

AMPLIFY:

DESIGNING

BRIGHT

FUTURES

**Penrhos College Junior School
Western Australia**





Application

Participation in AMPLIFY was prompted by the Head and Deputy Head of the Junior School and together they took up responsibility for completion of the application. Part of the rationale behind the desire to be a part of AMPLIFY was they felt that involvement in the project would assist in bringing together a number of areas on which the Junior School had been focussing.

Penrhos College Junior School presented a case that emphasised its existing passion for education and learning and an ability to adopt a 'change', or growth mindset. In its application it emphasised support for the active participation of staff across the school in collaborative projects with other AISWA schools and a willingness to be fully engaged in workshops (a necessity given the community of practice focus of AMPLIFY).

In terms of the direct benefit of participation to Penrhos College, the applicants believed that staff returning from AMPLIFY workshops would strengthen the teaching practice of educators in the Junior School through the dissemination of the knowledge and skills acquired. The application additionally noted that the wider school community was also actively involved in the students' education. At the time of application for example, to support STEM (Science, Technology, Engineering and Mathematics) learning areas, a team of parents was engaged in sourcing "expertise from within and beyond the school community group". Finally, in regard to the school's capacity to rise to the challenge of meeting the demands of such a large-scale innovation, Penrhos College Junior School noted its resources "would be well equipped to meet the scale of the challenge."

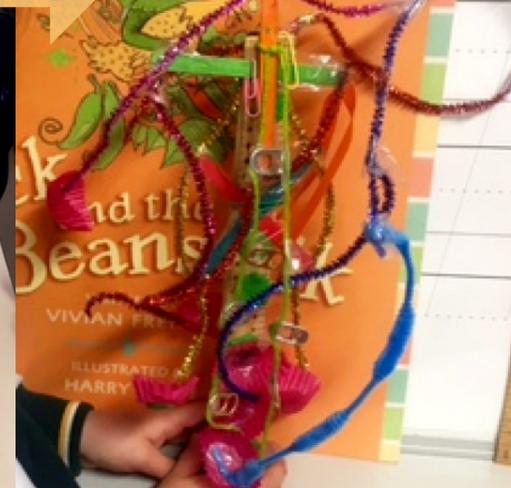
Once accepted into the AMPLIFY project, other members of staff became actively involved and the year level Team Leaders were invited as they represented the various ages and specialist areas operating in the school. As the project continued, the inclusion of the Learning Technologies Integrator was deemed appropriate, due to the nature of the project undertaken.

Workshop 1

The first AMPLIFY workshop, 'Hub Formation' was designed to assist participants in the necessity for changing practices to engage students. This team was certainly convinced of this, which is evident in an end of year report, it produced:

"Exploring a case for change in their own setting given that 60% of our current students will be significantly affected by automation in the workforce, 38% of Australian students say they are bored at school and 22% can't remember what they have learned. Many of the jobs that our students will pursue currently do not exist. Most significantly though was the need to move from a content-driven agenda to one that emphasizes what have now been referred to as 'soft skills; or 21st century skills."

The AMPLIFY team was surprised by student' perceptions of what a "good learner" was. The Head of Junior School said the girls described a 'good learner' as "a compliant person who put up their hand and wore their school uniform properly". It was also concerning that this view became more pronounced as the children moved up the year levels. In addition, data collected from the teacher's implementation of "visible learning" showed that it had moved the teachers but not the learners. A teacher was released from teaching duties to collate all this information and the Leadership Team said that this task was a most necessary step in the foundation of the project. The Head of Junior School reported, "This was concerning as we had two sets of data which indicated that there was no shift in the perception of students as to what constituted a 'good learner'".



Workshop 2

Support for making changes

The Head of Junior School encouraged staff to experiment and embrace innovative practice. The Leadership Team implemented several support measures. They were:

- freeing up the timetable so teachers had larger blocks of uninterrupted time to implement inquiry based projects centred around Global Digital Citizen Foundation's Essential Fluencies;
- sending staff on professional learning, for example the Year 2 teachers attended Kath Murdoch's inquiry-based professional learning workshops;
- collegial mentoring for those who wanted to change but did not know where to start, including demonstration lessons;
- provision of a lending library of professional texts on the inquiry approach and other relevant topics;
- sharing personal research during Professional Learning Community meetings;
- sourcing experts in the field invited to work with the Junior School e.g. scientist in residence working across all year levels.

Prior to Workshop 2, the AMPLIFY team surveyed parents, students and staff. This information clearly indicated the need to move toward inquiry based/student focussed learning. The team decided that the work of Crockett and Church (2017)

fitted well with the General Capabilities from the Western Australian Curriculum and complemented the existing focus on Visible Learning and 21st Century Learning Design. The Team Leaders presented the proposal to prototype the work of Crockett and Church and invited participation. The Deputy Head of Junior School emphasised the invitational nature of this and facilitated prototyping through removal of timetable constraints. The Learning Technology Integrator and a small group of teachers decided to prototype 'Solution Fluency' as a design thinking process relevant to STEM. Another team of teachers decided to prototype the 'Information Fluency' as they thought it more relevant to their work in Science and the Humanities and Social Sciences. The Deputy Head of Junior School met with staff on a regular basis to ensure appropriate support and resourcing.

Workshop 3

Perceptions of success

While no formal evaluation of the innovation had taken place, there was anecdotal evidence to indicate that the intentional focus on inquiry-based learning and the Essential Fluencies was successful. Success was portrayed in two main ways, the first was teacher motivation and the second was evident shifts in student engagement and learning.

The teachers that had initially engaged in the process were motivated by the positive changes they saw in student engagement. This in turn motivated more teachers to try to experiment prototyping with the Essential Fluencies to

improve pedagogy. One teacher said; "Well, it's certainly successful judging by the degree of take-up from the staff."

A team member indicated the amount of professional sharing that was taking place suggested the innovation was being met positively by those involved. One of the team leaders stated that enthusiasm and motivation for the project was high when she said; "You can see that enthusiasm. You can see it in the in classrooms, you can walk past now and see it in action. There's a real willingness to share with each other and work together and support each other".

One of the Year 5 teachers who had successfully prototyped one of the Essential Fluencies in her teaching said the project had brought the whole Junior School together which in itself was a motivating factor. She explained that usually the teaching teams kept to their own clusters and did not know what was happening in the learning and teaching in other clusters. "It is rare to link up with early learning, middle and upper primary and have a central focus", she said. "It was good to debate what we felt should be priorities and to discuss what worked and what we will do moving forward. It was also good to see the challenges it might present at different ages and stages."

AMPLIFY Snapshot Pre-Primary Science

The Early Learning Years Team discussed how they might like to introduce an 'Essential Fluency' and the Pre-Primary teacher chose to prototype Solution Fluency which uses the framework of: Define, Discover, Dream, Design, Deliver

and Debrief. The college had a Scientist in Residence working across all year levels and the Pre-Primary teachers decided they would like to work on two separate units of inquiry around plants and materials. In this way with the assistance of the scientist they set up the project Jack and the Beanstalk. Visiting Scientist in Residence Ellen Fortini, posed the question "Now that Jack's beanstalk has been cut down, could you design and build a structure to help Jack return to the castle?" The design only had two guidelines, the construction had to be 30cm high and sturdy enough to withstand wind.

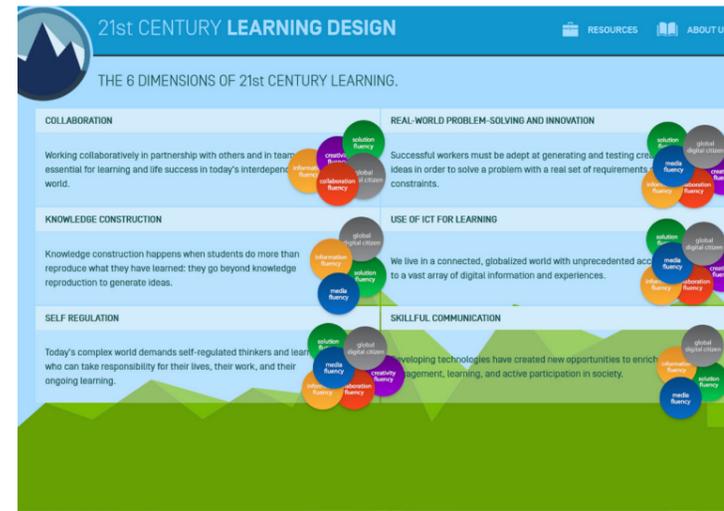
The students drew their ideas, and then tested and trialled them. One of the Pre-Primary teachers had noted how independent students were with this task. In the construction stage one of the teachers said she "couldn't believe what they made". The other said, "I was shocked and blown away as they (the students) were so creative." One teacher said she was speechless when one of the youngest students (at four years of age) created a pulley to get Jack up the beanstalk.

Part of this process was to invite the parents of the students in every Friday to look at the work of the week and this topic generated a lot of interest between the students and their parents. In Week 6, the structures were up and had been tested so the students were able to talk their parents through the process and describe what they would do differently next time. The teachers said the students wanted to continue the use of the Essential Fluencies and the prototyping was a success.

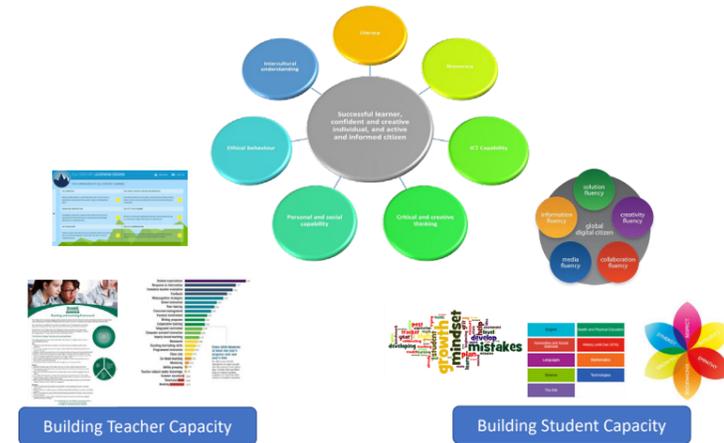
Essential Fluencies and the General Capabilities



Essential Fluencies and 21CLD
Essential Fluencies fit seamlessly into 21CLD. They enhance student engagement and provide students with a process to develop their capacity as independent learners.



Essential Fluencies are processes students engage with to build their capacity as individual learners



Conclusions

Leadership.

The Leadership Team and the collaborative nature of implementation was pivotal to the school's ongoing success of AMPLIFY across 2016 and into 2017. The Head and Deputy Head of Junior School removed barriers such as timetabling issues, gave extra time for staff to meet and discuss, and supported ongoing professional learning and conversations. The distributed leadership and co-coaching models assisted teachers in making decisions about school imperatives and choices in prototyping fostered teacher engagement. Importantly, teachers were empowered because the prototyping was seen as a trial, an experiment, and it was not expected to be perfect or for the same results to be achieved by those who tried it out.

The AMPLIFY Process

The tools

The UK Innovation team had prepared a number of tools that were used across the three days and the Leadership Team had thought many of them very useful. The first day's case for change and the accompanying video was commented on as being very powerful in establishing why an AMPLIFY innovation was necessary. The ethnography materials assisted in gathering data, the design brief and the road mapping tools were useful in planning and implementation. The Head of Junior School commented that it was important to assign the collation of all the ethnographic information to a staff member who is released from teaching. It was interesting that the idea of prototyping was popular with the team yet only a few used the prototyping tools presented during the second day of workshops.

The process

Upon reflection, all the staff on the AMPLIFY team thought that the process had been effective in initiating the changes they wanted to see. The Head of Junior School said that she wished she had understood the whole process from the start as many staff felt lost after the second day of professional learning. If she understood the whole process, she felt it may have made more sense and she would have been able to steer others in a more useful way. Now that they understand the whole process she said she would use it again to make innovative changes. AMPLIFY became the umbrella and the facilitating tool for the Junior School to initiate significant change; it gave a pathway for this to happen and involved all members of the community. The Head of Junior School added; "the process, although a little challenging at times, led to a wonderful outcome with change being implemented that was data-driven, implemented by the teachers willingly and with palpable improvement in student engagement and professional growth of staff."

PROTOTYPING LEARNING TEMPLATE

WHAT DID WE LEARN?
KEY ELEMENTS / DOMAINS EXPLORED

- Roles and relationships
- Environments and spaces
- Communication, messaging and look & feel
- Functions and operations
- Sequencing and service flow
- Is it desirable? - Do people want it? Do they understand it? Does it fit with their priorities, etc.
- Is it feasible? - How can it be delivered? Do we have the necessary skills, or how could they be acquired? Do we have the necessary resources, spaces, etc?.
- Is it viable? - Can we afford to do this? How can we make it cost effective? How can we draw in extra resources?

TOP 3 QUESTIONS WE WANTED TO UNDERSTAND

1. *Planning Do we have a consistent process to develop inquiry-based learning?*
2. *What models are available & suitable to our needs?*
3. *What specific skills are we aiming to develop in our students?*

WHAT WE FOUND OUT

- Students lack the ability to develop good questions for an inquiry project.
- Students lack ability to extract appropriate / relevant information.
- Ability of synthesising from a variety of sources.
- Students don't think fluencies are transferable.
- Stanford University's design thinking framework.
- No real design thinking - was using model thinking tool.
- Students struggle to find a way to adapt to the style of learning.
- It will look different in different parts of the school. ∴ Planning format needs to be easily adaptable.
- Take little steps.

DESIGN BRIEF

Enquiry Based Learning across the Junior School
Implementation of 21CLD across the Junior School with a focus on Knowledge Construction and Real World Problem Solving and Innovation.



Project aim

Embed the use of 'Information Fluency' across the Penrhos College Junior School from Pre-Kindy to Year 6

Specific challenge

How might we...

Use the common language of Information Fluency - Ask, Acquire, Analyze, Apply and Assess to promote Enquiry Based Learning across the curriculum.

Why is it important?

- Real life skills which can be applied to situations in the wider environment.
- Teacher Friendly
- Shared Understanding
- Common Language
- Consistency
- Logical order of thinking
- Scaffolding
- Produces active learners
- Enhances pre-existing learning strategies

Target users description

We feel the STUDENTS in the Junior School would benefit from the implementation of Information Fluency in the following ways

- It provides them with a clear step by step process to follow - encouraging independence in learning
- It will become a common language in the Junior School - making transition from year to year predictable
- It provides the students with a sense of security and predictability
- The 'Ask' component (first A) will inspire, hook and engage students in the Enquiry process.

We feel the STAFF in the Junior School would benefit from the implementation of Information Fluency in the following ways

- Simple implementation of 5 A's.
- Only slight modification of existing programs to accommodate for the 5 A's.
- Common language across PK-6 for reporting and assessment.
- Increased student engagement and independence in learning.
- STEM and STEAM links

We feel the PARENTCOMMUNITY in the Junior School would benefit from the implementation of Information Fluency in the following ways

- Common language across PK-6, particularly helpful for families with siblings
- Potentially a drawing card to the College

Insights & more detailed 'how might we' challenges

1. Diminute the information across the Junior School? - Staff PLC? Via Team Leaders?

Make the task of modifying existing programs easy on staff? - provide team leaders a half day relief to make modifications? Upper, middle and lower primary working together?

2. Ensure the common language is used from PK-6? - providing all classrooms with posters/stickers/laminated cards containing process and language

Make links with the scope of critical and creative thinking Curriculum Documents and the General Capabilities? Make a proforma for staff to follow when programming

3. How and when will we communicate this common language/process to the parent community?

Choose a small group/year group to conduct prototyping and collect data about the implementation of Information Fluency

Include specialist areas in the process? or is it best left for classroom teachers only?

Developing a more
robust evidence base

Being creative about
common challenges

Helping to
manage risk

Sharing activities
and resources

What is AMPLIFY?

AMPLIFY is an ambitious new initiative from the Association of Independent Schools WA (AISWA) and Innovation Unit Australia.

Our aim is to increase the proportion of Australian students who are deeply engaged in their learning, through the development of teaching, learning and assessment practices that promote engagement.

