to plan ahead. This week she purposefully didn’t plan the writing activity to see what I would do in my session and follow on from there. Good things already starting to happen so early on in the project.” (Artist)

Teacher Creative Habits of Mind



Impact on artist

"I in turn feel really energised by the process. It's great to have someone to bounce ideas off. We are developing a really positive and fruitful partnership." (Artist)

"The impact on my own practice has been great. The Art of Learning has made me more conscious of how I come up with my creative ideas. Many people think that creative ideas just arrive in your mind but I was lot more conscious of how these ideas are formed. I noticed how I am constantly looking for connections when I am working on a project and how I bring those connections together in new ways. What we were looking at with the Creative Habits of Mind I realized was very much a part of my own practice. I do a lot of research and background reading, I have to be disciplined with my time, I have to persist (not all ideas work out), I use my imagination within the visual story that I'm creating, I have to collaborate with other

and receive feedback (not always positive feedback, but often the feedback pushes you to come to a better result)." (Artist)

"As a visual artist, my paintings have always incorporated storytelling and an interest in history. The Art of Learning has impacted on my creative practice in so many ways. The children's natural curiosity about the world around them and their fresh approach when exploring historical stories is greatly influencing my work." (Artist)

"I learned that I really enjoy this type of work. That standing up and talking in front of children and adults isn't as terrifying as I originally thought. Seeing the difference that the Art of Learning approach made in the classroom. Being part of Educating our children in a different and creative way. I learnt that Teachers such as Mel are incredibly dedicated. They work very long hours and have an incredible knowledge of the curriculum; they have a huge workload but on top of that they have an amazing



passion for the well-being of their students and for seeing them succeed and thrive.”

(Artist)

“It was challenging and I learned so much.”

(Artist)

Suggestions for improvement

Ongoing mentoring for the Creative Practitioners during the projects. Perhaps more opportunities to get together during the term to brainstorm our ideas and plan our workshops. The online platform was great but I felt it was more a place to showcase what we had done. Having Mathilda/Lamis available to mentor and support during the second term was a big help.

School leadership

Final words

“Everyone enjoys it. There are smiles when we do Art of Learning.” (Student)

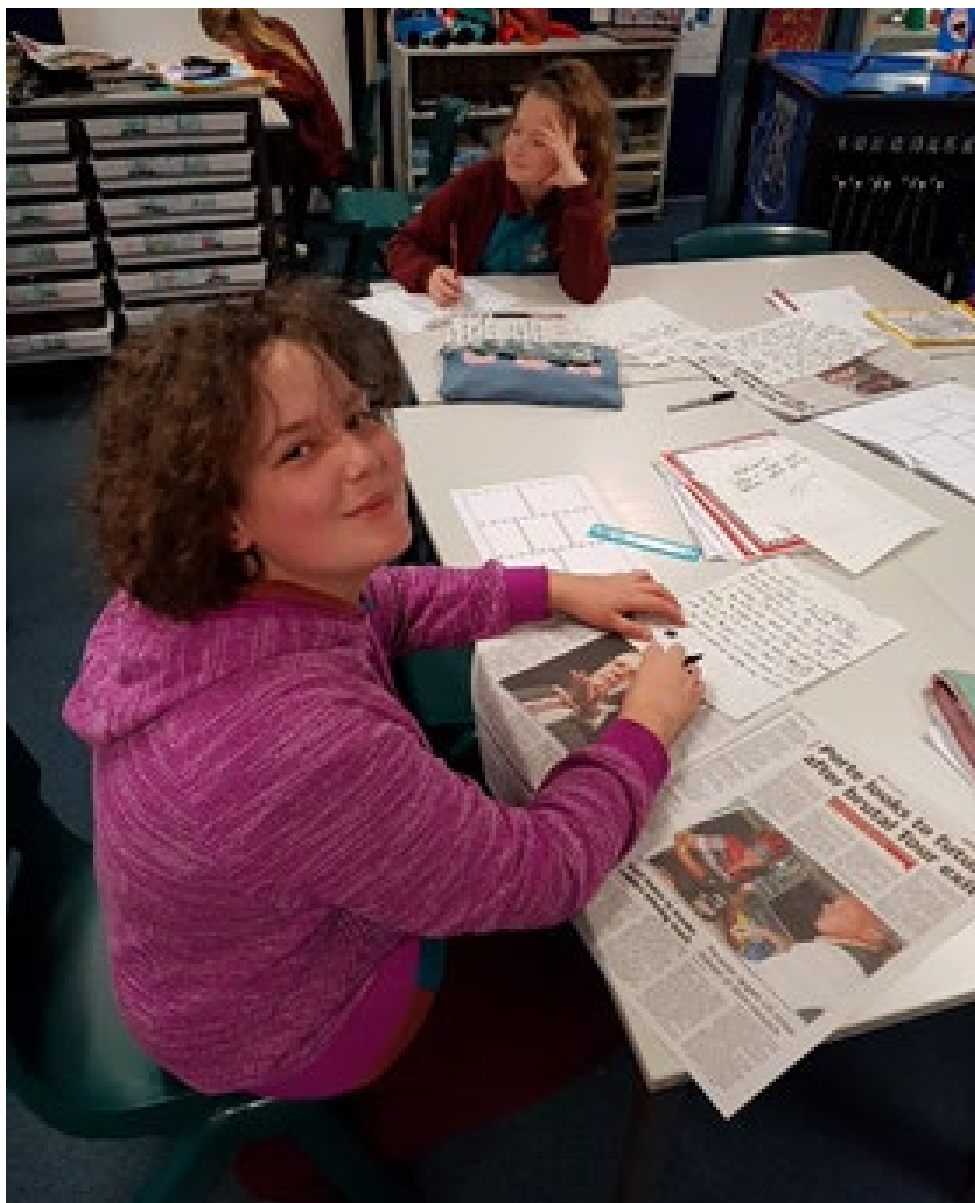
Yes please (for more of this). Whatever makes learning fun I’m a fan of. (Parent)

Appendix

| Kinross Year 4 | | Pre (%) | |
|--|----------|---------------|-----------|
| Statement | Not true | Somewhat true | Very true |
| 1. I feel that I belong at this school. | 3.4 | 44.8 | 51.7 |
| 2. Teachers and students at my school respect each other. | 7.1 | 60.7 | 32.1 |
| 3. My school knows how to deal with bullying and harassment problems. | 10.3 | 24.1 | 65.5 |
| 4. I feel safe at this school. | 3.4 | 37.9 | 58.6 |
| 5. My school cares about me as an individual. | 6.9 | 37.9 | 55.2 |
| 6. Students at this school get along with each other. | 3.4 | 93.1 | 3.4 |
| 7. My teachers listen to me and value my opinion. | 6.9 | 24.1 | 69.0 |
| 8. We learn about making friends and managing our emotions. | 6.9 | 27.6 | 65.5 |
| 9. We get a chance to practice building friendships and managing our emotions. | 10.3 | 51.7 | 37.9 |
| 10. I don't give up when things get difficult. | 0.0 | 51.7 | 48.3 |
| 11. I know how to manage my emotions when things are difficult. | 10.3 | 34.5 | 55.2 |
| 12. I talk to someone when I have a problem that I need help with. | 17.2 | 48.3 | 34.5 |
| 13. My teachers encourage me to take on new challenges | 10.3 | 31.0 | 58.6 |
| 14. Teachers help students who are worried or upset. | 0.0 | 21.4 | 78.6 |
| 15. There are teachers students can go to if they are worried or upset. | 3.7 | 40.7 | 55.6 |
| 16. I would go to a teacher if I needed help. | 6.9 | 37.9 | 55.2 |
| 17. I can tell when a student is upset or worried. | 6.9 | 37.9 | 55.2 |
| 18. I know how to help a friend who is upset or worried. | 0.0 | 34.5 | 65.5 |
| 19. My school helps the parents of students who are worried or upset. | 3.4 | 62.1 | 34.5 |

| Post (%) | | | Difference (%) | | |
|----------|---------------|-----------|----------------|---------------|-----------|
| Not true | Somewhat true | Very true | Not true | Somewhat true | Very true |
| 7.4 | 25.9 | 66.7 | 4.0 | -18.9 | 14.9 |
| 3.7 | 44.4 | 51.9 | -3.4 | -16.3 | 19.7 |
| 7.4 | 33.3 | 59.3 | -2.9 | 9.2 | -6.3 |
| 11.1 | 33.3 | 55.6 | 7.7 | -4.6 | -3.1 |
| 11.5 | 53.8 | 34.6 | 4.6 | 15.9 | -20.6 |
| 0.0 | 80.8 | 19.2 | -3.4 | -12.3 | 15.8 |
| 12.0 | 28.0 | 60.0 | 5.1 | 3.9 | -9.0 |
| 7.4 | 29.6 | 63.0 | 0.5 | 2.0 | -2.6 |
| 22.2 | 44.4 | 33.3 | 11.9 | -7.3 | -4.6 |
| 3.8 | 42.3 | 53.8 | 3.8 | -9.4 | 5.6 |
| 11.1 | 37.0 | 51.9 | 0.8 | 2.6 | -3.3 |
| 24.0 | 32.0 | 44.0 | 6.8 | -16.3 | 9.5 |
| 11.5 | 23.1 | 65.4 | 1.2 | -8.0 | 6.8 |
| 3.8 | 15.4 | 80.8 | 3.8 | -6.0 | 2.2 |
| 0.0 | 44.0 | 56.0 | -3.7 | 3.3 | 0.4 |
| 15.4 | 50.0 | 34.6 | 8.5 | 12.1 | -20.6 |
| 11.5 | 30.8 | 57.7 | 4.6 | -7.2 | 2.5 |
| 4.0 | 40.0 | 56.0 | 4.0 | 5.5 | -9.5 |
| 12.5 | 50.0 | 37.5 | 9.1 | -12.1 | 3.0 |

The Art of Learning 2018: *Merriwa case study*



Background context

1st term we focussed our learning on language development around HASS and focussed in on two landforms. We wrote a song about them and did many activities that developed our understanding of landforms. We also talked about curiosity and created activities that encouraged curiosity.

2nd term we focussed on reading and writing and made Super Heroes our theme. We did 'super hero training' to get them in the spirit, which encouraged greater listening skills and observation skills.. and they had to do some 'code cracking' as part of their training... which all involved reading and writing. Then we discussed super heroes and read about real life super heroes and they wrote about times that they might have displayed super hero qualities. Then, each one of them was given a title for a newspaper article they had to write based on their super hero qualities about themselves.

Term 3 – Merriwa Primary School

Merriwa students focussed on literacy with the entire school working on a theme of newspapers. We also incorporated HASS and sustainability into the project. Students created sculptures using both industrial offcuts and lunchbox packaging discussing the difference between needs and wants and then pitched their objects to the class using advertising methods to sell their product. They created posters for their product and their junk food packaging lead to a cooking session using produce (natural resource) from the school vegie garden. They formed wheelbarrows (capital resource) and labourers (human resource) and we discussed cyclic economies, sustainability and newspaper content (sports, articles, advertising, problems, reports, comics and recipes). Maths and literacy were used while they weighed and measured, then wrote out their recipes to enter into the Children's Book Council of Australia's (CBCA) A Recipe is a Story Too Competition. We developed a problem page for the newspaper coming up with fictitious problems and suggesting solutions. To reinforce the activities groups collaborated to write a report on each of the Art of Learning sessions by writing a sentence or two each, cutting them up and reforming them into a logical sequence. Empty comic strips were added into this activity as they would be required for our newspaper and provided an alternative method for students with lower literacy levels to contribute. As an alternative to a standard newspaper, each group collaborated to cover a cube shape making a newspaper cube. They had to include a title for their paper and for each section within the paper. The groups competed with each student having a different role within their newspaper office (reporter, photographer, comic artist, sports writer etc) to complete their cube incorporating worksheets done in previous sessions.

Individual School Case Studies

The Art of Learning 2018: ***Merriwa case study***

Undertaking a different task each week gave students projects to write about.

Week 1 - Needs and wants (HASS) - Created something the student would like to have from industrial offcuts. Discussed the process of offcuts going to landfill.

Week 2 - In groups, create a want from lunch wrappers. (HASS) Develop a Pitch to present to the class of this want as a need ie: advertising (newspaper content)

Week 3 - Pitch the creation (drama) and vote. Exploring the power of media to convince

Week 4 - Cooking, cyclic economy, 3 types of resources (human, capital, natural). Wrote up the recipes and methods (suitable for a newspaper 'Cooking' section)

Week 5 - Problems and Solutions column for the newspaper. Students posed a problem and another student had to answer it. Without realising they were writing content.

Week 6 - Writing a report for the Art of Learning sessions in groups.

Week 7 - Group collaboration to achieve each of the individual components required for the newspaper. Done as a competition where they could tick off each part as it was completed

Week 8 - Group collaboration in constructing the newspaper cube and layout out the contents

Presenting findings, conclusions, reports in a range of communication forms (written, oral, visual, digital)

Reflect on learning, identify new understandings and act on findings in different ways proposing a course of action.

Drama - presentation of their 'Pitch'

Literacy - report writing, competition entry, comic writing, problems and solutions, advertising

Art - 2D comics, 3D sculpture

HASS - economics, needs and wants

Maths - competition scores, measurement (cooking)

IT - typing up reports, sourcing recipes, researching events and rewriting

A painted Mural that they helped design, they also have there our coded alphabet, with a connection to the South American project. We created posters, and team building games that can be carried out over the year.

We explored 2 Australian landscapes and the kids wrote a song using language associated with these landscapes.

Evaluation Methodology

A range of qualitative and quantitative data was collected throughout 2018 to capture the impact of the Art of Learning partnerships on students, teachers and artists. Data sources included classroom observations, interviews with teachers, artists and students, questionnaires administered to teachers, students, artists and parents, pre-and post-intervention wellbeing surveys, pre-and post-intervention student narrative writing samples and analysis of teacher/artist planning and reflection documentation. This wide range of data sources enabled triangulation of findings, thereby reducing internal biases and increasing the robustness of the findings. Some effects can only be measured over a longer time scale. The program evaluator will aim to continue working with the school's leadership team to continue tracking the impact on student learning over a longer period of time. Although not all data sets were collected for each class, sufficient data sources were available to enable triangulation for each finding reported here.

It is important to acknowledge the limitations of the project evaluation. The Art of Learning program is only one of many variables operating within the school environment and artists only worked directly with students for 1 hour a week across 16 weeks in Terms 2 and 3. Schools are busy places with numerous different initiatives intersecting. It is impossible to isolate the effect of a program like Art of Learning from everything else that is simultaneously happening in the school without experimental design conditions. This report can merely point out correlations without any claims of causality. Caution should also be applied around the interpretation of statistical data due to small student numbers.

What made the project unique?

Before discussing the evidence of impact that the program had in Merriwa Primary School, it is important to aim to articulate what was unique about the Art of Learning ways of working, to use as a lens for interpreting the impact data. Students were asked to reflect on how Art of Learning sessions were different to other lessons. Whilst the student comments focused on the unique contribution of the artist in the classroom setting, it is important to recognise the potential power of the project lies in combining the curriculum and pedagogical expertise of a teacher with the creative engagement expertise of an artist and not for the one to replace the other.

“We always play a fun warm-up game. It gets us excited for the lesson.”

(Student, year 5)

“It has been really fun with lots of games that has helped us learn.” (Student, year 5)

"It has been really fun. We got to build stuff, be more hands-on." (Student, year 5)

"I enjoy it because we get to make stuff. It helps me learn better." (Student, year 5)

"Work is less boring when the artists come."
(Year 5 Student, known to be disruptive)

"It's really fun because it feels like you're not really doing work, but you are."

"It is really fun. We got to do art and team bonding games."

"The artists are really nice. They are very creative. They help people. They listen to us. They always listen to our ideas."

"We have played lots of games, we invented a code and we learnt about each other." [social, creative, physical]

"It is funner. We do different stuff. We learn new things."

"They make class more fun and we do fun things when they are here. They are really nice."

"It is exciting, fun. I really enjoyed it. We got to do more art than we would have done."

"It is very exciting. She is always thinking of new and exciting things. We can learn and have fun at the same time."

Impact

Better learning

"I enjoy it because we get to make stuff. It helps me learn better." (Student)

"You learn more with the arts – and in a more fun way." (Student)

"It has been really fun with lots of games that has helped us learn." (Student)

"Their depth of knowledge and understanding is much better now." (Teacher)

"I couldn't believe how quickly they got it. The ownership over their work is amazing."

"Their capacity to learn improved. We will see the impact only later on attainment."
(Teacher)

Better learning outcomes

"Their depth of knowledge and understanding is much better now." (Teacher)

"I couldn't believe how quickly they got it. The ownership over their work is amazing."

"The children have really good understanding of HASS and sustainability now. They have now become environmental warriors." (Teacher)

All children hit their writing targets in Year 3 in Merriwa.

We achieved a large number of outcomes as per SCASA - refer to key areas (curriculum)

"We do lots of fun stuff and learn new things with the artists. We've learnt to do art and history and we've learnt to cook healthy food." (Student, year 5)

"It is really fun, exciting and always interesting. We learnt how to recycle so we can save the earth and have less pollution." (Student, year 5)

"I learnt about places like South America and their culture."

"We learnt that Uluru is owned by Aboriginal people. We learnt about the Great Barrier Reef. It is colourful, but

it is sad that it is dying. People should stop taking boats over it and should stop touching it."

"At the end of the program, the kids were able to recall and describe the landscapes and characteristics associated with it. We expected that children would be able to describe two landforms using accurate topic specific language and state they were able to recall these things through linking them to the lyrics of the song." (Artist)

Increased engagement in learning / enjoyment

Enjoyment: 100%

"It changed my attitude to learning."
(Student)

"Everyone is contributing. It would not have been the same without these two cycles of the Art of Learning." (Teacher)

"It is good to have an artist in the classroom because it is fun and we are learning." (Student)

"Kids who are normally disengaged are just so engaged." (Teacher)

"They are excited about learning HASS – never normally." (Teacher)

"We do fun activities when the artist comes in – and we learn." (Student)

"It has been really awesome, fun, interesting." (Student)

"It was definitely worth it. We got to meet new people and we got our arts skills going and we learnt about friendship." (Student)

"It's really fun because it feels like you're not really doing work, but you are." (Student)

"Engagement increased dramatically from the start of the project to the completion."
(Artist)

"I loved making the song and writing a newspaper. I thought it was very educational and fun."

"It was more fun than just normal lessons."

"It was different to normal lessons because we didn't do work."

Highlight:

"Watching Preston (Merriwa) who is diagnosed with Autism and who at the beginning of term would not focus for any length of time. He was completely disengaged from activities yet in both session 7 and 8, he sat for over an hour and plan, design, write text and drew a comic depicting two different activities done during the term. What was even better than that was how proud he was of his work." (Artist)

"A number of the children are keen artists, so we have noticed higher engagement during any artistic tasks." (Artist)

"telling them exactly what to do during tasks doesn't always work, but allowing them to figure it out them selves seems to have them more engaged." (Artist)

I look forward to coming to school. 8.1% decrease in not true – now only 9.52 not looking forward – [engagement]

Enhanced social skills (Personal competence, e.g. resilience?)

The class was challenging. They were not collaborating. They are now. It took them time to get there but they're there now. You have to trust the process and it will happen." (Teacher)

"At the beginning of the term, students found it difficult to work in collaboration, could be disruptive, would destroy work (both theirs and others) and needed to have activities broken into small time schedules in order to hold their attention. By the end of the term, almost all members of the class displayed an ability to work successfully as a group, focussing on an end goal even though each member of the group had a different task. The way in which they spoke to each other changed and they demonstrated appreciation of other's work." (Artist)

"The kids are working together, supporting each other. They won't normally do it." (Teacher)

"My primary aim was for the students was social skills. They are now closer together. I am so thrilled." (Teacher)

"It was definitely worth it. We got to meet new people and we got our arts skills going and we learnt about friendship." (Student, year 5)

"The children seem to work better together, and groups that were formed before our arrival have change dramatically. They are mixing a lot more." (Artist)

"Activities during each session involved some type of group work which initially had limited success however by the end of term, the class dynamic changed. Students were able to collaborate and

both the teacher and students spoke more respectfully to each other. They showed that they were able to work independently yet still as a group." (Artist)

"At the beginning of the term, students found it difficult to work in collaboration, could be disruptive, would destroy work (both theirs and others) and needed to have activities broken into small time schedules in order to hold their attention. By the end of the term, almost all members of the class displayed an ability to work successfully as a group, focussing on an end goal even though each member of the group had a different task. The way in which they spoke to each other changed and they demonstrated appreciation of other's work. They showed respect and courtesy, great team work but also more importantly, a pride in their own work. This was evident in the last two sessions in putting together the contents for their newspaper cube and in constructing the final piece." (Artist)

"Class collaboration has definitely increased. It is often still noisy however it is now a productive noise rather than a disruptive one. The class was able to successfully work in a team to complete their newspaper cube." (Teacher & artist)

"Today they all worked on their newspaper cubes and got those finished. Each person in the group was doing a different activity and they would automatically within the group, some would lead and some would follow. It was lovely seeing them work together to achieve a united goal." (Artist)

"I learnt how to be a superhero and how to be team mates."

I listen when other people talk. Up 29.2% from 37.5% to 66.67% very true. Only 4.76% not true

I always take turns and share with others. Up 16.1%

from 47.1% very true to 63.16%. Only 5.26% not true.

Caveat re self-perception.

I have friends to play with at lunch times. Up 14.8% from 47.1% very true to 61.90% very true.

I have at least one friend who cares about me. Remained high at 71.43.

Resilience, personal competence (new these – move content) Pride

“Watching individual students evolve was powerful. One student was crying in every session at the start. By the end, through developing resilience, she was contributing, trusting others, collaborating.” (Artist)

“We chose a self-improvement focus, to focus on the superhero inside. It helped to instil confidence in students.” (Artist)

“Have the children changed? The recall of lyrics, changes in individual behaviours, improvements in confidence was great to see.”

“Some students found some of the tasks challenging, but they persevered, collaborated and achieves. They were really proud of their creations.” (Artist)

Sense of connection/community

“My main objective was to make the classroom more of a community where the kids work better together, and get to know each other better.” (Artist)

“I learnt that everyone is now more closer together.” (Student)

Overall, I’m just really pleased with their way of working as a class. Their consideration of each other, their

consideration of me and adults coming into the class, they are a lot more respectful than they were. (Artist)

I like this school. Up 13.7% from 52.9% very true to 66.67% very true.

I feel happy at school. Up 19.6% from 47.1% to 66.67%.

Improved behaviour & attitudes, including effort

“Their behaviour is so much better now. This is a completely different class.” (Teacher)

“People behave better when they are here, because they enjoy it and some people in class normally don’t enjoy learning.” (Student)

“It changed my attitude to learning.” (Student)

The difference in the behavior of Merriwa students between the beginning and the end of the term was dramatic. (Artist)

“The difference in these kids from my first week to this week is amazing. Preston who would hang off his chair and couldn’t concentrate for any length of time is doing the most amazing comic strips about what’s going on within the class and the lessons and putting in the most attention to detail. Today he was even colouring it in. I was so impressed.” (Artist)

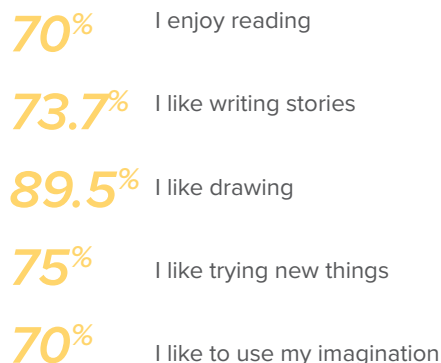
“Taichang is wearing headphones and takes some time out to sit on his own and get some work done which seems to make a general difference in his overall behaviour. He was really excited today about getting the letter from James Foley. He was very proud of himself and allowed me to take a photo so the attitude in him seems to have dropped. Rogue who was quite mousy and was always complaining

has found her voice and has no hesitation in coming forward. Elijah is being more proactive and coming up with ideas and different things. And just the groups all working together as a team, the noise level goes down. They are all busy, they are all doing stuff. You still have some of the, mainly boys, who tend to get a little bit lazy but generally, their behaviour compared to the first week is hugely different.” (Artist)

“Rogue (Merriwa) initially cried each week because someone wasn’t being nice to her yet by the end of term, she was working within her group, removed herself from situations that she wasn’t comfortable in and was able to be more accepting of the fact that sometimes collaboration meant you didn’t get to use all of your ideas. It was lovely to watch Rogue find her voice and happily stand up for herself.” (Artist)

“Titchang (Merriwa) was the biggest personality in the class, always being told off, sent out of the room, misbehaving and generally getting attention for being the class clown. He did a comic strip about Vikings based on a book that was read in class (The Last Viking). I was able to send this through to the illustrator of the book who wrote a response directly to him praising his work and asking Titchang to let him know how the story ended. Along with that was a letter to the class received from the book’s author, Norman Jorgensen, along with a copy of his recent manuscript. To watch the excitement in the class and the feeling of being special after hearing the letter was beautiful. To listen to Titchang self-consciously read his letter from (Illustrator) James Foley to his classmates and then have them spontaneously clap for him was priceless.” (Artist)

Attitudes to reading, writing & drawing



No pre-test

Comparison with Year 5/6 Scribblers group – selected students vs all class.

Effort

I always try my best at school. Up 22.1% from 52.9% to an astonishing 75%

Agency

“The artists are really nice. They are very creative. They help people. They listen to us. They always listen to our ideas.” (Student)

“She’s much more funner than the teachers. She always lets us think about things and call out our answers.”

“We made a song and it was really good. I like how we made it with our voices.”

“I was really pleased to see how much the children loved making the song and having full ownership over it. I have a keen focus in contributing to their sense of self through activities that celebrate their strengths instead of focussing on the things they can’t do.” (Artist)

“These kids were incredible, but are

restricted by a 'label' being seen as challenging ... I think letting the kids have more freedom with how they are learning might benefit all. These kids feel like they will not be anything in life, so giving them responsibility, will change their perception about what they are capable of. During my time, I wanted to really push the idea of 'you can be and do whatever you want to be'. (Artist)

"It was immediately obvious to me that these approaches to the curriculum were working. The kids who had been a bit reserved or stand offish at first were jumping up to help me pack up the musical equipment once I had finished recording them. Each of the kids sang the song loudly and proudly a few months after they had last performed the song... and the lyrics contained information that they needed to know for HASS. The teachers reported to me that some of the kids who hadn't been doing so well in school had started to be more engaged because the song contained each and everyone's voices in it and they had a real ownership over the song... and it turned out to be a good song." (Artist)

"The super hero sessions were equally rewarding. Kids who perhaps felt a little left behind in the system were contributing to the stories and feeling that they had a role and were important in the production of the paper. Also the fact that each story was about them, the kids could identify within themselves skills that they possessed that were worthy of celebration." (Artist)

"Learnt a lot about South America. I find letting the kids help with the tasks and take ownership on things, improves there moods and attitudes." (Artist)

"Students began to write more freely when given a variety of ways to do so. Some used computers to do presentations, others

put together their reports in the form of a comic. It was important for them to find the voice or method that suited them which resulted in them being engaged and having a positive attitude and pride in their work. This then followed through to their behavior." (Artist)

Improved creative thinking skills

"I am now better at creativity." (Student)

"It has helped me be more creative because we have to think a lot. We got a lot of practice at creative thinking because we have to create new things every week." (Student)

"I have learnt to be more creative." (Student)

"It improved our creativity and curiosity." (Student)

"It is bringing imagination right in front of them." (Teacher)

It is lovely to observe the positive changes in these kids particularly in being able to start to think for themselves. (Artist)

"I learnt to write a song and I learnt curiosity."

Enhanced questioning skills, Inquiry

"She's always very excited to show us what she has got, for example a rock. We started asking questions. It is good. Because you learn through asking questions. You want to know more." (Student)

Our focus on questioning was a crucial component which continued to be a focus in our classroom. Moving students to think "What if ..." opened their thoughts to more creative responses and more questions. [Inquiry; creativity] (Teacher)

"We learnt to ask lots of questions. [inquiry]
(Student)

"I can use what I learnt by asking questions to my friends and family."

"Curiosity was a big theme. We were continuously encouraging questioning."
(Artist)

Increased pride in achievements (agency link)

"They showed respect and courtesy, great team work but also more importantly, a pride in their own work." (Artist)

"I loved how much the kids got into the whole process and took pride in what they had made. I could see that it was truly transformational for a couple of kids who initially were not that forthcoming in their interactions." (Artist)

"The students felt a real sense of achievement." (Teacher)

"I couldn't believe how quickly they got it. The ownership over their work is amazing."
(Teacher)

I noticed that if the kids had ownership and power in their role within the workshops, they responded better to the workshops themselves. The song worked so well because everyone contributed to it and they were proud of their work. (Artist)

"We made a song and learnt about Uluru."
[Nearly every child mentioned the song in their evaluation – really achievement]

Enhanced inclusivity

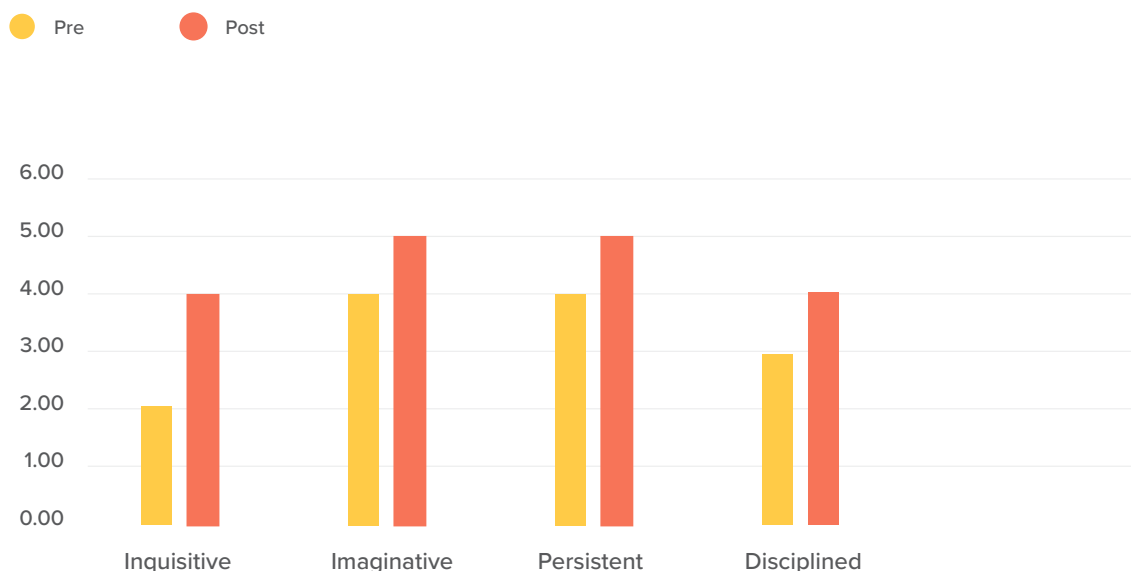
"Students like him, who is so low, gets to participate in projects like these. Normally they get different, differentiated work, but with this they get to participate. It is really good for him." (Teacher)

Female student - changed from a student who constantly complained, was often left out, limited confidence and had tears, to one who was more outspoken, positive and capable.

"Student with Autism - previously hung off chairs and rarely engaged in activities and finished the term with creating detailed comic reports on the activities. Male class 'character' - produced an amazing piece of work resulting in respected praise which he graciously received." (Artist & teacher)]

Impact on teacher practice

Teacher Creative Habits of Mind



Impact on artist practice

As difficult as this group was at times, I have probably learnt the most from my time with them. Sometimes the child who doesn't want to write or contribute due to a difficulty in understanding, only needs another method (i.e.: a comic strip, an interview, a group writing activity) to realise that there is an array of methods that can be used for the same or similar outcome.

(Artist)

There were some very frustrating moments but I have found it quite insightful to read back through [my reflections] especially with reference to the general lack of any continuity and my complete loss as to how to proceed yet persistence paid off ten fold. ... I think I learned an enormous amount in working with Shonagh at Merriwa. As frustrated as I was, I think she was in the same boat. For us, it was as much about our collaboration as it was the kids.

I feel it pushed me to be creative with what I was presenting while still being on point. It was a great process to keep clarity of message and task while making up lots of games. Keeping clear on what outcome I am truly striving for has most certainly flowed onto my art practice and my life.

(Artist)

I have developed skills and methods through practice that can be implemented and are able to instigate change subtly. Often it is the process of the activity itself rather than the outcome that brings about the greatest reward and realisations in participants.

(Artist)

This has resulted in increase productivity, higher levels of concentration and a renewed enjoyment of the many aspects of my work.

(Artist)



The process has brought about an improved awareness of the power of demonstrating as opposed to telling.”

“Being able to collaborate with artists and teachers has provided opportunities to develop new skills, explore alternative ways of thinking and successfully navigating creativity within the boundaries of a school curriculum.”

“These projects weren’t always easy although the above makes it sound as though it may have been. They challenged me both as an arts educator, project manager and collaborating artist yet I feel more confident in my ability to navigate the school system, manage large groups, collaborate with teachers sharing our strengths to relax knowing that patience and tolerance is much more effective than the opposite and much more enjoyable.”

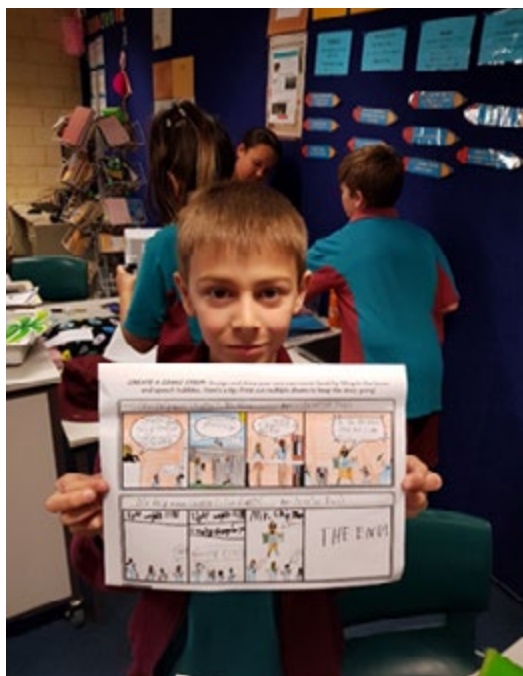
“I loved every minute of the process of working with students and teachers. Have I changed? I now want to go and study education.” (Artist)

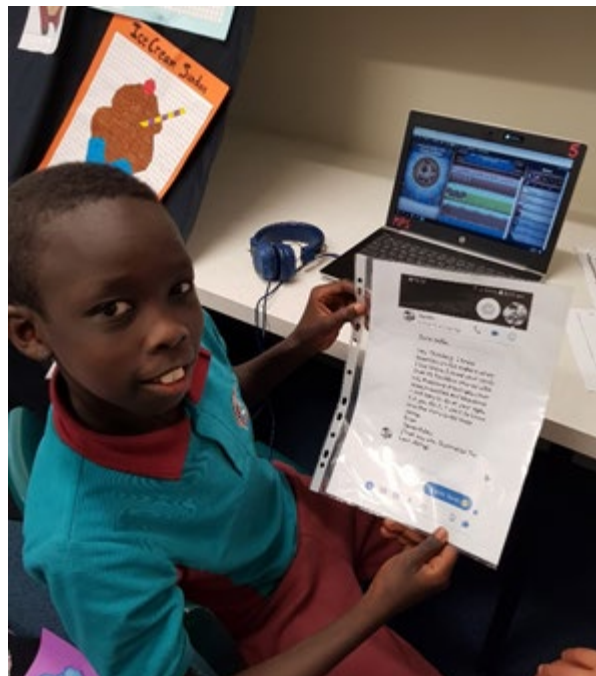
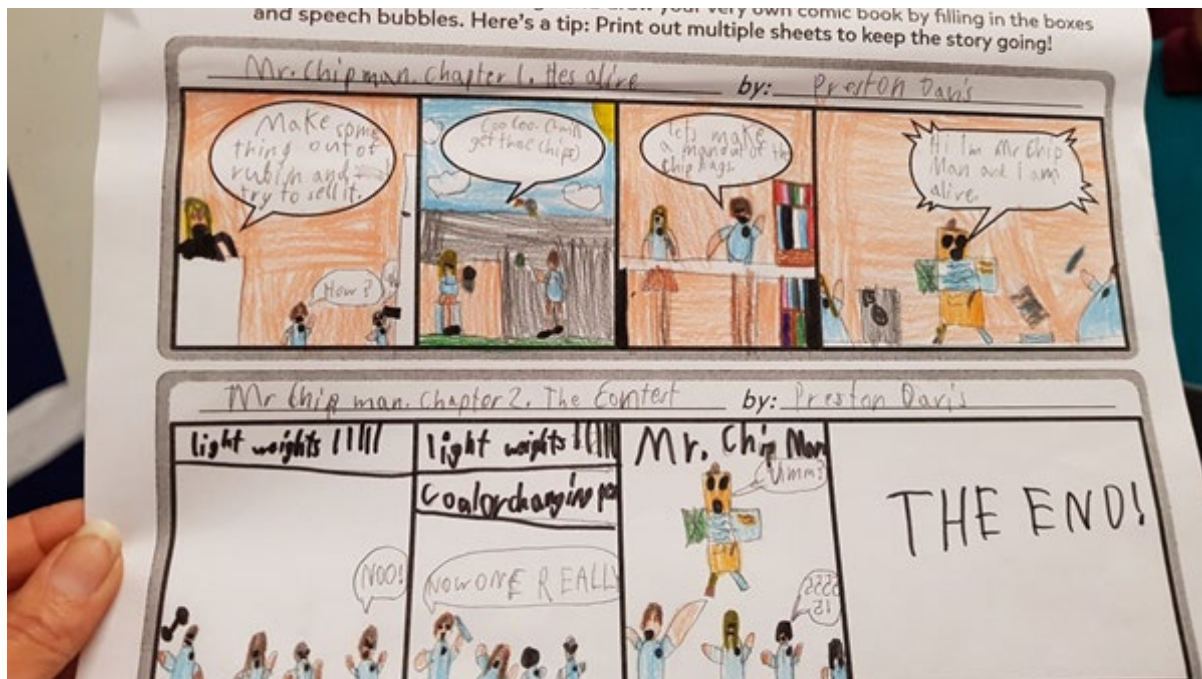
Suggestions for improvement

Leadership involvement
Observation phase to get to know the school
Extend classroom time to 1.5 hours per week

Final words

“I have learnt lots. I wish they would never leave. Let’s get a chair and rope to keep the artists here.” (Student)





Appendix

| AOL Attitudes to Reading Survey | | | |
|---|-------|--------------------------|------|
| Merriwa Primary Year 3 | | Merriwa Year 3 AOL Class | |
| Question | % Yes | % Not Sure | % No |
| 1. I enjoy reading | 70.0 | 20.0 | 10.0 |
| 2. I am not interested in books | 15 | 20.0 | 65.0 |
| 3. I like reading stories | 60.0 | 35.0 | 5.0 |
| 4. I like reading poems | 35.0 | 35.0 | 30.0 |
| 5. I like reading comics or magazines | 35.0 | 35.0 | 30.0 |
| 6. I like reading information books | 55.0 | 20.0 | 25.0 |
| 7. Reading makes me feel good | 50.0 | 25.0 | 25.0 |
| 8. I like watching TV better than reading books | 65.0 | 20.0 | 15.0 |
| 9. I like writing stories | 73.7 | 10.5 | 15.8 |
| 10. I struggle to get good ideas when writing | 52.6 | 31.6 | 15.8 |
| 11. Drawing helps me write better | 50.0 | 15.0 | 35.0 |
| 12. I like drawing | 89.5 | 0.0 | 10.5 |
| 13. I like trying new things | 75.0 | 25.0 | 0.0 |
| 14. I like to use my imagination | 70.0 | 20.0 | 10.0 |
| 15. I would like to be an author or illustrator | 15.0 | 15.0 | 70.0 |

| AOL Attitudes to Reading Survey | | | |
|---|-------|--------------------------|------|
| Merriwa Primary Year 3 | | Merriwa Year 3 AOL Class | |
| Question | % Yes | % Not Sure | % No |
| 1. I enjoy reading | 70.0 | 20.0 | 10.0 |
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| 3. I like reading stories | 60.0 | 35.0 | 5.0 |
| 4. I like reading poems | 35.0 | 35.0 | 30.0 |
| 5. I like reading comics or magazines | 35.0 | 35.0 | 30.0 |
| 6. I like reading information books | 55.0 | 20.0 | 25.0 |
| 7. Reading makes me feel good | 50.0 | 25.0 | 25.0 |
| 8. I like watching TV better than reading books | 65.0 | 20.0 | 15.0 |
| 9. I like writing stories | 73.7 | 10.5 | 15.8 |
| 10. I struggle to get good ideas when writing | 52.6 | 31.6 | 15.8 |
| 11. Drawing helps me write better | 50.0 | 15.0 | 35.0 |
| 12. I like drawing | 89.5 | 0.0 | 10.5 |
| 13. I like trying new things | 75.0 | 25.0 | 0.0 |
| 14. I like to use my imagination | 70.0 | 20.0 | 10.0 |
| 15. I would like to be an author or illustrator | 15.0 | 15.0 | 70.0 |

| Merriw Year 5-6 Scribblers Group | | | Difference | | |
|----------------------------------|------------|------|------------|----------|-------|
| % Yes | % Not Sure | % No | Yes | Not Sure | No |
| 96.3 | 3.7 | 0.0 | -26.3 | 16.3 | 10.0 |
| 0 | 3.7 | 96.3 | 15.0 | 16.3 | -31.3 |
| 88.9 | 0.0 | 11.1 | -28.9 | 35.0 | -6.1 |
| 81.5 | 0.0 | 18.5 | -46.5 | 35.0 | |
| 64.0 | 0.0 | 36.0 | -29.0 | 35.0 | -6.0 |
| 81.5 | 0.0 | 18.5 | -26.5 | 20.0 | 6.5 |
| 70.4 | 3.7 | 25.9 | -20.4 | 21.3 | -0.9 |
| 34.6 | 0.0 | 65.4 | 30.4 | 20.0 | -50.4 |
| 48.1 | 0.0 | 51.9 | 25.5 | 10.5 | -36.1 |
| 7.4 | 0.0 | 92.6 | 45.2 | 31.6 | -76.8 |
| 7.4 | 0.0 | 92.6 | 42.6 | 15.0 | -57.6 |
| 92.6 | 7.4 | 0.0 | -3.1 | -7.4 | 10.5 |
| 74.1 | 18.5 | 7.4 | 0.9 | 6.5 | -7.4 |
| 85.2 | 14.8 | 0.0 | -15.2 | 5.2 | 10.0 |
| 18.5 | 7.4 | 74.1 | -3.5 | 7.6 | -4.1 |

Appendix

| Wellbeing Survey Merriwa Yr 3 | Pre (%) | | |
|---|------------|-----------------|-------------|
| | Not true % | Somewhat true % | Very true % |
| 1.1. I like this school. | 11.8 | 35.3 | 52.9 |
| 1.2. I look forward to coming to school. | 17.6 | 29.4 | 52.9 |
| 1.3. I feel happy at school. | 17.6 | 35.3 | 47.1 |
| 2.1. My teachers care about me. | 5.9 | 29.4 | 64.7 |
| 2.2. I feel safe at this school. | 23.5 | 23.5 | 52.9 |
| 2.3. If I have a problem I can talk to my teacher. | 5.9 | 29.4 | 64.7 |
| 3.1. I can cheer up someone who is sad. | 17.6 | 23.5 | 58.8 |
| 3.2. I listen when other people talk. | 12.5 | 50.0 | 37.5 |
| 3.3. I always take turns and share with others. | 17.6 | 35.3 | 47.1 |
| 4.1. Other children help me at school. | 29.4 | 23.5 | 47.1 |
| 4.2. I have at least one friend who cares about me. | 17.6 | 11.8 | 70.6 |
| 4.3. I have friends to play with at lunch times. | 23.5 | 29.4 | 47.1 |
| 5.1. I like myself. | 29.4 | 5.9 | 64.7 |
| 5.2. I always try my best at school. | 17.6 | 29.4 | 52.9 |
| 5.3. I feel happy most of the time. | 29.4 | 41.2 | 29.4 |

| Post (%) | | | Difference (%) | | |
|----------|---------------|-----------|----------------|---------------|-----------|
| Not true | Somewhat true | Very true | Not true | Somewhat true | Very true |
| 9.52 | 23.81 | 66.67 | -2.2 | -11.5 | 13.7 |
| 9.52 | 33.33 | 57.14 | -8.1 | 3.9 | 4.2 |
| 14.29 | 19.05 | 66.67 | -3.4 | -16.2 | 19.6 |
| 4.76 | 28.57 | 66.67 | -1.1 | -0.8 | 2.0 |
| 23.81 | 28.57 | 47.62 | 0.3 | 5.0 | |
| 14.29 | 19.05 | 66.67 | 8.4 | -10.4 | 2.0 |
| 15.00 | 35.00 | 50.00 | -2.6 | 11.5 | -8.8 |
| 4.76 | 28.57 | 66.67 | -7.7 | -21.4 | 29.2 |
| 5.26 | 31.58 | 63.16 | -12.4 | -3.7 | 16.1 |
| 20.00 | 35.00 | 45.00 | -9.4 | 11.5 | -2.1 |
| 19.05 | 9.52 | 71.43 | 1.4 | -2.2 | 0.8 |
| 14.29 | 23.81 | 61.90 | -9.2 | -5.6 | 14.8 |
| 10.00 | 25.00 | 65.00 | -19.4 | 19.1 | 0.3 |
| 5.00 | 20.00 | 75.00 | -12.6 | -9.4 | 22.1 |
| 10.00 | 60.00 | 30.00 | -19.4 | 18.8 | 0.6 |

The Art of Learning 2018: Mundaring case study



Background context

Science was the key area we were working on focussing on how living things have features to help them survive and how they have adapted to enable them to exist in various environments. During the 8 weeks we covered music (music making, recording and sound), art (printmaking and collage), English (writing narratives and storyboarding), drama (taking on the role of particular animals, acting out how they move within particular environments), HASS (geography in determining the various environments within Australia).

Our focus was maths and the first project was on 2D and 3D shapes with the final product being a minibeast made of boxes (the class theme was minibeasts).

Second term was transport and we looked at travel and time. They made a passport and 'travelled' to different countries – needed to tell time, buy tickets,. They also made a diorama using 3D shapes and travel.

Term 2 we focused on the curriculum topic maths, 2D, 3D and skip counting and combined it with the term topic of Minibeast.

Throughout the term we worked with a range of disciplines and techniques in the sessions. We combined art, drama and English to engage the students. We used a range of materials and techniques such as folding, bending, rolling to create 3D plant forms, as well as construct minibeast sculptures made from recycled materials.

This term we will be using Maths as the basis and combining it with the topics of transport, time and money and addressing them in a fun creative way. We will be addressing a few topics this term such as transport, time and money. Transport- to understand the concept and the different modes of transport. Time -Year 1- On the Hour and half past the hour. Time -Year 2- On the hour, half and quarter past the hour. Money- counting and making different combinations of a number values eg 50

Term 3 the key area was again maths, focusing on time and money, combining it with the term topic of Transport. We combined the topics to create travel scenarios.

The Travel Around the World activity -connected time, money and different modes of transport used to travel. The students created passports and directed their own travel adventures from the selected destinations. They used pretend money to buy transport tickets, such as plane, train or even camel for their travels.

The students also created a storybox/diorama, drawing on a memory, experience, desire or imagination: the diorama was a visual depiction of their adventure.

Term 2 – Mundaring Christian College

We were covering Science for year 5 and 6 and discussing the way plants and animals adapt to their environments. Students explored their external environment surrounding the school in a sensory manner, noting smells, touch and textures of plants alongside acting out the role of animals and considering how surfaces and surrounding might feel. They used audio equipment to make and record sounds from the environment, used textures from plants, the playground equipment and buildings to create monoprints using colours found in each of the environments – desert, rainforest, wetlands, savannah, coastal and urban. These along with a variety of drawn plants and objects were collaged together to form backgrounds. We discussed what would happen if two different creatures combined to form a new species and what some of the challenges may be to that creature when finding themselves in a place not necessarily suitable to their physical features. Students collaborated to write scripts that had to involve a problem and solution for their character to solve. This was narrated, recorded as a puppet show and combined with soundscapes.

Term 3 – Mundaring Christian College

This term focussed on HASS covering economics and sustainability. Students created sculptures using both industrial offcuts and household packaging discussing the difference between needs and wants and then pitched their objects to classmates in an attempt to use advertising techniques to sell their product. The household packaging determined the direction of the project by considering the function of cyclic economies. Students took egg cartons back to its base product making it into a new product, milk bottles down to a flat material to make new shapes which formed an installation and gave bottle tops a new purpose as material for a mosaic mural thereby reinforcing the understanding of cyclic economy and directing materials away from landfill and back giving them a new purpose. Each session was reinforced with a short video showing the manufacture of the initial objects.

Individual School Case Studies

The Art of Learning 2018: Merriwa case study

Evaluation Methodology

A range of qualitative and quantitative data was collected throughout 2018 to capture the impact of the Art of Learning partnerships on students, teachers and artists. Data sources included classroom observations, interviews with teachers, artists and students, questionnaires administered to teachers, students, artists and parents, pre-and post-intervention wellbeing surveys, pre-and post-intervention student narrative writing samples and analysis of teacher/artist planning and reflection documentation. This wide range of data sources enabled triangulation of findings, thereby reducing internal biases and increasing the robustness of the findings. Some effects can only be measured over a longer time scale. The program evaluator will aim to continue working with the school's leadership team to continue tracking the impact on student learning over a longer period of time. Although not all data sets were collected for each class, sufficient data sources were available to enable triangulation for each finding reported here.

It is important to acknowledge the limitations of the project evaluation. The Art of Learning program is only one of many variables operating within the school environment and artists only worked directly with students for 1 hour a week across 16 weeks in Terms 2 and 3. Schools are busy places with numerous different initiatives intersecting. It is impossible to isolate the effect of a program like Art of Learning from everything else that is simultaneously happening in the school without experimental design conditions. This report can merely point out correlations without any claims of causality. Caution should also be applied around the interpretation of statistical data due to small student numbers.

What made the project unique?

Before discussing the evidence of impact that the program had in Mundaring Christian College, it is important to aim to articulate what was unique about the Art of Learning ways of working, to use as a lens for interpreting the impact data. Students were asked to reflect on how Art of Learning sessions were different to other lessons. Whilst the student comments focused on the unique contribution of the artist in the classroom setting, it is important to recognise the potential power of the project lies in combining the curriculum and pedagogical expertise of a teacher with the creative engagement expertise of an artist and not for the one to replace the other.

"In normal lessons we sit down and write and calculate and basically do paperwork, but in Art of Learning we get up and do hands-on work." (Student)

"We didn't just sit inside, we went outside. When we were inside we weren't doing worksheets, We made lots of things. We did lots of physical things compared to an ordinary class." (Student)

"We did a mix of subjects. It was better than doing individual subjects." (Student)

"In the Art of Learning we got to get out of class and get messy. We get to learn different things that aren't a subject. We got to create new and different things." (Student)

We did a mix of subjects. It was better than doing individual subjects.

Physical: I loved hammering and seeing the project keep getting bigger.

In the Art of Learning we got to get out of class and get messy. We get to learn different things that aren't a subject. We got to create new and different things.

Key success factors were doing hands-on, fun activities and giving students more control.

I think everything was different because it doesn't happen everyday and it was more fun than usual lessons.

Impact

Enhanced creative thinking skills

"Being challenged creatively gave opportunity for the children use their imagination, to be persistent and problem solve." (Artist)

"I have become better at being creative this year because of the Art of Learning." (Student)

"I have learnt how to be creative, how to build stuff, how to make up your own stories, how to imagine something." (Student)

"I now have more ideas of what to do." (Student)

"We now have more original ideas. We are using our creative thinking more." (Student)

"You think more outside the box, even outside of the school now." (Student)

"It is really interesting. We are doing different things. You get to make stuff. You get to be creative. It is really important because it helps you get better ideas." (Student)

"I definitely felt the creative confidence of the students grew over the duration of the program. Students that were timid became more confident with their ideas/work." (Artist)

"It is fun and creative and helps me improve my skills." (Student)

"The sessions encouraged the students to learn in creative ways." (Artist)

"The Year 1s and 2s have been busy working with their artist in residence too. Their artist, Adam, has helped them to use creativity and make learning fun. Below are some pictures and comments from the Year 1s." (Newspaper)

"All input was of value and by encouraging creative thinking students were more likely to make suggestions without fear of it being wrong." (artist)

"The creativity (at Mundaring) in the subject's tackles in their scripts, the characters they created along with the impairment that their new physical features caused them and the group engagement and teamwork during the filming process on the last day of term 2." (Artist)

"I felt the Art of Learning sessions had a positive impact on the little learners. The sessions encouraged the students to learn in creative ways."

"Having the freedom to express their ideas, the student's creative learnings were original and imaginative." (Artist)

"I definitely felt the creative confidence of the students grew over the duration of the program. Students that were timid became more confident with their ideas/work. It was a source of great joy when I was able to observe these changes." (Artist)

"The attitudes from the students were very positive, and they were always eager for the next session and keen to show off their creative learnings." (Artist)

"It was amazing to see the children's unique creativity, their ideas, their learning and artworks."

“I love the Art of Learning workshops and could visibly see the benefits that the children gained.” (artist)

A number of students surprised me with their ingenuity by creating moving elements in their dioramas through the creation of slots or other articulating components.

The works created were unique, instead of producing generic pieces that all looked the same. I also observed problem solving amongst the children to realise their creations. The students developed and improved their techniques and skills.

Being challenged creatively gave opportunity for the children use their imagination, to be persistent and problem solve. Artist

When the students surprise us, the teachers with unique and inventive ideas:

1. Jack created an articulating craft person for his diorama
2. Kimberley’s imaginative mode of transport in her diorama was a Portal. She also created slots in her diorama so that different elements could move.
3. Adam used previously learnt skills and created 3D pyramids for his diorama.
4. Nathaniel’s dinosaur world diorama, he was super proud
5. Lara’s diorama, where she created a 3D rocket using skills learnt in term 2. Artist

On a scale of 1-5

How much did your students’ creative thinking improve?

They in general do things totally different now; 2

Most of the time students try and do things differently now, 2

They come up with good ideas of how they can be creative in discussions 4

They can be creative if encouraged and prompted 4

It is hard for me to be creative in thinking 2

Students were asked to reflect on how much they thought their creativity had improved on a scale from 1 – 5.

Increased enjoyment (through hands-on learning)

“The activities are fun and you get to learn heaps. It’s amazing.” (Student)

“It was fun to do all the things we did, at the same time I was learning.” (Student)

“We learnt how to make learning fun.” (Student)

“I enjoyed it because the things we did were enjoyable and hands-on. They were also creative.” (Student)

“It has been worth it. It is very interesting. It just makes the class more fun and make you learn better because it is more fun.” (Student)

“It is fun and also very very very educational.” (Student)

It’s fun and you don’t realise you’re working hard.

I had to draw a picture of April, but the trick was to not look at the paper and don’t lift my hand off the paper.

The children loved it! They were extremely engaged and loved the hands-on learning. (Teacher)

We learnt how to make learning fun.

It is a more fun and creative way to learn.

A highlight was seeing how much the children enjoyed it. (Teacher)

Highlight:

Being part of the total enjoyment (Mundaring) year 5's had getting messy and mixing colours into paper pulp. The children became so immersed in the process it was as if they were back in Kindy and that is the way it should be yet often, rarely is. (Artist)

The behaviour of the students towards the Art of Learning sessions were enthusiastic, at times bordering rambunctious from excitement. (Artist)

Some of the work is hard, but it is fun at the same time.

Enjoyment: (Y5-6)

23 enjoy (50%)

12 okay (enjoyed some activities and didn't enjoy others) (26%)

11 didn't enjoy (24%)

Enjoyment depended on the activities

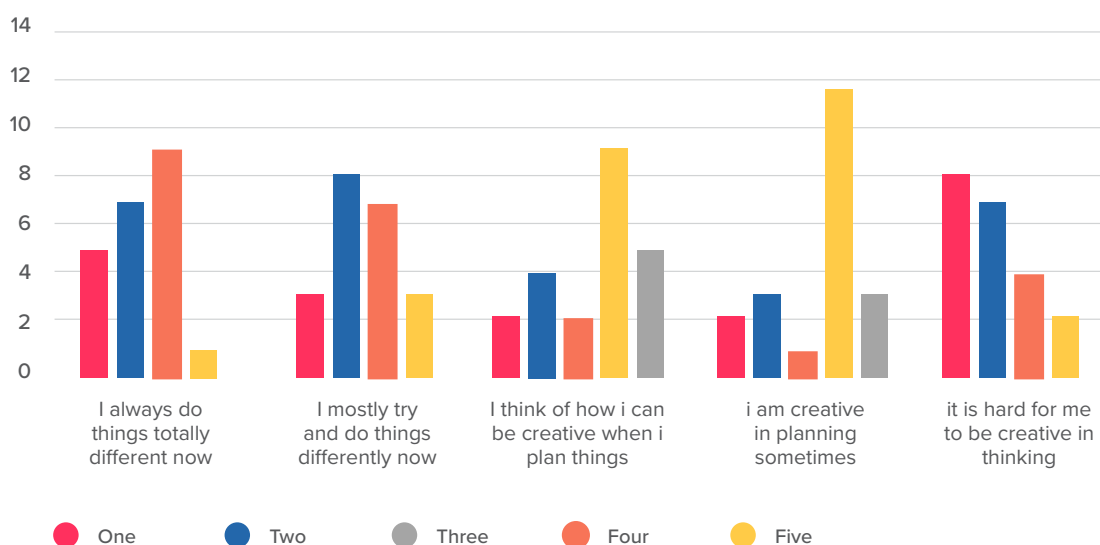
I enjoyed it because I really liked making the bottle top mural and it's fun doing the human knot.

I didn't really enjoy it. I found it a bit boring for me, but others might have liked it.

I enjoyed it. It was awesome.

It was different because we were doing more outside activities; not sitting at a desk.

Student Creativity Reflection



Sometimes I enjoyed it, sometimes I didn't because at first when we did drama, sound and art, I liked the art and drama, but not the sound, and then when we did organising plastic I didn't like it. Then when we did bottle tops I liked it. [activity dependent – didn't really see it as creativity or learning science/geography in an engaging way – it was just about the arts activities]

Enhanced student agency

"What made the project interesting was that you had choice." (Student)

"We always have a lot of freedom which I love." (Student)

"Being able to use their creativity and imagination, allowed for more interesting outcomes and unexpected outcomes. When students were given the freedom to create, many of them exceeded expectation." (Artist)

"Key success factors were doing hands-on, fun activities and giving students more control." (Teacher)

"I observed that the children enjoyed the flexible process, having more freedom to express ideas." (Artist)

"Having the freedom to express their ideas, the student's creative learnings were original and imaginative." (Artist)

I didn't like it because I don't like pulp [not student agency/choice – EBI for artists]

Success factors were hands-on learning and children had to self-manage and be responsible. (Teacher) [agency]

I observed that the children enjoyed the flexible process, having more freedom to express ideas. Not being tied down to a desk allowed for the opportunity to collaborate naturally.

Being able to use their creativity and imagination, allowed for more interesting outcomes and unexpected outcomes. When students were given the freedom to create, many of them exceeded expectation. An example of this was in the diorama a number of the children created moving and articulating elements in their artwork, which I thought was very clever. (artist)

"It was a process of stepping back and giving the kids space." "Different kids started to take leadership." (Teacher)

Improved teamworking skills

"I learnt some team building skills and art isn't just painting, it's lots more." (Student)

"It's so different to general class and we interact a lot more." (Student)

"It was a highlight observing the students collaborate and assist each other. Although the students were each creating their own minibeast, it was wonderful seeing them assisting each other in the making, as using recycled materials made it awkward to construct. I heard a lot of words of encouragement amongst the students." (Artist)

Students at this school get along with each other. Down 19% - shifts between very and somewhat true.

We learn about making friends and managing our emotions. Up 23.8%.

. We get a chance to practice building friendships and managing our emotions. Up 14.3%

I learnt some team building skills [social] and art isn't just painting it's lots more and even though some things are recyclable they can't get recycled in Aussie yet.

The best bits were working with my friends. [social]

It's so different to general class and we interact a lot more. [social]

You get to do teamwork. [social – opportunity to develop/practice, rather than having improved]

They worked more successfully in their groups, problem solving and discussing solutions as a group rather than the stronger individuals making all of the decisions. (artist)

The unity of the class in this process was a joy to watch. (Artist)

Observing the students collaborate and assist each other. Although the students were each creating their own minibeast, it was wonderful seeing them assisting each other in the making, as using recycled materials made it awkward to construct. I heard a lot of words of encouragement amongst the students. Artist

Year 5 data

84.2%

I have at least one friend who cares about me.

72.2%

I have friends to play with at lunch times.

Enhanced subject learning

(Teacher) *I think they gained understanding of 3D and 2D shapes, money and time.*

"It is fun and interesting. She makes us do lots of craft and we do 3D and we do mysterious things." (Student)

"I learnt a lot of things about many different subjects like adaptations, the environment, how to make old bad things into new useable stuff." (Student)

I learnt a lot of things about many different subjects like adaptations, the environment, how to make old bad things into new useable stuff.

"The first few weeks is always a bit chaotic and then we find our groove. Then at the end we are really amazed at what the children have achieved." (Teacher) [Project-based learning]

We drew animals mixed together (cat and bandicoot = candicoot), did drama, sound lessons and art. The biggest one is where each class had a different material (Yr5: egg cartons, Yr 5/6: milk bottles and Yr 6: bottle lids) and they make artwork out of it.

We did drama, sound, art, youtube videos, crating new animals, egg carton pulp, recycling videos, human knot, post it note reflections, advertising pitch needs and wants, organise collected materials and getting into circles and linking hands while trying to get free.

Students achieved the original outcomes expanding to include their urban environment. This enabled them to consider the impact that housing and humans have had on the survival of particular living things and also how humans have enabled introduced species to survive and in some cases flourish. They were also able to comprehend how environmental change can result in extinction of some species. (Artist)





Working on a project over a number of weeks meant opportunities to repeat information. In term 2 we would ask each week the names of each environment and discuss their physical characteristics. This repetition along with the variety of activities on offer (drama, art, music) provided opportunities for students to increase skills by trying methods and using materials that they had not previously explored. Their enjoyment and successful collaboration in performing their stories was evident in the final six videos which were filmed in the final session. (artist)

I think there was some improvement with skills, motor skills when folding, forming 2D/3D forms, however I believe more repetition of certain activities would result in a greater increase in improvement. (Artist)

I learnt how to make flowers and minibeasts.

We got to go in the bush and make 3D things. [doing vs learning]

I learnt art and stuff about different countries.

We pretended to visit different countries. We had to buy a train, plane or a bus ticket using play money.

****The Travel Around the World -this activity connected time, money and the different modes of transport used in different countries. The students were absorbed and excited throughout the sessions. This activity enabled them to create their own scenarios/ travel adventures from the selected destinations. Using the pretend money they had to buy their ticket, for the different transport modes such as plane, train or even camel to get to/travel around their chosen location.**** Artist

In creating the dioramas It was observed that many of the students were able to visually create their story box with 2D and 3D elements previously learnt in term 2. The students problem solved different ways of construction and ways to depict the story.

The children did enjoy themselves, there is no question about that, but I don't think that the students got the depth of HASS knowledge and skills they should have for a term's worth of work following our program. There were too many adults to liaise with, and too many students to work with to be able to draw out that depth of understanding that I would expect from a HASS program. Working under these conditions made the program superficial. (Artist)

Through creating and making, they were able to understand mathematical concepts. Evidence of learning was observed when some students Initially struggled with the activities such as manipulating paper to make a 3D form or creating a 3D minibeast out of recycled materials. The process required conceptual, creative thinking and imagination to re-purpose the recycled materials. Some students felt they weren't creative enough, some struggled with concepts or motorskills, however with discussion, encouragement and at times demonstration, the students persevered, resulting in a sense of achievement and pride. The group was observed sharing knowledge, collaborating and assisting each other to create their individual pieces. Through the making of these sculptural forms eg minibeasts, flowers/plants, there was an understanding of the difference between 2D and 3D.

1-year effect size key

<.0

0.0-0.39

0.4-0.79

>0.8

| Mundaring Year 5 & 6 Writing Samples | | | |
|--------------------------------------|--------|--------|-------------|
| Name | Time 1 | Time 2 | Effect size |
| Student 1 | 350 | 410 | 1.07 |
| Student 2 | 300 | 345 | 0.80 |
| Student 3 | 375 | 385 | 0.18 |
| Student 4 | 390 | 420 | 0.53 |
| Student 5 | 360 | 400 | 0.71 |
| Student 6 | 230 | 280 | 0.89 |
| Student 7 | 340 | 385 | 0.80 |
| Student 8 | 295 | 330 | 0.62 |
| Student 9 | 350 | 490 | 2.49 |
| Student 10 | 320 | 400 | 1.42 |
| Student 11 | 370 | 385 | 0.27 |
| Student 12 | 380 | 500 | 2.14 |
| Student 13 | 300 | 425 | 2.22 |
| Student 14 | 385 | 460 | 1.33 |
| Student 15 | 340 | 420 | 1.42 |
| Student 16 | 365 | 450 | 1.51 |
| Student 17 | 310 | 400 | 1.60 |
| Student 18 | 455 | 480 | 0.44 |
| Student 19 | 330 | 380 | 0.89 |
| Student 20 | 290 | 345 | 0.98 |
| Student 21 | 330 | 360 | 0.53 |
| Student 22 | 285 | 350 | 1.16 |
| Student 23 | 385 | 390 | 0.09 |
| Student 24 | 340 | 370 | 0.53 |
| Student 25 | 350 | 385 | 0.62 |
| Student 26 | 290 | 320 | 0.53 |
| Student 27 | 420 | 480 | 1.07 |
| Student 28 | 370 | 380 | 0.18 |
| Student 29 | 340 | 370 | 0.53 |
| Student 30 | 410 | 400 | -0.18 |
| Student 31 | 365 | 380 | 0.27 |
| Student 32 | 455 | 480 | 0.44 |
| Student 33 | 370 | 395 | 0.44 |
| Student 34 | 390 | 385 | -0.09 |
| Student 35 | 375 | 400 | 0.44 |
| Student 36 | 320 | 340 | 0.36 |
| Student 37 | 340 | 400 | 1.07 |
| Average | 350.54 | 396.62 | |
| STDEV | 46.74 | 49.50 | |
| Average STDEV | 48.12 | | |
| Effect size | 0.96 | | |

Mastery of arts skills

“Students mainly learnt artistic skills, e.g. how to use a looping machine or how to make pulp from cardboard.” (Teacher)

“We learnt drama, sound art, learnt how to make a youtube videos and making art out of recycling.” (Student)

Seeing real artists in real life that have created art is special.

I learnt how to make songs on one of these sound kits and how to record them.

Not for all: I think singing and making noises isn't really my thing.

I learnt how to use different materials for different purposes.

Something like the bottle top picture is really fun and beautiful. [not always clear how it served curricular learning, considering this wasn't art lesson time]
It was really interesting because we made a great painting and now we are hammering the bottle tops to it.

I love art and it was really fun meeting an artist.

Deepened understanding and changed attitudes about the environment

Yr 5-6

“I learnt that your choices do effect the environment so much and that you have to make less waste.” (Student)

“I learnt to respect/take care of the environment more.” (Student)

“Many students changed their attitude to the environment and how important it is to protect it. Some made changes, e.g. no wrapping on food.” (Teacher)

“Since Jodie and Sue came to work with us I am noticing rubbish more. I think the school is cleaner now.” (Student)

“My views on recycling and waste have changed.” (Student)

I learnt how much rubbish is hurting and killing the environment.

Sustainability was the main thing we focused on and we learnt how to prevent waste and to make something seemingly useless into a form of art.

[Not for all – or getting a bit too much]

I didn't like constantly listening to them talk about sustainability over and over again.

It's boring and it's shoving down environment messages into our throats. [environment focus not appreciated by all]

Increased willingness to have a go and keep going (resilience)/new things/ challenge

“I found it fun and exciting, it was very fun to try something new.” (Student)

“I liked trying new things.” (Student)

“It is different to normal lessons because we go outside and challenge ourselves.” (Student)

“I think it was interesting because they made it challenging.” (Student)

“It was a highlight watching the student's transformation as they persisted and conquered a challenging activity!!”

I also observed problem solving amongst the children to realise their creations.

“It’s fun and you don’t realise you’re working hard.” (Student)

“Some of the work is hard, but it is fun at the same time.” (Student)

“A student, who is often riddled with self doubt and thinks he can’t, came up to me and said: ‘because I believe I can, I made this... can you come and have a look.’”
(Artist)

It’s a good experience to learn and participate in new things.

My personal highlight was when the students saw the end product and suddenly all the prior lessons and learning fall into place. (Teacher) - Perseverance

Every lesson we usually had something different to do and it was pretty fun.

Engagement at both schools increased dramatically from the start of the project to the completion. This was clearly obvious at Mundaring by the increased participation in the warm up activity which initially had a lot of students preferring not to take part. By the final session, only three students chose not to participate. (Artist)

What I did notice was a positive improvement in students’ General Capabilities, especially Social Management (Social Capability). When I first started in Term 3, I noticed that children only joined in when they felt like it. They tended to walk in and out of the class as they felt and some children were not able to focus on a task or work well in small groups. In Week 4, we introduced the ice-breaker the human knot. The first time we tried it, there were six groups, but only one group was able to achieve the task. The other groups just gave up or had group members sabotage the activity. Several children refused to participate. They either hung around the edges of the groups or were completely disengaged. By Week 10, we built up to one giant group, and only two children refused to participate.

As a whole, they worked together really well to figure out strategies. This improvement in collaboration was reflected in class activities. The students were more focused, and they spent a longer time on their tasks before giving up. (artist)

Watching the student’s transformation as they persisted and conquered a challenging activity!! For example some of students found the creative activity of making a minibeast out of recycled materials challenging. Students Mia, Matilda and Daniel were unsure and teary as they didn’t know where to start. However with some discussion, encouragement, experimentation and lots of persistence on their part, they completed and were very proud of their recycled sculptural creations. (artist)

When Chris, who is often riddled with self doubt and thinks he can’t, comes up to me and says ‘ because I believe I can, I made this... can you come and have a look.’

Seeing Declan focus and really try with his space themed diorama and that he was happy with the result.

When Alana says ‘Art isn’t her thing, but tries and is then proud of her creation’

Seeing the transformation in Daniel who is so incredibly timid and would barely engage in term 2, come up to me regularly in term 3 and show me his work it was evident, that he was feeling very proud of himself.

Whenever Max tried and didn’t give up

Enhanced inclusivity

"This has been great for him (student with autism). The artist engaged really well with him. She got him to think creatively. He maintained interest. I noticed he became better, working more independently, organising himself better. I was blown away. Normally that doesn't happen."

(Education assistant referring to student with autism)

"Many of the students that didn't fit into the school learning mould thrived and excelled in the 'doing' of activities, construction and making and rather than traditional methods." (Artist)

Also relationship with artist:

"It has been great. She has built an awesome relationship with our kids."

Seeing real artists in real life that have created art is special.

Many of the students that didn't fit into the school learning mould thrived and excelled in the 'doing' of activities, construction and making and rather than traditional methods. Artist

When I made a connection with Logan. Logan is clever and full of energy, though at times has some behavioural/ learning issues. I was proud when his minibeast creation surprised and impressed the teachers. He was focused and worked hard on his creation. He also showed great enthusiasm and effort for the World Travel Adventure activity and was diligent in filling out his passport. Artist

The Students learn differently and at different rates I observed that many students learn through play making and construction. There was a high level of focus when the students were constructing, The activities engaged students that were often easily distracted, on the spectrum or have a particular behavioural issue. Artist

Connectedness to school

Year 6 data

81%

I feel that I belong at this school - up 38.1% from 42.9% - massive shift

-11%

Teachers and students at my school respect each other.

71.4%

My school cares about me as an individual. Up 23.8% from 46.7%

71.4%

Teachers help students who are worried or upset. Down 13.6% from 85% to 71.4% - still very high. (External locus)

+14.3%

I talk to someone when I have a problem that I need help with. (Internal locus)

+9.5%

I would go to a teacher if I needed help. (internal locus)

76.2%

My teachers listen to me and value my opinion. Up 9.5% from 66.7%

Year 5

73.7%

My teachers care about me.

78.9%

I always try my best at school.

73.7%

I feel happy most of the time.

Impact on teacher practice

"I think the AOL projects have challenged me to step out of my comfort zone and be more imaginative with my lessons. I usually stay away from messy and noisy activities."
(Teacher)

"I have also learned to involve students more in the learning process instead of planning every activity myself, e.g. ask them 'What do you think about ...?' or 'What could we do next?'" (Teacher)

"The chance to collaborate freely has been great. We often shy away from messy, noisy things. But it was great to push those ideas with the artists." (Teacher)

"Us as teachers and the kids, shy away from risks. It was good for them to have that freedom outside strict parameters."
(Teacher)

Impact on artist practice

I'm learning:

*that everything takes much longer than expected.

*that its challenging /impossible in trying to give equal time to each of the ~40 students; smaller group would be better.

*learn fun facts about minibeasts

"This experience has had a positive impact on my practice. It was amazing to see the children's unique creativity, their ideas, their learning and artworks." (Artist)

"I will always be more conscious of the 'Habits of Mind' and the 'High Functioning Learning Chart' and the emotional connections needed when creating workshops." (Artist)

These projects weren't always easy although the above makes it sound as though it may have been. They challenged me both as an arts educator, project manager and collaborating artist yet I feel more confident in my ability to navigate the school system, manage large groups, collaborate with teachers sharing our strengths to relax knowing that patience and tolerance is much more effective than the opposite and much more enjoyable.

Personally, I loved the process, the projects and the people. Given the opportunity again, I would do some things differently but some quite the same knowing that the potential for success is always there even if sometimes it's not evidently clear at first.

The biggest impact for me is in understanding that behaviours can change although it is not something that I can force into a time frame. Instead, I have developed skills and methods through practice that can be implemented and are able to instigate change subtly. Some of these can involve of a variety of consistent and short activities which don't necessarily need to be focused on a creative result. Often it is the process of the activity itself rather than the outcome that brings about the greatest reward and realisations in participants.

Although I was already conducting a lot of my workshops outdoors where possible, the benefit of this became more obvious at the schools where frequently we were confined to the classroom due to weather. The difference in the engagement of the students was visible. Initially it was a novelty, particularly at the beginning of our first sessions and resulted in lots of climbing on the playground. With more movement outside the classroom, the playground was soon forgotten as students became immersed in whatever activity they were doing. I find this in my own practice too. More often I make a point of moving beyond my office to complete my work. Administration, particularly on the computer, is more focused if I sit at a café and work. Sculpting is taken outdoors into my yard or to a park and illustration is moveable. This has resulted in increase productivity, higher levels of concentration and a renewed enjoyment of the many aspects of my work.

The process has brought about an improved awareness of the power of demonstrating as opposed to telling. Particular adult behaviours would sometimes be difficult to discuss however by modelling an alternative method, that behavior began to change. This was also evident with students. By engaging in activities with students, being willing to take part, ask questions and wait patiently for answers knowing that sometimes it may take longer than expected has helped me to be more flexible with time. Recognizing that when students are engaged, noise levels will increase but they then often reduce when they really begin to focus and be absorbed by the process. This was something that I was aware of but was fortunate to see demonstrated so obviously throughout this program.

Moving forward in my own practice I understand that even as an adult, expecting myself to remain focused on a task for an extended length of time is sometimes unrealistic. By choosing to undertake activities and creative pursuits that are authentic to who I am, I feel more fulfilled which extends to my enjoyment of sharing these with others. Being able to collaborate with artists and teachers has provided opportunities to develop new skills, explore alternative ways of thinking and successfully navigating creativity within the boundaries of a school curriculum.

As an artist – I am learning to be more disciplined. I would consider myself as a conceptual artist, and the idea is often more important than the technique. I am now revisiting some processes and techniques I learned at uni and learning new ones to see how correct techniques and quality craftsmanship can add to the meaning of my work.

As a teacher – I took on board what I learnt during my PDs and residency and transferred that into my classroom.

This experience has had a positive impact on my practice. I will always be more conscious of the 'Habits of Mind' and the 'High Functioning Learning Chart' and the emotional connections needed when creating workshops. I'm aware that smaller groups work best, so that students are able to have more individual attention and assistance if needed.

Suggestions for improvement

More planning time with artists to ensure better collaboration, organisation and quality of learning, i.e. meeting curriculum expectations

“develop outlines for who is responsible for controlling/running lessons and who needs to obtain resources”

Budget for resources

“Use PD days for planning with actual artist instead of random artists”

“Decide who is with who before the training”

“The project took up a lot of extra time, e.g. back and forth emails trying to arrange times that suited everyone, scanning of data collection, meetings, reflections, etc.”

More direction during the first PD days – meeting the artists that we will be working with and knowing/ understanding who is responsible for what

Group size

I would like a more visible involvement from the Principal of the schools if possible.

Observer in class first to build relationships

Final thoughts

“Towards the end of term 1, his mum said to Mrs De Klerk ‘ She had noticed that he was happy, and wondered what was different?’ and Mrs De Klerk responded: ‘He’s been working with Addam!’ (Mexican wave ;-))”
(Artist)



Appendix

| Mundaring Georgia Year 6 | | Pre (%) | |
|--|------------|-----------------|-------------|
| Statement | Not true % | Somewhat true % | Very true % |
| 1. I feel that I belong at this school. | 4.8 | 52.4 | 42.9 |
| 2. Teachers and students at my school respect each other. | 0.0 | 36.4 | 63.6 |
| 3. My school knows how to deal with bullying and harassment problems. | 4.8 | 47.6 | 47.6 |
| 4. I feel safe at this school. | 0.0 | 25.0 | 75.0 |
| 5. My school cares about me as an individual. | 0.0 | 52.4 | 47.6 |
| 6. Students at this school get along with each other. | 0.0 | 76.2 | 23.8 |
| 7. My teachers listen to me and value my opinion. | 0.0 | 33.3 | 66.7 |
| 8. We learn about making friends and managing our emotions. | 19.0 | 61.9 | 19.0 |
| 9. We get a chance to practice building friendships and managing our emotions. | 19.0 | 66.7 | 14.3 |
| 10. I don't give up when things get difficult. | 0.0 | 42.9 | 57.1 |
| 11. I know how to manage my emotions when things are difficult. | 0.0 | 47.6 | 52.4 |
| 12. I talk to someone when I have a problem that I need help with. | 19.0 | 61.9 | 19.0 |
| 13. My teachers encourage me to take on new challenges | 0.0 | 42.9 | 57.1 |
| 14. Teachers help students who are worried or upset. | 0.0 | 15.0 | 85.0 |
| 15. There are teachers students can go to if they are worried or upset. | 4.8 | 33.3 | 61.9 |
| 16. I would go to a teacher if I needed help. | 28.6 | 42.9 | 28.6 |
| 17. I can tell when a student is upset or worried. | 0.0 | 42.9 | 57.1 |
| 18. I know how to help a friend who is upset or worried. | 3.8 | 46.2 | 50.0 |
| 19. My school helps the parents of students who are worried or upset. | 38.1 | 33.3 | 28.6 |

| Post (%) | | | Difference (%) | | |
|----------|---------------|-----------|----------------|---------------|-----------|
| Not true | Somewhat true | Very true | Not true | Somewhat true | Very true |
| 4.8 | 14.3 | 81.0 | 0.0 | -38.1 | 38.1 |
| 0.0 | 47.6 | 52.4 | 0.0 | 11.3 | -11.3 |
| 4.8 | 52.4 | 42.9 | 0.0 | 4.8 | -4.8 |
| 0.0 | 19.0 | 81.0 | 0.0 | -6.0 | 6.0 |
| 0.0 | 28.6 | 71.4 | 0.0 | -23.8 | 23.8 |
| 0.0 | 95.2 | 4.8 | 0.0 | 19.0 | -19.0 |
| 0.0 | 23.8 | 76.2 | 0.0 | -9.5 | 9.5 |
| 4.8 | 52.4 | 42.9 | -14.3 | -9.5 | 23.8 |
| 9.5 | 61.9 | 28.6 | -9.5 | -4.8 | 14.3 |
| 0.0 | 57.1 | 42.9 | 0.0 | 14.3 | -14.3 |
| 0.0 | 42.9 | 57.1 | 0.0 | -4.8 | 4.8 |
| 14.3 | 52.4 | 33.3 | -4.8 | -9.5 | 14.3 |
| 0.0 | 42.9 | 57.1 | 0.0 | 0.0 | 0.0 |
| 0.0 | 28.6 | 71.4 | 0.0 | 13.6 | -13.6 |
| 0.0 | 33.3 | 66.7 | -4.8 | 0.0 | 4.8 |
| 9.5 | 52.4 | 38.1 | -19.0 | 9.5 | 9.5 |
| 4.8 | 38.1 | 57.1 | 4.8 | -4.8 | 0.0 |
| 9.5 | 47.6 | 42.9 | 5.7 | 1.5 | -7.1 |
| 23.8 | 42.9 | 33.3 | -14.3 | 9.5 | 4.8 |

Appendix

Mundaring Jasmyn Year 5 Post - Different Survey

Statement

- 1.1. I like this school.
- 1.2. I look forward to coming to school.
- 1.3. I feel happy at school.
- 2.1. My teachers care about me.
- 2.2. I feel safe at this school.
- 2.3. If I have a problem I can talk to my teacher.
- 3.1. I can cheer up someone who is sad.
- 3.2. I listen when other people talk.
- 3.3. I always take turns and share with others.
- 4.1. Other children help me at school.
- 4.2. I have at least one friend who cares about me.
- 4.3. I have friends to play with at lunch times.
- 5.1. I like myself.
- 5.2. I always try my best at school.
- 5.3. I feel happy most of the time.

| Post (%) | | | |
|----------|----------|---------------|-----------|
| | Not true | Somewhat true | Very true |
| | 0.0 | 47.4 | 52.6 |
| | 5.6 | 72.2 | 22.2 |
| | 0.0 | 84.2 | 15.8 |
| | 0.0 | 26.3 | 73.7 |
| | 0.0 | 57.9 | 42.1 |
| | 15.8 | 42.1 | 42.1 |
| | 0.0 | 57.9 | 42.1 |
| | 0.0 | 52.6 | 47.4 |
| | 0.0 | 55.6 | 44.4 |
| | 0.0 | 68.4 | 31.6 |
| | 0.0 | 15.8 | 84.2 |
| | 0.0 | 27.8 | 72.2 |
| | 5.3 | 47.4 | 47.4 |
| | 0.0 | 21.1 | 78.9 |
| | 0.0 | 26.3 | 73.7 |

The Art of Learning 2018: Scotch College Case Study



Background context

In 2018 two classes from Scotch College participated in FORM's Art of Learning program, one class from Junior School and one class from Middle School. The aim of the program is to make a positive impact on student academic, social, emotional and creative learning through establishing partnerships between teachers and creative practitioners/artists. Each teacher-artist pairing chooses an area of the curriculum to target each term and they work together to plan a series of learning activities to co-teach the chosen curriculum areas in creative ways. The creative practitioners visit the school once a week during Terms 2 and 3 to co-facilitate a 60-minute learning experience with the teacher to their own class of students. Time is built into the program design for a weekly plan-do-reflection cycle between the teacher-artist pairs.

During 2018 actor/director Michael Abercromby worked with the Year 4 classroom of Olivia Creagh and the Year 6 classroom of Lauren Ellington within the iLearn subject area. In Year 4 the focus for Term 2 was a topic on myths and legends, leading to an in-depth investigation by each student on a legendary person. The mediums of theatre and script writing was used to get the boys to think of the legendary characters as real people with opinions and the capability for interactions, rather than just a sequence of facts and achievements. The Year 4 focus in Term 3 was a topic on the age of explorers. The main outcome was the development of board games in teams to demonstrate an understanding of the opportunities and challenges faced by explorers.

In Year 6 Term 2 was focused on studying a topic on energy, electricity, and particularly renewable sources of energy. Students worked in teams to develop a news report on their chosen topic, which included scripting, filming and editing the news report. In Term 3 the Year 6 students studied a topic on migration. Students explored their own migration histories, concepts like cultural bias and stereotypes as well as migration legislation and statistics through a range of arts-based activities, including role play and drawing. The topic concluded with the students writing letters to students in a diverse school in Maddington.

Individual School Case Studies

The Art of Learning 2018: Scotch College case study

Evaluation Methodology

A range of qualitative and quantitative data was collected throughout 2018 to capture the impact of the Art of Learning partnerships on students, teachers and artists. Data sources included classroom observations, interviews with teachers, artists and students, questionnaires administered to teachers, students, artists and parents, pre-and post-intervention wellbeing surveys, pre-and post-intervention student narrative writing samples and analysis of teacher/artist planning and reflection documentation. This wide range of data sources enabled triangulation of findings, thereby reducing internal biases and increasing the robustness of the findings. Some effects can only be measured over a longer time scale. The program evaluator will aim to continue working with the school's leadership team to continue tracking the impact on student learning over a longer period of time. Although not all data sets were collected for each class, sufficient data sources were available to enable triangulation for each finding reported here.

It is important to acknowledge the limitations of the project evaluation. The Art of Learning program is only one of many variables operating within the school environment and artists only worked directly with students for 1 hour a week across 16 weeks in Terms 2 and 3. Schools are busy places with numerous different initiatives intersecting. It is impossible to isolate the effect of a program like Art of Learning from everything else that is simultaneously happening in the school without experimental design conditions. This report can merely point out correlations without any claims of causality. Caution should also be applied around the interpretation of statistical data due to small student numbers.

What made the project unique?

Before discussing the evidence of impact that the program had in Scotch College, it is important to aim to articulate what was unique about the Art of Learning ways of working, to use as a lens for interpreting the impact data. Students were asked to reflect on how Art of Learning sessions were different to other lessons. Whilst the student comments focused on the unique contribution of the artist in the classroom setting, it is important to recognise the potential power of the project lies in combining the curriculum and pedagogical expertise of a teacher with the creative engagement expertise of an artist and not for the one to replace the other.

Students described the sessions as “more creative and fun”. Deeper prompting helped to identify the specific characteristics that made the lessons more creative and fun. A strong theme that emerged from the data is the interactive nature of the sessions: students were engaged in physical learning, not being desk-bound and thus learning-by-doing.

“I enjoyed it because it was more creative than normal classes and interactive and fun.” (Student)

“It was funner because you got to do physical stuff instead of just writing down stuff. The activities we did were fun and educational.” (Student)

“Instead of sitting at our desks and working we would creatively find ways to teach us in an enjoyable way.” (Student)

“I would like to learn like this more often because it engages more students into the topic because it's fun and physical.” (Student)

“It was fun and interactive. It gave us a break from desk work.” (Student)

“It is more interactive and it help me understand the topics more.” (Student)



“It was different because lessons are not as interactive. In a normal lesson you sit and listen.” (Student)

“He loved the ‘active’ element of learning.”
(Parent)

Each Art of Learning session contained a wide variety of activities. The variety and fast pace of introducing different practical activities engaged students and meant there was never a dull moment.

“Having an artist and a teacher together is good. You learn differently when he is here. There is more variety when he is here.”
(Student)

“It was interesting because it was involving and actually making it to do work or activities.” (Student)

“We did activities like being electrons and doing a news report.” (Student)

“We did activities to lead up to a big project which was fun and led to more understanding.” (Student)

“It was different to a normal lesson because it was a lot more exciting and interactive and there was a lot of fun activities on the way.” (Student)

“It’s creative. We do lots of activities. We are active, not really sitting down.” (Student)

Games were used very effectively to teach concepts in enjoyable ways:

“We did warm up games, hands-on exploration, e.g. migration role play, news reports, board games, desert island presentations, drawing, acting, thinking, talking, etc.” (Student)





Impact of the Art of Learning at Scotch College in 2018

The project evaluation aimed to capture the impact of the program on students, teachers, artists and the wider school community.

Impact on students

Numerous positive effects on student learning, thinking, creativity, attitudes and personal and social skills were reported and are outlined below.

Enhanced engagement and motivation to learn

Teachers and students reported that the boys became more engaged in the learning process through the Art of Learning project.

“I think the boys were more engaged in their learning and became more confident to perform in front of the class.” (Teacher)

“It is a lot more interesting way of learning. You get to try out new things.” (Student)

“[A personal highlight was] seeing the boys become more confident and engaged in their learning.” (Teacher)

“It’s fun, engaging and an easy way to learn.” (Student)

“These classes were different to normal classes in that they were more engaging, more fun. It’s more fun than just sitting down and taking notes.” (Student)

“I would love to learn like this more often because I am more engaged in learning when we get to play.” (Student)

The project also enabled learners of all ability levels to engage fully in the learning process, which does not always happen when students with learning difficulties are often excluded from group work or assessment tasks.

“We have a student with special needs operating a very low level. He usually can’t participate in assessments or group projects. This has been great for him. He could participate.” (Teacher)

Increased engagement describes the behaviour of students actively participating in the learning process (the what); motivation runs deeper and taps into why. Whilst student could engage because they feel they ought to, intrinsic motivation only occurs because a person wants to engage. At Scotch College the Art of Learning project managed to tap into both engagement and more deep-seated motivation with parents and students reporting increased motivation towards learning with changed attitudes and more enthusiasm for learning.

“I have noticed more intrinsic motivation to learn.” (Parent)

“I have noticed he has more enthusiasm for learning.” (Parent)

“His overall approach to school has become more positive with this creative form of learning.” (Parent)

“I would like to learn like this because I feel it makes me less bored and when I’m bored I don’t learn or listen as much.” (Student)

“The difference from normal lessons is it’s fun which means you want to study about it.” (Student)

Deeper thinking, better learning

Students, parents and teachers reported how the Art of Learning project engaged the students in deeper thinking and, as a result, better learning. The interactive learning challenged learners to think more deeply, more critically and ‘use our brains’.

“I did enjoy participating in the art of learning project. This is because art of learning allows you to expand your brain in a fun way.” (Student)

“The collaboration really built up the critical thinking skills to be much stronger.” (Teacher)

“It allowed them to ‘dig deeper.’” (Teacher)

“We’re using our brains in such a creative way. We are taking learning a level higher.” (Student)

Some students reported that they had learnt specific learning strategies that could benefit them.

“The art of Learning lessons was different to normal iLearn lessons because Michael showed me different strategies of taking notes and using key words and information about the topic.” (Student)

Students also identified improvements in focus or concentration as a result of the interactive learning style.

“I enjoyed this because it was very interactive and it made me feel more focused.” (Student)

“I enjoyed being part of a group while still learning. It brought a bit of fun and made me feel better, improving my concentration.” (Student)

Students, teachers and parents reported how the interactive learning and the deeper thinking enhanced learner understanding. The learning felt easier, made more sense and retention was enhanced.

“I think the boys found the research tasks easier than they had in previous years (I have taught year 4 for 6 years at Scotch) as they were able to learn topics and concepts in different ways.” (Teacher)

“I found that the information from that lesson can stay in your head better.” (Student)

“I would love to learn like this more often because it is a lot easier to understand and write out.” (Student)

“I found it easier to process information with games and activities rather than a teacher droning on and on.” (Student)

“It was very interesting, fun and I was able to make more sense of it.” (Student)

“This helped me understand the topic better.” (Student)

“He loved all the interactive style of learning. Role playing worked really well for his style of learning! What an awesome learning opportunity!!!” (Parent)

Increased enjoyment of learning

Students definitely enjoyed the Art of Learning sessions. Students, parents, teachers and artists reported this effect with all students identifying high levels of enjoyment as a key outcome. 100% of parent surveys from both the Junior school and Middle school class involved, indicates that their children enjoyed the project and that they would like their child to do it again if given the chance.

“The boys thoroughly enjoyed all of the Art of Learning sessions and said it made learning more fun.” (Teacher)

“He loved being part of the Art of Learning project. He found it fun, stimulating, exciting and amazing. It was the highlight of his week.” (Parent)

“The boys were engaged and really enjoyed the opportunity to deliver a project/ knowledge/ information in a different way.” (Artist)

“It is incredibly fun. It is very, very, very, very, very, very, very fun and funny. He does most of it hands-on.” (Student)

“The boys had a wonderful opportunity to work with an actor and loved every minute of it!” (Teacher)

“It has made learning fun.” (Student)

“Anything that makes learning more enjoyable for a boy not naturally in love with school is helpful.” (Parent)

Some students reported enjoyment because it didn't feel like work:

“We did not do as much work as we usually do and we played a lot more games than usual.” (Student)

“It was very different in a good way as we got to play a lot more fun games.” (Student)

“He was usually happy with the games and enjoyed the experience.” (Parent)

“It was really different because we did warm up games and we didn't do much paperwork. We only did drawing and talking.” (Student)

Whilst students found the sessions very enjoyable, there was definitely understanding that it was not enjoyment at the expense of learning, but enjoyment in the service of better learning and that the games were an essential component to further their learning and understanding.

“It felt like play, but he learnt more.” (Parent)

“I learnt that you can learn more in a fun, engaging class than a normal class.” (Student)

“I really enjoyed participating in the Art of Learning project because it was interacting us with learning in a different perspective.” (Student)

“It was good and made schoolwork better.” (Student)

“It was fun and a better way of learning.” (Student)

“It was funner than a normal lesson but at the same time I also learnt more.” (Student)

It seems that not all parents were convinced of the link between enjoyment and learning.

“He really enjoyed it, however it did seem to consume a lot of time that could be spent on spelling or science or core skills so my reservation would be whether there is a balance of time between fun and things that they need to learn.” (Parent)

Improved subject learning outcomes

Apart from better generic learning strategies and engagement, teachers, artist, parents and students all reported improved learning outcomes in the specific subjects targeted by each teacher-artist pairing.

“The quality of the student’s work definitely improved.”

“There was a much deeper level of understanding and higher quality work than in previous years.” (Teacher)

“My child learnt a range of history, geography and interactive constructive activities in a fun environment.” (Parent)

“I learnt a lot about the topics like how electricity flows through a circuit.” (Student)

“I have done this project six times before, but the quality of the boys’ work is better this year.” (Teacher)

What was unique was that the boys did not just learn the content, they became passionate about it, developing a deep emotional connection with the learning content. Parents noticed this enthusiasm and teenage boys were happy to report ‘loving’ electricity and other topics, being inspired by the passion they saw in Michael and his ability, as an artist, to normalise the use of emotion in the learning process.

“I think that the coolest thing that I have learnt is that I have friends and that I love electricity because without it we wouldn’t have evolved into the people we are today.” (Student)

“It showed us so much about electricity, conductors and insulators, stereotypes, migration and more, but it was very interesting to be learning about these fascinating tasks.” (Students)

“I have noticed enthusiasm about historical figures, a broader knowledge base and a sense of interest and achievement from construction activities in my son.” (Parent)

“What made the project special was the fact that we did the same thing that we would do in a normal lesson and change the way you learned the stuff. I would like to learn like this more because it was really fun and the teacher [artist] really had passion for this.” (Student)

The project also provided opportunities for students to develop artistic skills as these were seamlessly integrated into the learning process.

“I learnt more than the curriculum as I learnt how to film and make a news program and other life skills.” (Student)

“They really enjoyed learning ‘Periphery’ skills (like script writing, editing, board game creation, grid making), and could see how they could use things like this in the future.” (Artist)

“It is quite cool working with Michael. We don’t normally do things like filming and script writing, but we are still learning.” (Student)

“He enjoyed showing me the iMovie while talking about the process involved in making it.” (Parent)

“He learnt how to manipulate technology whilst using the green screen.” (Parent)

“This is technically a mix of all subjects when we work with Michael. We’re learning everything technically.” (Student)



Enhanced student agency and ownership of learning

The project-based nature of the learning experiences, with students working towards real outcomes with real purpose and real audience (e.g. the news report or historical character presentations), enhanced student agency and contributed to greater ownership of the learning process. Students reported the positive impact of being given more responsibility or agency to manage their own time, to the extent that they found it unhelpful when their learning was interrupted by adults.

"I liked having the new process of videoing ourselves and getting outside and having some responsibility. It involved me with the work." (Student)

"I loved the news report because they let us do our own thing without interruption so I could get in role." (Student)

"It was different because: We had a different teacher. We used acting in learning. They let us manage our own time" (Student)

"The least favourite things was when we had to do a task and 30 seconds in they would interrupt so we couldn't get much done." (Student)

The enhanced agency led to ownership and pride in their achievements, which were reported by teachers, artist and parents.

"The feedback from the students was wonderful. They were so proud of what they achieved and having that product to showcase was great for them." (Teacher)

"The delivery of the projects was great. I was particularly proud of the news reports. They went really well and the boys were very excited by the project. It was nice to see the boys proud of work they had done, because it had more elements than just regurgitating knowledge. Theirs was unique to them and their group, and it was really great to see the pride in the creativity or ingenuity which made their projects unique." (Artist)

"I have noticed a sense of interest and

achievement in my son.” (Parent)

Some of the projects, e.g. filming the news reports, were really ambitious and whilst the teachers feared they may not be able to sustain these activities on their own, it was exactly the ambitious nature of these projects that made them the best. It challenged students to work more independently, which made it hard for the adults to control, yet it delivered great outcomes. This was a very valuable learning experience for students and it would be a pity to lose that. The big projects were by far the best aspect of the Art of Learning program for students.

“It was a very ambitious project that won’t be sustainable without Michael and extra IT support, but the outcomes were great.” (Teacher)

“For me one of the best bits was filing the news report.” (Student)

“The best bits of the project for me were learning how to use the greenscreen and put a GIF into it.” (Student)

“The best parts were when we did the news report acting because it was fun and engaging.” (Student)

“My favourite part was the film making. I love creating films and especially funny ones so this was cool for me.” (Student)

“My favourite project was the desert island project when we did research on a famous character. We dressed up, did research and had to present how we would survive on the desert island. We also did plays in class and wrote a script.” (Student)

“We did energy, government, migration. They were all fun, but my favourite had to be the energy because we did a news report.” (Student)

“It was an enormous job but incredibly

worthwhile.” (Teacher)

Improved cooperation and collaboration skills

The frequent use of groupwork as a learning strategy resulted in the identification of improved cooperation and collaboration skills by students, teachers, artist and parents from both classes.

“The boys showed an extraordinary improvement in groupwork over the 16 weeks.” (Teacher)

“The largest notable effect on both classes was their steep improvement with group work. They became more and more comfortable to work together, share ideas, collaborate and compromise.” (Artist)

“Feedback from the boys show that they are learning to collaborate as a team. They loved working together. It is powerful for them to see each other’s work.” (Teacher)

“He learnt how to collaborate with members of the group.” (Parent)

“I like the collaboration and group dynamic. He learnt how to delegate. He would usually take on the whole work himself.” (Parent)

“Their ability to teach each other editing skills on iMovie showed a great comfort with group work.” (Artist)

“I learnt different skills compared to just working, like working in a group.” (Student)

“It was really fun because I thought that the level of interaction with students was outstanding.” (Student)

“A personal highlight was observing the improvement in the boys’ cooperation

skills.” (Teacher)

The pre-and post-intervention wellbeing survey (see Appendix) indicated interesting findings regarding social competency in the Year 4 classroom. There was a 31.7 percentage point increase in agreement with the statement “We learn about making friends and managing our emotions” from 64% to 95.7%. There was also a decrease in some of the social competence indicators. Agreement with the statement “Teachers and students at my school respect each other” decreased from 76% to 56.5% and agreement with the statement “I know how to help a friend who is upset or worried” went down from 84% to 73.9%. It is worth reiterating the reminder to apply caution around small sample sizes and the inability to attribute these effects purely to the Art of Learning program.

These seemingly contradicting figures are, however, consistent with the qualitative data collected. During the Art of Learning students gained deeper insight into the process of collaboration. They realised that it can be hard, that it involves compromise, open-mindedness and that others don’t always behave the way you want them to. They realised that learning to collaborate well is a process and, over time, with repeated practice, they got better at it.

“We had some really annoying people who ruined some of the games.” (Student)

“Cooperation was the greatest challenge throughout the project. Some of the boys found it difficult to accept other people’s ideas and work together on a task. Most of the tasks the boys completed were collaborative and it was amazing to see the difference in their ability to work together in the last project. They were more open-minded to the perspectives of others and shared the work.” (Teacher)

“Sometimes the excitement levels caused some problems, but I have found that as we have been more transparent with work, and different groups and students have presented work to a high level, it has lifted the class to want to produce group work at the same level. This has created more focus and a desire to create something great.” (Artist)

“I learnt that it is a lot more fun to work in a group than by yourself.” (Student)

“I think that the coolest thing that I have learnt is that I have friends.” (Student)

“Group work is now easier. We share the load and have more ideas.” (Student)

Enhanced empathy

When Year 6 students learnt about migration through The Art of Learning it was more than just acquisition of knowledge. The experiential activities, e.g. first-person role plays and exploring stereotypes through drawing, had a profound impact on the students. Their attitudes changed as they reported greater empathy, caring, open-mindedness, cultural awareness, compassion and gratitude.

“I didn’t just learn about the topic, I also learnt how to be more caring and being more open-minded to other ideas.” (Student)

“During the project I learnt a lot of things, like what people think stereotypical people are like from different cultures.” (Student)

“I have noticed how drawing helps them to break down stereotypes.” (Teacher)

“It has made me more open-minded and more curious about the world.” (Student)

“I learnt more about what and how difficult the events some people have gone through and formed my opinion. It was that people shouldn’t be fined for running away from war in different countries.” (Student)

“If I ever met someone that has migrated I would know how to act.” (Student)

“It was more fun and more education for life skills like caring and being more social.”

“I know that I learnt that I am very privileged to live in Australia and how privileged I am to live in a very wealthy city.” (Student)

Enhanced creative thinking skills

Students, parents, artist and teachers noticed enhanced creative thinking skills. This was expressed in two different ways. Firstly, students developed a greater awareness of their own creativity.

“It is very interesting and fun when Michael comes. We are learning how to be creative and use your brain when he comes.” (Student)

“They got to explore their creativity.” (Parent)

“I have noticed a positive approach to different creative ways of learning.” (Parent)

“It was really great to see the pride in their creativity or ingenuity which made their projects unique.” (Artist)

“I think it is a different way of learning important skills for the future.” (Parent)

“I liked it because I could be creative.”

Secondly, students gained opportunities to practice specific creative strategies, e.g. problem-solving or develop specific creative habits of mind, e.g. imagination, open-mindedness and reflection.

“They were more open-minded to the perspectives of others and shared the work.” (Teacher)

“It has made me more open-minded and more curious about the world.” (Student)

“He learnt to look at problems in a more creative sense – not to try and provide an answer he thought the teacher wanted.” (Parent)

“I learnt that to be able to learn you need to have time to be creative, listen to yourself and others and to be confident in your learning. I would make more time during school to do some self-time like being able to reflect, be creative and just do what I want to do.” (Student)

“I learnt to free my imagination.” (Student)

Increased confidence

Teachers and parents from both classes noticed an improvement in student confidence levels, particularly with regards to speaking in front of others.

“A personal highlight was seeing the boys become more confident and engaged in their learning.” (Teacher)

“It was easier for them to get into character. They were more confident in their presentations. They could convince people much better.” (Teacher)

“I have noticed my son is more confident speaking and performing in front of people.” (Parent)

“He has more confidence – especially in front of peers.” (Parent)

“I think the boys were more engaged in their learning and became more confident to perform in front of the class.” (Teacher)

“He did seem a lot more confident in his ability to speak in front of others.” (Parent)

“They became much more confident in their classwork.” (Teacher)

This newfound confidence could have a powerful future effect on student learning. John Hattie defines self-efficacy as “the confidence or strength of belief that we have in ourselves that we can make our learning happen” and it has an effect size of 0.92 on student learning, well above the hinge point of 0.4 (Hattie, 2008; Hattie, 2011).

Developing resilience

The artist constantly challenged the students to participate in new activities, to take on new challenges, to make themselves vulnerable in front of their peers, to have a go, to make mistakes and to learn from failure. This developed student resilience.

“It made it special and interesting because Michael came in once a week and had so much for us to do and made it really fun.” (Student)

“I learnt about how long it takes to make a news report. First you have to research, then you have to write a script, etc.” (Student)

“I also quite enjoyed the board game creation, even though it wasn’t universally successful. Some of the ideas were incredible, and I wish I had have started the process two sessions earlier so we could have all played them. I also missed a great opportunity (again ran out of time/ sessions) for the boys to reflect on why theirs didn’t work, as you can learn a lot from “failure”. Mostly this had to do with the boys contradicting their own guidelines for what makes a good game, and what is achievable in the time they had, so that would have been interesting to see.” (Artist)

Year 4 wellbeing survey data (see Appendix) showed that resilience is still a work in progress. Agreement with the statement “I don’t give up when things get difficult” went down from 84% to 65.2%. At the same time student agreement with the statement “My teachers encourage me to take on new challenges” went up 7 points from an already high 80% to 87%. Encouragingly, there was a pronounced improvement in the survey item measuring student ability to manage emotions when being challenged. Agreement with the statement “I know how to manage my emotions when things are difficult” increased by 15% points from 72% to 87%.

Enhanced connectedness

The project evaluation identified an increase sense of connectedness at different levels: students-to-students, students-to-teacher, students-to-parents, parents-to-school and students-to-school. Again, we must remember that this finding may be attributed merely to strengthening of connections due to the passage of time, however, when read in conjunction with other data a pattern of impact does emerge.

Strengthened student-to-student relations were reported, including the integration of new children and students with learning difficulties.

“He enjoyed it because of the interaction with others. He found that fun.” (Parent)

“We have a student with special needs operating a very low level. He usually can’t participate in assessments or group projects. This has been great for him. He could participate.” (Teacher)

“It was great to see the students with low levels getting involved and great to see the other boys stepping up to support them.” (Teacher)

“I have noticed that he has finally settled into his class and made some friendships. He seems better at listening and is very eager to help and see a task through. Is this due to the program or the natural evolution of his skills in a supportive environment?” (Parent)

“I think that the coolest thing that I have learnt is that I have friends.” (Student)

Student-teacher connectedness improved as teachers got the opportunity to collaborate with their students in creative learning tasks and to see their students interact through different ways of learning.

“I don’t often get the opportunity to see the boys in their Performing Arts lessons and it was wonderful to see them learn about our units of inquiry through a different approach.” (Teacher)

The wellbeing survey showed a 24.9-point increase in agreement to the statement “I would go to a teacher if I needed help” from 36% to 60.9%. At the same time ratings went down for the statement “There are teachers students can go to if they are worried or upset”, down 21.5 points from 76% to 54.5%, reflecting a decrease in external locus of control accompanying the increase internal locus of control in the previous statement.

The data reflected an increased sense of connection between parents and school. Students felt that parent connection strengthened, reflected in an increased agreement with the statement My school helps the parents of students who are worried or upset, up 18.3% points from 60% to 78.3%.

“The boys love it. The parents too.” (Teacher)

Parents also reported how their sons shared more and connected more with family.

“It is great that he has an interest in family history now.” (Parent)

“My son has been very stimulated and thoroughly enjoyed his year. I have loved hearing stories of how he enjoyed his day.”

(Parent)

Finally, the wellbeing survey indicated a strengthened relationship with school. Agreement with the statement “My school cares about me as an individual” went up from 56 % to 73.9% from the beginning to the end of the project, an increase of 17.9 percentage points.

Impact on creative teaching practice

The Art of Learning project does create extra work for teachers, but both teachers felt it was worth the effort, for the sake of the students and their own professional practice. Whilst, at times, the adoration the children feel for the artist could lead to feelings of insecurity the teachers have learnt many new creative teaching strategies that they have already shared with colleagues and implemented in their own teaching practice.

“At stages very stressful, but ultimately very rewarding project.” (Teacher)

“The kids are loving it. They look forward to when Michael is coming. What about me?” (Teacher)

“I have noticed some of Michael’s strategies rubbing off on me. For example, in other lessons I am now getting the kids to draw more, not just use words and getting them to brainstorm more. I have noticed how drawing helps them to break down stereotypes.” (Teacher)

“I will spend more time doing oral activities as I can see it really enhances the boys’ writing.” (Teacher)

“The workshop style lessons was very effective and I would like to do this more in the classroom.” (Teacher)

“I have started to consider how to incorporate a creative habit into my lessons that links to the learning objective.”

(Teacher)

“It highlighted the importance of slowing down and ‘digging deeper’.” (Teacher)

“It has given me some great ideas how I can incorporate more creative thinking into the classroom.” (Teacher)

“Michael is a great resource of ideas for me as a teacher.” (Teacher)

“I learnt lots of little activities that can be shared with other teachers.” (Teacher)

“It was an incredible learning experience for me.” (Teacher)

“Planning with the teacher has been great. She has been very receptive to my ideas and has given great feedback about her classes abilities and challenges. She has been great with incorporating some of my ideas into her regular teaching and continuing with aspects of the project even when I am not there which has been great.” (Artist)

Artists growth and learning

The impact on the artist working in Scotch College can’t be triangulated from multiple viewpoints, since there was only one artist, but reflections were still captured and reflect views from different times and contexts, collected via different methods, including interview, survey, self-reflection and planning documentation. It clearly indicates how the artist has implemented some of the concepts learnt during the program (e.g. reflection and elements of a high functioning classroom) into his artistic practice. The artist has also learnt from the teachers, which had a positive impact on his practice.

“I definitely have been using reflection more and more in my directing practice. Even though not formalised in a written way, I find myself more and more asking “What did you think of that?”, “How did you feel you went” or “What is this scene about?”. I have also noticed that people start a bit stunned by these questions, but after a couple of rehearsals, get very good at answering them. This shows me that reflection needs to be practiced, and something I will keep in my rehearsal rooms.” (Artist)

“A high functioning classroom looks much like a high functioning rehearsal room. I was already doing this as a director, but using the chart has helped me identify more areas I can allow the performers to be autonomous, create and engaged.” (Artist)

I noticed that what I was initially trying to deliver was too advanced for the boys. I got Olivia to do some written feedback and a common comment was clearer instructions. I have taken this on board, reduced the complexity of the content, and allowed more time for the boys to ask questions about each activity.” (Artist)

Suggestions for improvement

Feedback from the pilot program has enabled FORM to make improvements to the program for a wider roll-out in 2019. This is discussed in more detail in the overall project report to FORM. Specific recommendations that were identified in the Scotch data include:

- Manage expectations of what is achievable in 8 hours a Term.
- Clarify all expectations on teacher time commitments up front.
- Ensure parents understand the program.

- Clarify artist/teacher roles and responsibilities upfront.
- Consider longer sessions or intensive blocks of time with students: 50-60 minutes a week were too short.
- Work more closely with school leadership teams to collect a full data set from all classes involved as well as comparison control group data.
- Comparison survey with control group class on the same topic.

Final words

The Art of Learning 2018 was a pilot program. Whilst there is room for improvement on project coordination, delivery and evaluation, triangulated data from the evaluation indicates that the program had a profoundly positive impact on students, teachers and the artist at Scotch College. There is strong desire from students and parents for this work to continue at the college to expand opportunities for enhanced engagement, creativity and learning; to benefit other students, teachers and parents within the school community.

“We’re using our brains in such a creative way. We are taking learning a level higher.” (Student)

Appendix

| Scotch Year 4 | | Pre (%) | | |
|--|----------|---------------|-----------|--|
| Statement | Not true | Somewhat true | Very true | |
| 1. I feel that I belong at this school. | 4.0 | 20.0 | 76.0 | |
| 2. Teachers and students at my school respect each other. | 0.0 | 24.0 | 76.0 | |
| 3. My school knows how to deal with bullying and harassment problems. | 4.0 | 24.0 | 72.0 | |
| 4. I feel safe at this school. | 0.0 | 8.0 | 92.0 | |
| 5. My school cares about me as an individual. | 8.0 | 36.0 | 56.0 | |
| 6. Students at this school get along with each other. | 8.0 | 52.0 | 40.0 | |
| 7. My teachers listen to me and value my opinion. | 4.0 | 24.0 | 72.0 | |
| 8. We learn about making friends and managing our emotions. | 0.0 | 36.0 | 64.0 | |
| 9. We get a chance to practice building friendships and managing our emotions. | 8.0 | 28.0 | 64.0 | |
| 10. I don't give up when things get difficult. | 4.0 | 12.0 | 84.0 | |
| 11. I know how to manage my emotions when things are difficult. | 0.0 | 28.0 | 72.0 | |
| 12. I talk to someone when I have a problem that I need help with. | 4.0 | 56.0 | 40.0 | |
| 13. My teachers encourage me to take on new challenges | 4.0 | 16.0 | 80.0 | |
| 14. Teachers help students who are worried or upset. | 12.0 | 16.0 | 72.0 | |
| 15. There are teachers students can go to if they are worried or upset. | 4.0 | 20.0 | 76.0 | |
| 16. I would go to a teacher if I needed help. | 8.0 | 56.0 | 36.0 | |
| 17. I can tell when a student is upset or worried. | 8.0 | 32.0 | 60.0 | |
| 18. I know how to help a friend who is upset or worried. | 0.0 | 16.0 | 84.0 | |
| 19. My school helps the parents of students who are worried or upset. | 16.0 | 24.0 | 60.0 | |

| Post (%) | | | Difference (%) | | |
|----------|---------------|-----------|----------------|---------------|-----------|
| Not true | Somewhat true | Very true | Not true | Somewhat true | Very true |
| 0.0 | 17.4 | 82.6 | -4.0 | -2.6 | 6.6 |
| 0.0 | 43.5 | 56.5 | 0.0 | 19.5 | -19.5 |
| 0.0 | 17.4 | 82.6 | -4.0 | -6.6 | 10.6 |
| 0.0 | 8.7 | 91.3 | 0.0 | 0.7 | -0.7 |
| 4.3 | 21.7 | 73.9 | -3.7 | -14.3 | 17.9 |
| 4.3 | 73.9 | 21.7 | -3.7 | 21.9 | -18.3 |
| 0.0 | 34.8 | 65.2 | -4.0 | 10.8 | -6.8 |
| 0.0 | 4.3 | 95.7 | 0.0 | -31.7 | 31.7 |
| 4.3 | 26.1 | 69.6 | -3.7 | -1.9 | 5.6 |
| 0.0 | 34.8 | 65.2 | -4.0 | 22.8 | -18.8 |
| 4.3 | 8.7 | 87.0 | 4.3 | -19.3 | 15.0 |
| 9.1 | 50.0 | 40.9 | 5.1 | -6.0 | 0.9 |
| 4.3 | 8.7 | 87.0 | 0.3 | -7.3 | 7.0 |
| 0.0 | 13.0 | 87.0 | -12.0 | -3.0 | 15.0 |
| 0.0 | 45.5 | 54.5 | -4.0 | 25.5 | -21.5 |
| 8.7 | 30.4 | 60.9 | 0.7 | -25.6 | 24.9 |
| 0.0 | 43.5 | 56.5 | -8.0 | 11.5 | -3.5 |
| 0.0 | 26.1 | 73.9 | 0.0 | 10.1 | -10.1 |
| 8.7 | 13.0 | 78.3 | -7.3 | -11.0 | 18.3 |

Appendix: Evaluation Partner

FORM has partnered with Mathilda Joubert from Sheridan College to conduct the evaluation of the effectiveness of the Art of Learning Program. Sheridan College is an accredited, not-for-profit Higher Education provider in Western Australia, delivering Bachelor and Masters degree programs in the disciplines of Education, Business, the Sciences, Humanities and the Arts. The College engages extensively in generating original research that will make a positive contribution to society.

Mathilda Joubert is Director of Excellence & Innovation, Researcher and Lecturer at Sheridan College and PhD Researcher at the University of Western Australia studying measurement of creative thinking skills. As an experienced teacher (primary and secondary), teacher trainer, business innovation consultant, policy maker and researcher she is a true cross-disciplinarian and an advocate of lifelong learning with two bachelors and three masters degrees (in music, languages, education, cognitive neuropsychology and business). Mathilda has worked directly with more than 500 schools on a range of successful school improvement projects and has advised national governments (e.g. Australia, Lithuania and the UK) on curriculum and assessment policy development. She has served on the Australian Curriculum, Assessment and Reporting Authority (ACARA) General Capabilities Advisory Group as the creative and critical thinking expert advisor and is currently Director of an independent school in Victoria and Member of the WA State Executive of the Australian Council for Educational Leadership (ACEL). She has also authored numerous publications e.g. *Challenging Convention: Creativity in Organisations* (2002) *All Our Futures: Creativity and Culture in Education* (NACCCE, 1999) with Sir Ken Robinson and *Making a Difference* (2016) an independent analysis and review of Creative Connections and ArtsEdge commissioned by the WA Department for Culture and the Arts and the WA Department of Education.

Mathilda has been involved in numerous evaluation studies in the arts and education sectors, locally and internationally, e.g.:

- British Broadcasting Corporation (BBC): Evaluation of creativity LABs for training producers in the use of interactive technology and developing staff creativity
- Creative Partnerships, UK: Conducted an independent evaluation (funded by the Department for Education and Skills and the Esmée Fairbairn Foundation) of the impact of a creativity training program for teachers, tracking the impact of the training on both teachers and students over the course of a full academic year, using in-depth qualitative research methodologies, including observation of classroom practice, interviews and questionnaires.
- Department for Culture, Media and Sport; Quality, Efficiency and Standards Team (QUEST), UK: Consultant researcher exploring how research into learning outcomes associated with participation in the arts and sport was linked to government policy and practice of non-departmental public bodies.
- Design Council, UK: evaluation of the use of The Big Zipper teacher resource materials in schools across the UK.

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- Museum of Western Australia: Conducted an evaluation of two projects for the Learning and Creativity Team: the Dampier Marine Gallery Activation Project and Frogwatch.
 - National Endowment for Science Technology and the Arts (NESTA), UK: Conducted an evaluation of the NESTA Ignite! Creativity LABs for young people.
 - North West Arts Board and Yorkshire Arts Board, UK: Evaluation and mapping of the activities and aspirations of arts education agencies in the regions to devise a strategy for the development of arts education agencies and the building of strategic partnerships.
 - West Australian Department of Education & Department of Culture and the Arts: Conducted a strategic review of the Creative Connections partnership programme to inform development of the next strategic plan across these two departments.

For further information
please contact:

Lamis Sabra
Creative Learning Manager

lamis@form.net.au
(08) 9385 2200

Vanessa Bradley
Programming Coordinator

vanessa@form.net.au
(08) 9385 2200