

MAP4U Murdoch University

The BIG PICTURE ACADEMY Research Project

Promising Practices: What students, parents and teachers say about learning in a Big Picture context.

Combined School Report 3

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About the Big Picture Academy Research Project

The Big Picture Academy (BPA) research is part of a larger research project funded by the federal government under the direction of Professor Andrew Taggart of Murdoch University and called "MAP4U" or Murdoch's Aspiration and Pathways for University project. As the name suggests, the MAP4U project seeks to "develop sustainable programs that will grow the number of eligible, willing and able students to attend university." That is, to increase the numbers of students moving into tertiary education from a low socio-economic communities in outer metropolitan Perth, Western Australia.

The BPA research investigates the implementation of the BPA project in five schools in the relevant region. In that project, Big Picture Academies are introduced/supported in three schools and a whole-school Big Picture orientation is supported in two schools. Also included in the research project are two additional schools which have been following a Big Picture approach for a number of years.

The Research Questions

- 1. What are the processes and consequences of establishing a Big Picture Academy within existing school structures?
- 2. How does student engagement, learning and aspirations develop in a Big Picture Academy?
- 3. How does the Big Picture Academy influence teacher learning?

This research is made possible thanks to the ongoing support and commitment of schools, staff, students and parents. We trust that the feedback from our study will provide educators and interested parties with some interesting and useful information. The continued collaboration allows us to continue this important research into the role of Big Picture Education at the local, national and international levels. What we seek is a better understanding of what works best for students and their teachers in terms of engagement, deep learning, aspirations and success. As well, it will contribute valuable knowledge to our understanding of the conditions that need to be created and more widely sustained to support progressive school reform.

^{1.} MAP4U (2013) Murdoch's Aspirations and Pathways for University Project. Murdoch University.

Executive Summary

These findings are developed from an analysis of interviews of students in years 8-12 who commenced a Big Picture education experience in Term 1, 2014. They attend one of five quite different Big Picture Academies/Big Picture inspired schools in a low socio-economic region in Western Australia. Most were interviewed on three occasions: (1) Term 1, 2014; (2) Term 4, 2014; and (3) Term 3, 2015. Parents were interviewed for the first time in Term 4, 2014 and some parents were re-interviewed in Term 3, 2015. Teachers were interviewed on three occasions, around the same time as students. The findings contained in this report build on the previous two combined reports (No 1 & 2) by connecting student, parent and teachers perspectives. We have organised these findings around four key questions:

- 1. Why are students disengaging from mainstream schooling?
- 2. What are students learning in Big Picture Advisory?
- 3. What practices support student engagement for learning?
- 4. How does the Big Picture Education design enhance student aspirations?

1. Why are students disengaging from mainstream schooling?

❖ Disengagement – alienating experiences of mainstream schooling

Mainstream secondary schooling is an alienating experience for a subset of secondary school students. The reasons range from a perceived lack of support, too much pressure, disruptive classrooms, bullying and lack of curricular relevance and flexibility. These students disconnect and are often effectively pushed out of mainstream schooling.

Year 8 and 9 and half of year 10 I didn't want to be at school. One of the main reasons was because I didn't want to be in my classes because all the kids in my classes would make fun of me and pick on me all the time so I didn't want to be in there so I stopped going at one point and it kind of came like a habit so I stopped going to school.² (Student)

Sub-optimal engagement – students looking for something better

Mainstream secondary schooling is not engaging for many students who perceive a lack of relevance and flexibility in the curriculum and a rigidity of pedagogy. They do not disconnect because schooling offers future benefits but are simply looking for something better.

Loretta's project focused on history, not the kind of decontextualized history covered in the race through the syllabus but a desire to understand 'life to text' rather than 'text to life'. Her research/inquiry question examined the reasons why European families migrated to Australia in the post war period. Loretta wanted to explore her own family history as a means of understanding why historical events happen. Her family came from Macedonia so she decided to undertake an oral history through the use of interviews and by accessing primary documents in the state library as well as family photos. These are real research techniques employed by experts that help students move beyond low-level Wikipedia information gathering i.e., cutting and pasting information into an assignment of dubious value. Loretta is doing much more than completing assignments for the sake of it. (Researcher)

^{2.} The quotes in the Executive Summary help make a point and enliven the text but as a set they don't 'cover' all the points being made.

2. What are students learning in Big Picture Advisory?

Relationships – respect, trust and care

Students value the closer relationship with their Advisory Teacher (AT) because they feel connected and supported. This relationship is an important cornerstone of their learning. For many students the acceptance and interest shown by the AT is unusual, facilitating a sense of belonging and trust. A few students found their relationship with the AT had low moments during the research period. Even so, they preferred it to the usual teacher/student relationship. Students felt more connected to their Big Picture peers than in mainstream school settings, arising out of the smaller class size and increased time together which facilitated openness and trust.

❖ Affective – well-being, self-worth and self-efficacy

Students feel happier, have greater self-worth and offer increased support for each other in a Big Picture environment. Students feel better about themselves and this often extends to improved relationships with their families and beyond. For some students this appears to be coming from increased academic success and enhanced social connection both at school and in learning out in the community. An enhanced sense of well-being is especially marked in those students who were most alienated and disengaged from mainstream schooling. However, students at all schools demonstrate enhanced well-being and happiness in their Big Picture environment.

Deeper learning – facilitated by a personalised approach

At this early stage, we are beginning to see some evidence of how personalised learning approaches can develop deeper learning. Students are starting to learn about the language, key concepts, tools, and the 'ways of working' of their interest. This is achieved by: starting from where students are at and what they are interested in; exploring real world standards; developing authentic research methods; linking to academic knowledge ('the subjects'); and working one student at a time.

At the beginning [of the year] I wanted to be a tattooist. Learning the history of that was fun and how they do it... Now I'm studying psychology because it has always interested me. In particular, I'm studying post-traumatic stress disorder. For my Exhibition, I did a timeline of psychology from 1500 BC to 2000 A.D. Psychology isn't just about mental illness. I made a PTSD fact sheet and people asked me if I'd just cut and pasted it but I had written it all down and then put it into a document. It was my own work, including the compare and contrast of two different PTSD cases. (Student)

Engagement – taking ownership of learning

In the Big Picture learning environment, students are enthusiastic about the opportunity to negotiate curriculum and instruction. They respond positively to having a greater say over what and how they learn. Student engagement was noticeably enhanced in the Big Picture contexts, as observed by teachers, students and parents.

We've had students working on fantastic topics... we had one student last year who was learning all about the issues in Palestine and Israel and it was all off the cuff comments from the news... she found it fascinating and she had no idea and she just ran with it really. She was not the student you would have expected to go there and I remember her mum coming in for one of the Exhibitions and she said "I've never seen her talking about the news and tuning into it." But she is quite a high level and performing student. The whole research thing... she was very good at putting that together... and it wasn't planned it was just how it went. (AT)

❖ Transformation – developing independence and agency

Students recognise the importance of directing their own learning and behaviour. Students describe increased confidence in dealing with school and their futures. They value the opportunity to present their learning to others and engage in out of school experiences. Students demonstrate a growing sense of self-reliance, responsibility and agency. Most students appreciate the challenges, although a couple of students found the degree of responsibility too much in their school and wanted more scaffolding.

The other day they were studying for their upcoming assessments and the way that they did it was sophisticated. They were challenging each other. They knew each other's strengths and weaknesses so they knew when to lean on someone or when to let someone lean on them during that process. (AT)

Learning about learning – self and others

A subset of students were able to take a "bird's eye" view of their learning and describe their meta-learning. Being placed in the Big Picture learning environment where they are required to be more responsible for their learning and articulate their learning strengths and limitations has helped them learn. They identify increased understandings of themselves as learners and how this knowledge will help them in future.

I have found it hard to manage myself with the TAFE course. It has shown me how much motivation matters. I didn't understand the commitment of a Cert IV. I just need to put my head down. It has helped in the Cert IV that I have had the experience in Big Picture because there is lots of talking to lecturers and group work. Taking feedback in Big Picture is essential. That has helped me at TAFE as we all have to get up and talk to the class. How we do this matters as we need to get the class engaged in our joint project. (Student)

3. What practices support student engagement for learning?

Advisory – like an extended family

The Big Picture Advisory provides a place where students felt safe and had a sense of belonging. They got to know and understand other students and the AT really well. The image of the advisory being like 'family' emerged. Students dealt with the inevitable tensions of the group and became adept at being more inclusive of other's views.

In Big Picture it is great that you don't have to do everything on your own. If there's a problem or something on my mind I can talk to the Advisory teacher or the other students. The advisory teacher knows me as person and I know him well enough to talk to him about anything. It's amazing. There is a lot interaction between students and no problems we get on really well. We help each other and work together on any decisions. Any conflict is over by the next day. (Student)

Advisory Teacher – supporting, extending and deepening

The AT featured strongly in all student responses about themselves as learners, as young people, and as members of the community. They talked about the AT as someone to go to for help whether about school or outside school matters. They saw the AT as someone who cared for them, challenged them, and supported them. They understood that over time the AT was asking them to take more and more responsibility for their work and learning.

Like she knows my strengths and weaknesses through my time in Big Picture, so I can sort of trust that she knows when to step in and help out, unlike other teachers that will just watch me struggle in other classes. (Student)

* Real world learning - connecting to people in the community

Students identify valuable learning as taking place when they move into the community and engage with people and authentic tasks. At this early stage, Internships were only operating effectively in a few schools and only a small number of students were able to engage in fully developed Internships. Those who did engage were inspired, clarified their career goals, and learnt many important skills. Students who were not able to participate in a fully developed Internship often found the experience unsatisfactory and disengaging.

Rick is a Year 12 student with a passion for basketball. He worked on a project that required him to analyse the shooting techniques of famous players. He represented his finding using parabolas. Throughout the project Rick also investigated the scientific principle of force in relation to the vertical leaps of some of the best known players that can slam dunk a basketball. Rick combined his project work with an internship at an NBL club working closely with his mentor to explore the world of professional sport. The work in school informed by the work at his internship. Rick is currently completing his Certificate III in Gym Instruction and Fitness (AT)

Post-school plans – looking to the future

Students explore their interests and future career aspirations. Over the research period many students appeared to gain greater clarity around future pathways to achieve their chosen careers. For others, the possibilities have widened thus making choice more difficult. Some schools emphasised the importance of students becoming experts in the pathways available to them. Students had mapped and implemented plans including completion of relevant Cert IV qualifications. Some students had left Big Picture to implement the next stage of their career pathway (e.g. moving to TAFE or moving into an ATAR pathway in mainstream school).

Exhibitions – a site of learning and connection

Exhibitions play a key role in enabling students to gauge their learning and develop new skills and confidence in presenting their learning to others. Some students found Exhibitions to be very stressful experiences. Exhibitions are highly valued by parents who were consistently impressed with their child's learning and capacity to express their learning.

I did an Exhibition in front of a big group of visitors to the school. I was really nervous because I am scared of public speaking but it benefited me in the long run. Getting the feedback from so many adults was good. I was stressed but afterwards I was glad that I had had the opportunity. (Student)

Family engagement – families are enrolled too

Students and parents identify increased levels of engagement with the school and improved family relationships. Families play an important role in students' education. From helping students develop their Learning Plan to participating in events, parents show a deeper understanding about their child's learning and interests. Parents were involved in quarterly learning plan meetings and student exhibitions of learning throughout the school year. There was a unanimous valuing by parents and students of the enhanced relationship facilitated through increased parental involvement.

I feel like I'm a lot closer with the (family)...(they ask) how was school today and that kind of stuff ...I am probably telling them more about what I did because it's interesting for me and its just like I write this and this and I'm doing this next week and can you come along to that because I kind of need you to. I feel like it's closer – like me with them with school. (Student)

My relationship with William is changing. When he was in mainstream he'd arrive home angry, drop his bag down. I'd ask how his day was. He'd just say "bad." Now he wants to talk to me because he's interested in being at school and loves it when I listen to what he's doing. The Exhibitions are good for him to push him a bit more and good for his confidence. They give him an opportunity to reflect on how he's going... The other kids give him positive feedback and are encouraging. At his first Exhibition he was sweating, breathing fast... now he can talk confidently. I wish that I'd had Big Picture when I was at school. I would have stayed at school rather than dropping out in Year 10 and going into a low paying job. Now I'm 38 and at university at last. I had the potential back then but just didn't want to be there. (Mother)

4. How does the Big Picture Education design enhance student aspirations?

At this early stage of implementation we are starting to see how student aspirations for the future develop. Students are provided with opportunities to explore their interests and then go deeper around the things that really matter to them. In the Big Picture Advisory there is a focus on acknowledging the strengths and assets students bring to school rather than weaknesses and pathologies. The AT creates a context in which students can think differently about their imagined futures. This involves identifying the barriers and obstacles they face and developing the skills and knowledge that will enable them to lead the kinds of lives they desire. In pursuing this goal students are provided with opportunities to 'leave school to learn' through Internships and social networking in the adult world in order to explore future pathways and careers. Whilst these practices were still being developed in most schools there was strong evidence that when enacted well, these promising practices enable students to move from aspiration to implementation.

All students interviewed could describe their interests (and for some how they stick and others how they've changed). Students interviewed were able to name pathways and careers that they were considering and exploring. Most of the students were quite clear about the next step they were taking. They were clarifying the sort of life they wanted to live. Others were still searching.

I have responsibility as a year 12 to uphold what is needed and pass it on to the year below. I try to be an all-rounder and keep the respect level for everyone. That's part of being a leader, at school and outside of school. Life is getting a hold of me. I've worked at a number of jobs – at a cycle shop, at a nightclub and at a restaurant/tavern. I also do footy umpiring. This is my third season and I have been chosen to be the league number one boundary umpire for the grand final. I worked hard to ensure this place – training hard every week and being focused on game days. Although my main focus is school, I like having a life outside school. I am still doing Mixed Martial Arts twice a week. Because I'm 18 and I find that I'd get loose on the weekend and come back to the week refreshed – having a bit of fun on the weekend helps – not to the extent of destroying brain cells.... Hopefully I'll start a clothing brand. It's been a little idea in the back of mind for a while... I still don't know what I want to do, whether I should move out, whether I should travel... I just like to go with things. (Student)

Loretta (see page 1 of this Executive Summary) continued to flourish in Big Picture. She floated in working on developing her passions and interests and was lost. Her work on her family history posed more questions then she answered and she had to battle her own personal demons whilst balancing the demands of school. If it was not for Big Picture, who knows what Loretta would be doing now. Then, out of the blue, she came to her advisor and talked to him about learning about child birthing techniques. She said that she always loved children and that she found the medical side of it fascinating. She went about working on developing an authentic project. She worked closely with her peers, the child-care teacher at the school and the Big Picture School Coach. Her research became an in depth exploration of her passion and her exhibition and final product was something to be proud of. This young lady, who in her first exhibition broke down with anxiety and fear, got up in front of her parents and peers and was able to talk about the childbirth process, in graphic details. She then applied and was admitted to the nursing pre-placement programme in Nursing. Her research skills that she developed in her personal history project gave her the ability to develop a real research question, to find the valid sources and communicate it carefully. The successes, and sense of flow (c.f. Mihalyi Csikszentmihalyi) allowed her to get excited and intrinsically motivated to work towards her goals. If she was in mainstream, she would have been stuck with labelling diagrams of the human body and would be demotivated and, well, lost. Instead, she found her sense of purpose and a dynamism that most young people do not have. Her parents, and Loretta, are grateful for the Big Picture programme. Her mother often commented that she now how a daughter that wanted to come to school and wanted to learn. Prior to this, they had a said daughter who hatted school and what it brought to her life. School became meaning and purposeful. (AT)

Concluding remarks

By way of concluding remarks we can make a number of general observations relevant to this research project.

First, statistical data (e.g., ATAR, NAPLAN, PISA) collected by education systems cannot adequately capture the benefits of engaging in more authentic and personalised approaches to learning. We can only properly comprehend the work of teachers and students by getting up close and personal to their daily lives and practices. Paying attention to the realities of students' lives provides a much richer insight into 'doing' school differently and the implications for student learning.

Second, there is an acknowledgment that mainstream schooling or a 'one size fits all' approach to education is not working for a growing number of students. In response, some students actively choose to enrol in a different way of 'doing' school where they feel a greater sense of ownership, belonging, and mattering. Others are simply "pushed" out of mainstream schools and searching for an alternative kind of education.

Third, personalised approaches provide numerous benefits in terms of student engagement, deep learning, aspirations, and wellbeing. Throughout this research we heard time and time again about the positive effects of personalisation. The attempt to implement the Big Picture design for learning has resulted in students re-engaging in learning with a greater sense of purpose, relevance and rigour. Furthermore, there is evidence of enhanced relationships with family and peers, growing self-confidence and the development of capabilities to manage their own learning and futures.

Finally, such outcomes can only be achieved through a deliberate approach to changing school culture, structure and pedagogy. This kind of change takes time, perseverance, resources and leadership. Pivotal to this process is a willingness to engage in self-reflection with a view to better understanding and improving practice. Along the way, there are tensions and contradictions as participants negotiate alternative ways of thinking and acting. We hope this report based on the stories of students (and their teachers and parents) provides a foundation for ongoing conversations based on a spirit of optimism and hope.

If I weren't in Big Picture I wouldn't be attending school. Big Picture provides a safety net. The portfolio entry to university is really helpful. I think my learning at Big Picture is deeper than in mainstream. I wouldn't have gone into the Cert IV and if I had just done ATAR and failed, I'd be screwed. (William).

Introduction

This Report provides an overview of the qualitative research undertaken in the Big Picture Academy Research Project together with an analysis of the qualitative data obtained from students, parents and teachers in the third and final round of data collection. Five schools are involved in this part of the research project. Each school implemented the Big Picture design to different degrees emphasising different practices. Fidelity to the design varied greatly. None of the schools/academies are fully Big Picture in terms of the distinguishers (see Appendix 1). At the time of these interviews the Advisory teachers in four of the schools had less than two years experience of implementing the Big Picture design. The other two had less than three years.³

The students interviewed predominantly commenced in a Big Picture Academy or Big Picture oriented school, or arrived soon into term 1, 2014.⁴ They chose the Big Picture option for various reasons identified in Research Brief No. 5.⁵ Some of the students were effectively pushed out of mainstream schooling. Others were predominantly looking for an educational experience that would allow them to pursue their interests. Towards the end of their second year in a Big Picture environment we returned for a third and final interview.

We saw in the *Combined School Report Two* that students' hopes and expectations for a different kind of education were being realised by most students. Students were successfully engaging in a more personalised approach to learning with the guidance of a supportive Advisory Teacher who knew them well. A few students wanted more explicit structure and scaffolding. Returning almost a year later we were interested to see how the student experience had developed with the added benefit of the teacher insights.

Data collection

Student and parent interview data

In the Third Round of data collection students were interviewed from each of the five participating schools late in Term 3 or early in Term 4, 2015. The interviews were scheduled to coincide with the student Exhibitions, where possible. The interviewer(s) observed the student exhibition and subsequently interviewed the student. Parents/guardians were interviewed separately, often on the same day as the exhibition that they also had attended.

These students were randomly selected for interview according to date of birth from the incoming group of Big Picture students in 2014. The students were in Years 9 and 10. One school was not organised in this way and the students interviewed were drawn from across the student body – students from Years 8 – 11. The numbers of students interviewed over the three rounds of data collection are shown in Table A below. Note: The interview times shown are when the majority of students were interviewed. In Round 1, one student was interviewed in early Term 2. In Round 3, four students were interviewed in early Term 4.

^{3.} We shall describe the experience of implementing a Big Picture Academy in a school and integrating the design in a school in a future report.

^{4.} Two students commenced in Term 1, 2015.

^{5.} See Choules, K., Down, B., Hogan, J., Carr, D., & Stone, H. (2015). Promising practices: what students have to say about learning in a Big Picture context. Report from Round 1 of student interview data. Research Brief 5. Big Picture Academies Project, MAP4U. Perth: Murdoch University.

School	Round 1 No. of students interviewed (Term 1, 2014)	Round 2 No. of students interviewed(Term 4, 2014)	Round 3 No. of students interviewed(Term 3, 2015)	Exhibitions observed	Comments
A	4	4	3	3	One student left the school at the end of 2014 to attend TAFE.
В	4	3	1	2	Two students had left the school before end of 2014 – 1 to attend another school, 1 to be home schooled. 1 of the remaining students chose not to be interviewed in 2015.
С	4	3	3	0	One student moved suburbs and changed school in early 2015. No exhibitions to view.
D	4	4	4	2	All students remained in the Big Picture pathway for the 2-year period.
Е	4	3	3*	2*	None of the original interview students were in the Big Picture program at the end of 2015. Two had returned to mainstream, 1 had started an apprenticeship and 1 had left school whereabouts unknown.
Total	20	17	14	9	

Table A: Overview of student interviews and Exhibitions

Advisory Teacher and School Leader interview data

ATs and School Leaders were interviewed during each of the three rounds of data collection. At four schools the same AT remained in the role and was interviewed on three occasions. At one school, the student cohort had three different ATs over the period.

Field Observations

Notes were taken by the research team when observing action and interaction in school and workshop settings. When required these were followed up with ATs and students for clarification, further evidence and confirmation.

Advisory Teacher and School Leader Research Circle

Another methodological approach in our project used action research to explore the learning of (some) teachers and (some) school leaders involved in the Big Picture Academies Project. This approach brought them together to establish a learning community (we called a Research Circle) that allowed the same group of teachers and leaders to meet - on a regular basis over time - and supported them to describe, and document their practice and learning. This writing has not been included in this report.

Student survey data

In Term 4, 2015 all students in the 7 Big Picture schools involved in the survey component of the research were surveyed for a third and final time. The analysis of the survey data from Round 2 and 3 will be published at a later date. It does not inform this report.

st In 2015 the Exhibitions observed and two of the students interviewed were new students – not randomly selected.

Overview of analysis and reporting

To date, the analysis of the student and parent interview data from Rounds 1 and 2 of data collection has been documented in individual reports for each school and combined school reports (1 & 2).⁶ Table B provides an overview of the analysis and reporting of the data to date.

	Individual school report	Combined report	Research Brief
Round 1 of data collection	Analysis of: Student interview data Student survey data	Combined Report 1 Analysis of: Student interview data Student survey data	Research Brief 5 Exec summary
Round 2 of data collection	Analysis of: Student and parent interview data	Combined Report 2 Analysis of: Student and parent interview data	Research Brief 6 Exec summary
Round 3 of data collection	N/A	Combined Report 3 (this report) Analysis of: Teacher and school leader interview data Summary of student and parent interview data Observations from student Exhibitions	Research Brief 7 Exec Summary

Table B: Analysis and reporting from the data produced to date

Focus and analysis of this report

In this Report we expand our focus from our previous reports. In the *Combined Schools Reports 1 and 2* we analysed the student and parent interview data to gain an understanding of the second research question: How does student engagement, learning and aspirations develop in a Big Picture Academy? In the third round of data collection students and parents were once again interviewed. We found that the data from the third round of interviews largely substantiated, reiterated and extended what students and parents had previously been saying.

The data for this report includes an overview of the student and parent interview data. In addition two student portraits are included to provide a more detailed insight into the experience of students over time in a Big Picture Academy/school (Appendix 2). The portraits have been crafted from the interviews. Students reviewed their draft portrait and were invited to suggest changes. This was an affirming process for students who generally showed great pride in their portrait and only ever corrected minor factual or typographical errors. The scope of student learning comes through strongly in these two portraits.

This Report takes the opportunity to introduce the perspective of the Advisory Teacher on the second research question. In addition, we touch on the third research question: How does the Big Picture Academy influence teacher learning? This theme will be reported on separately.

We begin to unpack and analyse the interview data around the nature and processes of **student learning** and the implications for future aspirations. We are interested in finding out what students are actually learning and identifying the kinds of conditions that support and enhance their learning.

^{6.} See Choules, K., Down, B., Hogan, J., Carr, D., & Stone, H. (2015). Promising practices: What students have to say about learning in a Big Picture context. Combined Reports 1 and 2. Perth: Murdoch University.

Differences between the schools were apparent in the data collection process for this report. There was a wide range of learning and achievement apparent across the schools. This reminds us of the importance of noticing the differences in student cohort and the different levels of uptake of the BPE design.

Why school context matters?

To understand more about student learning and how it develops in a Big Picture environment we need to have a feel not only for the students but the context of each of the schools that differed markedly in terms of ethos and structure. Each school had a particular cohort of students not typically representative of students of that age. Therefore, it is important to provide a brief overview of each participating school and the basis on which students were selected or opted in to the BPE Academy project. This is essential for making better sense of the data.

School	Academy or whole school?	Year levels in 2015	Description of cohort
А	Academy	10-12	Large government school both invites particular students to apply for the Big Picture Academy and has an open invitation to all students. Of the cohort that participated in the research project, two-thirds had major physical and/or mental/emotional health issues they were contending with that made regular attendance at school challenging.
В	Whole school	8-12	Very small independent school. Eclectic student cohort.
С	Whole school	10-12	Small sized alternative school whose students prior to coming to the school had a very high rate of absenteeism. The students at this school have higher rates of mental/emotional health issues and drug/alcohol problems. They had been failing in mainstream school.
D	Academy	10	Large independent school. Selection into the Big Picture program was by open invitation. While the students in the cohort were largely representative of the school's student body as whole, the group was quite eclectic.
Е	Academy	9-12	Large government school. Invited students who are disengaged or who were "square pegs," unable to sit in the "round hole" of mainstream education. In the main, these students had had high rates of absenteeism, mental/emotional health issues and had been failing in the mainstream. Students both self-selected and were identified by staff to join this program.

Table C: Profile of participating schools and student recruitment

Data is more than numbers

The data from students and parents reported in the previous *Combined School Reports 1 and 2* establishes clearly that the foundation for student learning – strong student engagement – is well established in the Big Picture Academies and BPE inspired schools. For many of the students this is a major achievement. This heightened level of student engagement developed over time supported by constant attention and care from ATs in relationship with parents and students. The benefits to the individual student and wider community are considerable in terms of enhanced mental health and well-being, careers and family life.

Unfortunately, some of these benefits are overlooked in schools and education systems preoccupied with measuring test results and narrow performance indicators such as ATAR and/or NAPLAN. For Big Picture teachers, parents and students themselves, it is these 'non measurable' outcomes that really matter. As one AT explains:

[There are] lots of mental health, physical health issues with my Advisory... The data from outside might look quite poor about my advisory. But the fact that these kids actually show up to school for one day out of two weeks is a pretty big deal. I know that, but it's hard ... Over half of my Advisory have pretty damn good reasons, whether it be from, mental health and nonattendance, through anxiety and depression, through to dealing with brain tumours... a huge spectrum... Anyone looking at quantitative data around my kids would probably see that there might be a drop in attendance that might not look that great. Their grades might not look as great as they could. The reality is for some of those kids it's the qualitative data that speaks volumes – from parents, from family members, from friends and from the students themselves that says "you know what I wouldn't be here at school if I wasn't in Big Picture." So the fact that their attendance looks like crap, the fact that there grades don't look that great, that child is still alive so that's the reality for some of them. (AT)

We can see in the outcomes that follow that much of what students say about their learning is difficult to quantify. So the students talk a lot about new insights about relationships, about key people they now relate to, about what is required to build a strong group culture, about themselves, their work and about how this work is transforming them.

My style of learning has definitely changed and the way I apply myself to things. Last year I sort of thought I was one kind of person but now this year I've realised that I'm not just one kind of person, there's so many different things and different ways of how I can apply myself and how I enjoy doing things and I don't process well just keeping myself to the same routine all the time, that doesn't benefit me in any way. (Student)

While we summarise the outcomes and achievements of the students in the research our reports continue to identify and attempt to describe 'this data that is more than numbers'.

Nonetheless, having established a strong foundation for student engagement, the question then becomes to what extent does rigorous academic learning follow? From our data at this point in the Big Picture school reform initiative we would need to respond "it depends on the school context and the student." Outstanding examples of depth of learning exist as do examples of just getting by. As one AT noted, although personalisation engages students, it does not necessarily translate into learning for every student, every time but it helps a lot:

Personalisation works. When you're having the conversations, and you suddenly hit on that interest or the passion, the kids just animate and it's just fantastic to watch. The hard thing is getting them to follow up with the stuff that you've discussed. (AT)

Findings

This section draws together the key findings from round three of data collection based on interviews with students, parents and teachers. It builds on the key findings about student learning from interviews conducted over the past two years between 2014-2015. The intent is to better understand student learning in the context of a BPE Advisory whether inside mainstream high schools or integrating the BPE design across a small school. These findings are organised around the four key questions:

- 1. Why are students disengaging from mainstream schooling?
- 2. What are students learning in Big Picture Advisory?
- 3. What practices support student engagement for learning?
- 4. How does this work enhance aspirations?

1. Why are students disengaging from mainstream schooling?

This research project acknowledges that student disengagement from schooling is a persistent and protracted problem for individuals, schools, education systems, governments and society. It starts from the premise that there is little to be gained by doing more of the same in the same old ways to address the problem. Participants in this project continue to draw our attention to two interrelated themes.

Disengagement - alienating experiences of mainstream schooling

For a subset of young people mainstream secondary schools are not hospitable places for learning. Students can experience intimidation, bullying, exclusion and discrimination, from students and staff alike, based on personal factors (such as appearance and language) and social factors (such as class, ethnicity and gender). Furthermore, the pedagogy, curriculum and organisational structures of large high schools can alienate many students who are unable to see the relevance to their lives or future careers⁷.

Students in this research provided a number of reasons for their disengagement: a perceived lack of support; too much pressure; disruptive classrooms; bullying; lack of curricular relevance; and flexibility. These students disconnected from learning and school and were effectively pushed out of mainstream schooling. Parents also expressed great concern at the anxiety created in their children by the inflexibility and lack of personalisation in mainstream schooling. Even while this theme was not a focus of the interviews for this round students continue to reflect on their reasons for disengagement from mainstream schooling, for example:

I didn't really go to class. It wasn't interesting. ...it just got boring for me so I guess I just stopped doing things that were boring for me.

Year 8 and 9 and half of year 10 I didn't want to be at school. One of the main reasons was because I didn't want to be in my classes because all the kids in my classes would make fun of me and pick on me all the time so I didn't want to be in there so I stopped going at one point and it kind of came like a habit so I stopped going to school.

Sub-optimal engagement – students looking for something better

For many other students, mainstream secondary schooling is not engaging them in optimal or deep learning because of a lack of relevance and flexibility in the curriculum and a rigidity of pedagogy. They do not disconnect because of the future promises and benefits of schooling but are simply looking for something better. They want to pursue their interests in greater depth.

It's horrible and the teacher sits up the – stands up the front – and says "you must do this. You're not talking. Don't do this. You can do this but you're not allowed to do that." (Student)

^{7.} See for example, Smyth, J. & Hattam, R. (2004). 'Dropping out', drifting off, being excluded: Becoming somebody without school. New York: Peter Lang; Smyth, J., Down, B., & McInerney, P. (2010). 'Hanging in with kids' in tough times: Engagement in context of educational disadvantage in the relational school. New York: Peter Lang; Washor, E. & Mojkowski, C. (2013). Leaving to learn: How out-of-school learning increases student engagement and reduces dropout rates. Portsmouth, NH: Heinemann.

And the same student - when talking about subject selection for the following years - commented.

[Subject selection] was a thing I was super stressed about because I know its obviously not the end of the world if you picked a subject you don't like and we can change them coming into next year. But it felt kind of like in small way we were picking our future and stuff because as much as we've still got two years until we finish school, picking these subjects, its not like you can pick drama and then say "Actually I don't want to do that. I'm going to be computer designer" and go into that in year 12 when you've done nothing of it. So picking these is picking the general direction your going to go in sort of. ...so I just picked ones that I will enjoy because when I don't enjoy something I know I get really bored with it quickly and I just don't have the motivation to do it. ...so it isn't the end of the world but it felt like that. (Student)

2. What are students learning in Big Picture Advisory?

Students enrol in a BPE Advisory with a view to doing school differently based on a more personalised approach to learning. Students in collaboration with their AT and family develop Personal Learning Plans based around their interests. They work with an AT to develop – amongst other things – Internships, Exhibitions and Post School Plans. Students pursue their interests through other subjects, courses and certificates too. The fundamental design principles of BPE are explained in the following way:

Big Picture schools/academies educate one student at a time, within a community of learners. It happens by adhering to four basic principles

- 1. Learning must be based on each student's interests and needs.
- 2. Curriculum must be relevant to the students and allow them to do real work outside of school.
- 3. Students must connect to adult mentors outside the school who share the interests and support the learning of the students.
- 4. Students' development and their abilities must be measured by the quality of their work and how this work changes them. 8

Students show an appreciation of the new relational environment that has been created. They show an awareness of the importance of the relational dimension of learning in Advisory. Throughout this study students were able to articulate a range of learning about learning. That is, the kinds of cultural, relational, pedagogical and organisational conditions that support their learning. In this section we examine six key elements of learning from the point of view of students as well as comments from ATs and parents. By way of summary these six elements of student learning include:

- Relationships respect, trust and care
- Affective well-being, self-worth and self-efficacy
- Engagement taking ownership of learning
- Deep learning facilitated by a personalised approach
- Transformation developing independence
- Learning about learning self and others

We shall now examine each of these elements in turn.

Relationships - respect, trust and care

Relationships refer to the broader beliefs, dispositions and behaviours that exist between and among staff and students. The connection between relationships and learning is a key dimension of this theme. Stable, positive relationships appear to flourish in smaller schools/programs where students have an opportunity to interact daily with their teacher and peers. These relationships provide a secure foundation for learning at school and in the world beyond.

^{8.} Big Picture Education What is the Big Picture Design for Schools? The Big Picture Education Distinguishers. www.bigpicture.edu.au p, 2. See appendix for summary description of The Big Picture Distinguishers.

Students value the closer relationship with their AT because they feel connected and supported. This relationship is an important cornerstone of their learning. For many students the acceptance and interest shown by the AT is unusual, facilitating a sense of belonging and trust. A few students found their relationship with the AT had some low moments as well during the research period. Even so, they preferred it to the usual teacher/student relationship.

Like she knows my strengths and weaknesses through my time in Big Picture, so I can sort of trust that she knows when to step in and help out, unlike other teachers that will just watch me struggle in other classes. (Student)

It's amazing. (AT name) really, really helpful, and I can talk to her about anything. It doesn't have to be just school work, it can be home stuff and it just it makes doing all this work easier because I have someone to talk to, like say if TAFE or work or something is getting me down, or something's happening in the yard or anything in general like anything at all I can just talk to her. (Student)

Students also felt more connected to their Big Picture peers than in mainstream school settings, arising out of the smaller class size and increased time together which facilitated a greater sense of openness and trust.

Yeah and when we – we try – because its such a small amount of us its good because we generally all agree on the same thing. But if someone doesn't want to do something or there's a bit of confusion we always try and make sure everyone' happy with the thing they're doing and I don't think in our class we really have anyone at the top who's always saying what we should do. It's pretty even so everyone gets his or her say. ...I mean its super cheesy and stuff, but it like we're all one big family. ...And I mean I have one friend in my class who I, without big picture, wouldn't hang out with. And when you look at it from the stereotypical cliques, we're all so different yet we all get along so well. And there's no one – I don't this we actually have any one who is – who hates anyone else. Everyone just gets along with each other really well. (Student)

I'm good friends with everyone in Big Picture. We're like a family, always have been. Sometimes we do have new people come in and sometimes people leave. ...and anything I want to do or anyone else, anything anyone else we just encourage them. (Student)

Affective - well-being, self-worth and self-efficacy

The affective dimension refers to the connection between a young person's sense of self-worth, self-efficacy and general happiness and their capacity to be a contributing member of a school community.

Students describe how they generally feel happier with a greater sense of self-worth and increased support for each other. Students feel better about themselves and this often extends to improved relationships with their families and beyond. For some students this appears to be a result of increased academic success and enhanced social connection (both at school and in learning out in the community). This enhanced sense of wellbeing is especially marked in those students who were most alienated and disengaged from mainstream schooling. However, students at all schools participating in this study described a greater level of well-being and happiness in their Big Picture environment.

I think I'm a lot more comfortable in myself. I'm not so nervous...up until this year I've been a real perfectionist, I wouldn't hand in work till the very last minute because I'm just sitting there going over it and over it and saying what can I add, what else can I put into it and I think put a lot of stress in myself doing that. But these past two years has really helped with that and especially last year with you sort of deciding your mark for your project with your teacher, talking about it that way and then getting the chance to go back afterwards and improve more and adding something and I think that's really helped me grow and change that not everything has to be hundred per cent perfect all the time. (Student)

I feel like I'm a lot closer with the (family)...(they ask) how was school today and that kind of stuff ...I am probably telling them more about what I did because it's interesting for me and its just like I write this and this and this and

I'm doing this next week and can you come along to that because I kind of need you to. I feel like it's closer – like me with them with school. (Student)

This enhanced level of well-being extended to family relationships as well. The mother of one student described how her relationship with her son changed:

My relationship with William (pseudonym) is changing. When he was in mainstream he'd arrive home angry, drop his bag down and I'd ask how his day was. He'd just say 'bad'. Now he wants to talk to me because he's interested in being at school and loves it when I listen to what he's doing. (Parent)

The grandfather of another student explains the impact of his grandson's growing confidence:

Big picture has been good for him. It's only been a plus. He has come out of his shell and is now more upfront, more direct in his conversations and how he talks with us, more mature. He is quite the young man. (Grandparent)

Engagement – taking ownership of learning

Engagement is a broad theme and includes how students feel about their learning, their interest, and their general endeavour and output. A desire to participate is a starting point from which a deeper commitment to learning is possible. This theme recognises the importance of relevance, rigour and relationships to student engagement – both within and outside the school.

In the Big Picture learning environment, students are enthusiastic about the opportunity to negotiate curriculum and instruction. They respond positively to having a greater say over what and how they learn and with whom. Student engagement and ownership of learning was noticeably better in the Big Picture Academy, as one Advisory Teacher explains:

We've had students working on fantastic topics... we had one student last year who was learning all about the issues in Palestine and Israel and it was all off the cuff comments from the news... I said "Go Google it and have a look," and then she just completed a whole project. And she found it fascinating and she had no idea and she just ran with it really. She was not the student you would have expected to go there and I remember her mum coming in for one of the Exhibitions and she said "I've never seen her talking about the news and tuning into it." But she is quite a high level and performing student. The whole research thing... she was very good at putting that together... and it wasn't planned it was just how it went. (AT)

This renewed sense of ownership is explained by one student in terms of "how I changed":

As I'm learning, I'm a lot more focussed. I do a lot more study. I do a lot more engaging with the work. I do a lot more work. I do a lot more sports and other things as well. (Student)

So what we are beginning to see here then is a greater awareness of learning, something we describe as deep learning, which is the focus of the next section.

Deeper learning - facilitated by a personalised approach

We see depth of learning as evidenced by the extent to which students learn about the content (both disciplinary and interdisciplinary knowledge) of their interest. Students learn about the language, key concepts, tools, and the 'ways of working' of their interest. Learning is also assessed against where the students 'are at' and how this learning is changing them. At this early stage of implementation, we are beginning to see some evidence of how deep learning occurs. This is achieved by: starting from where students are at; exploring real world standards; developing authentic research methods; linking to academic knowledge ('the subjects'); and working one student at a time.

One student at a time – starting from where students "are at"

Remembering that for some of the students interviewed, any learning is a significant improvement on their pre-Big Picture education experience, it follows that depth of learning may come some time after re-engagement.

To illustrate this, an extract has been taken from the portrait of a student who had very poor attendance prior to joining the Big Picture class in 2015. When she started the year she wanted to be a tattooist and moved to an interest in psychology. Having re-engaged in learning she then broadened and deepened her study. She was proud of what she had learnt and her endeavour. She was learning a lot and very keen to continue.

At the beginning [of the year] I wanted to be a tattooist. Learning the history of that was fun and how they do it... Now I'm studying psychology because it has always interested me. In particular, I'm studying post-traumatic stress disorder. For my Exhibition, I did a timeline of psychology from 1500 BC to 2000 A.D. Psychology isn't just about mental illness. I made a PTSD fact sheet and people asked me if I'd just cut and pasted it but I had written it all down and then put it into a document. It was my own work, including the compare and contrast of two different PTSD cases. The preparation is more stressful than the actual Exhibition. (Student)

Many students are not so disengaged as this in the first place but they are still looking for something different. One such student had an interest in gaming. His initial explorations at school began with some 'typical' research projects: the prices of different sorts of apps, the history of consoles, and gaming addiction and how it affects the body. At the time he planned to go to university to do a degree in Game Development. By the end of his first year (in Big Picture) he had secured entry into a Certificate IV in Game Design. Deep into his second year he was still working on completing his Cert IV in Game Design. He still loved Gaming. However he now aspired – the following year - to do a Cert IV in Bookkeeping and Accounting with a view to moving onto a Diploma and then to university in 2018. In his words:

I changed my career goal because I've had time to think about it. Gaming is awesome but it's not clicking with me. The development process (developing a game) is not individual but group based. Working on a big game can take years and I don't see myself doing the same game for four years in a row. (Student)

One student at a time - "Real World" standards.

Kiah's interest centred on astrophysics and the question of evolution. With support from her AT Kiah enrolled in an online course at Go8 University led by an astronomer. She participated in classes twice a week where she interacted with an expert mentor and students from specialist STEM schools around the country. These students were a year older than Kiah. She completed all her assessment tasks and participated in collaborative group work to tackle "real world" problems and questions. She described learning about light, wavelength, matter, and the universe. She found it challenging and in her words, 'too much depth'. Kiah is now thinking about a career in science. She is highly engaged and finds her work meaningful because she gets to decide what's important, how she learns and with whom. She was able to navigate 21st century technology to pursue her interest and learning. In other words, learning happens in many different ways, in different places and with different people depending on her needs at the time. This was a truly empowering kind of education for Kiah based on "real world" standards.

One student at a time – authentic research methods

Loretta's project focused on history, not the kind of decontextualized history covered in the race through the syllabus but a desire to understand 'life to text' rather than 'text to life'. Her research/inquiry question examined the reasons why European families migrated to Australia in the post war period. Loretta wanted to explore her own family history as a means of understanding why historical events happen. Her family came from Macedonia so she decided to undertake an oral history through the use of interviews and by accessing primary documents in the state library as well as family photos. These are real research techniques employed by experts that help students move beyond low-level Wikipedia information gathering i.e., cutting and pasting information into an assignment of dubious value. Loretta is doing much more than completing assignments for the sake of it. Her project illustrates how the values of relevance, relationship, and rigour in learning actually happen in students' lives. Importantly, Loretta sees herself as a knowledge producer and is beginning to think about how she might represent her findings by developing an iBook.

One student at a time – personal interest to academic knowledge

Rick is a Year 12 student with a passion for basketball. He worked on a project that required him to analyse the shooting techniques of famous players. He represented his finding using parabolas. Throughout the project Rick

also investigated the scientific principle of force in relation to the vertical leaps of some of the best known players that can slam dunk a basketball. Rick combined his project work with an internship at an NBL club working closely with his mentor to explore the world of professional sport. Rick is currently completing his Certificate III in Gym Instruction and Fitness.

These projects were not typical "school projects". He really wanted to do them in terms of understanding at a deep level how this impacted upon a shooter's efficiency and in order to improve his own performance. He is very much a student of the game of basketball and this has led him to want to analyse techniques. It has reinforced his interest in biomechanics and a passion to continue into the future – both his basketball and his study.

But more than this.

One student at a time... in a community of learners

The student examples described above could all be pursuing these different interests but still be in the same class. Students also then get support for their ideas and work from their AT, their Advisory group and extending out to the wider community seeking the expertise they need to do their work well and mentor them as they learn and grow. As the following two students explain:

In Big Picture it is great that you don't have to do everything on your own. If there's a problem or something on my mind I can talk to the Advisory teacher or the other students. The advisory teacher knows me as person and I know him well enough to talk to him about anything. It's amazing. There is a lot interaction between students and no problems we get on really well. We help each other and work together on any decisions. Any conflict is over by the next day. (Student)

Now I am open to ideas and thinking about things from other people's perspectives. The more I thought about it I realised that it is possible to change. Big picture has helped because we have different ideas coming from everyone. We had a discussion on books and some of the students asked a few of us what we liked about reading. I saw that they didn't get the pleasure that I do. Everyone is honest. One boy likes classical music but he can't say that to his friends outside Big Picture because he'd be the weird, nerdy one. Becoming more open minded has been my biggest change being able to see things form other peoples perspectives on big issues like race, and gay rights is good. Now I think, "I get your position – how would I feel if I were in that situation?" (Student)

In the words of one AT:

The other day they were studying for their upcoming assessments and the way that they did it was sophisticated. They were challenging each other. They knew each other's' strengths and weaknesses so they knew when to lean on someone or when to let someone lean on them during that process. (Teacher)

Transformation – developing independence

Transformation refers to the idea of a fundamental change in the way students perceive themselves and their experiences with the world. Transformative learning occurs when students become aware of having a limiting or distorted view about themselves or others. It involves interrupting the way things are and instead, imagining alternative identities and futures.

Students recognise the importance of directing their own learning and behaviour. Students describe increased confidence in dealing with school and their futures by presenting their learning to others and engaging in out of school experiences. Students growing self-reliance is facilitated through the recognition that they have a greater responsibility for managing their learning coupled with the implementation of various strategies to succeed. Most students appreciated the challenges, although a couple of students would have liked more scaffolding for some of their work.

Improved sense of confidence and wellbeing – developing agency

In some of the school contexts in this study there is a higher number of students with physical/mental health challenges such as anxiety than might be expected in a heterogeneous population. The excerpt from the student and parent portraits below illustrate the important learning that comes about when a student with some anxiety is required to Exhibit to her peers, family and visitors to the school in a supportive environment.

I did an Exhibition in front of a big group of visitors to the school. I was really nervous because I am scared of public speaking but it benefited me in the long run. Getting the feedback from so many adults was good. I was stressed but afterwards I was glad that I had had the opportunity. (Student)

Without Big Picture that maturity would not have happened. It took her half a year to pull the finger out. Her second Exhibition was in front of 15 people. Her classmate encouraged and supported her. She would never have been able to speak in front of a group of strangers before. It was such a proud moment for me. (Parent).

M was a very different person to interview the second time. In the first interview she either looked away or gave the interviewer the 'death stare' for most of the interview with many answers being monosyllabic. In the second interview (5 months later) she was engaged, looked at the interviewer with interest and had a lot more to say. A major transformation. (Researcher)

Learning about learning – self and others

This theme describes students' growing capacity to step back and reflect on the learning process itself. This involves the students' learning about their own learning and their learning about the learning of others (teachers, other students, mentors and parents). Students are developing an awareness of the challenges and possibilities of learning in an innovative and personalised environment.

Some of the students were starting to take a "bird's eye" view of their learning and describe their meta-learning. Being placed in the Big Picture learning environment where they are required to be more responsible for their learning has helped them to understand their learning strengths and limitations. They describe an increased understandings of themselves as learners and how this knowledge can help them in future learning. In the following extract, an AT explains how students are able to make sense of their learning;

My students have taught me a lot more about the [Big Picture] method. They know it better than I do...whenever [mainstream] kids come in and say "what is Big Picture education?" [Name of student] has got the spiel down pat and she can explain it better than I can because they experience it and that's that whole thing about education not being done to them, they're doing their education and they've constructed their own personal meaning. (Teacher)

In terms of collaboration *for* learning students also show an increasing awareness about the social nature of learning with peers, and from the world at large.

I've made new friends with everybody and I'm getting on with the teachers.Before I didn't like conversing with people and would yell at them. Now I can talk to people...things have been going well this year, although there has been a bit of drama with the girls. That's been sorted out and we're getting on with it – we are civil to each other. W had a meeting and sat and talked it through. (Mary, Portrait, Appendix 2)

I'm going a bit more in-depth in my learning about the game I play. I've taken recommendations from the community on the internet and incorporated it into my game. I've been learning that I can learn from everything that I do in life....(in Big Picture)...Being part of a small group helps a lot because I don't have to around different people every hour. (William, see portrait, Appendix 2, p. 34)

3. What practices support student engagement for learning?

In this section we move on to consider what kinds of promising practices have been implemented in the BP Academies to support student learning. Specifically, we can identify five main BP design elements that appear to be making a difference in terms of student engagement *for* learning⁹ –

- 1. Advisory
- 2. Advisory Teacher
- 3. Real World Learning (Internships)
- 4. Post-school Plans
- 5. Exhibitions
- 6. Family Engagement.

Students and teachers are telling us that these design elements are pivotal to engaging students *for* learning in the ways described in the previous section, by way of summary:

- Building relationships based on trust, care and respect;
- Attending to the affective dimension of student well-being, self-worth and self-efficacy;
- Pursuing deep learning through personalisation;
- Enhancing engagement and ownership of learning;
- Evolving transformation and sense of independence; and
- Understanding learning about learning for self and others

In the remainder of this section we identify, describe and explain six BP design elements by drawing on the stories of students, teachers and parents. We draw on interview data, observations and reflections to develop a profile of what we describe as promising practices. We also want to remind the reader that not all aspects of the BPE design had – at that point in time – been fully implemented in any of the contexts and there was variation in the extent and depth to which it had been implemented in each setting.

Advisory - like an extended family

An Advisory¹⁰ is a small community within a Big Picture inspired school. Students remain with the same Advisory for two to four years. This is so they will get to understand and know each other and the AT very well, and vice versa. In this way Advisories become great support systems. The Advisory is like an extended family. Within this system, every student has an adult in the school who cares about him or her deeply. The Advisory is the student's family group at school, with its own name, culture and personality. Students are expected to become respectful, caring and productive members of the Advisory group. The Advisory is a time for students to be exposed to a wide range of ideas, interests, skills and experiences. It is the AT's chance to mould, teach, inspire, provoke, bond, organise and make the learning come to life.

Collaboration and cooperation – the role of peers

In previous sections (see pp. 19-20) we outlined the different roles that peers play in supporting and challenging each student in relation to their learning. Here we focus explicitly on the ways in which students talk about the role of Advisory and peer support in their learning.

Here everyone is like a big family because it is a smaller school. When someone is down, everyone helps to pick them up. We all have similar experiences and we all 'get' each other. We know the same stuff and have the same experiences.

I am good friends with everybody in the Big Picture class. It's like a family. Some new people have come in and some have left. We support each other. We know about each other. I try and talk with everybody to hear about how much they love their interest. We know about each other' interests. (Student)

9. As previously indicated it is useful to remember that schools had not implemented all of the design distinguishers all of the way through.

10. Adapted from Hogan, J et al (2008) *Advisory A small community within a Big Picture school*. Big Picture Education Australia.

A lot of us wouldn't normally hang out together but here everyone gets to know each other in a different way. You learn a blot more about them and you just get along with everybody really. I think my friendship group might change with all the different projects that we're doing. Unlike in mainstream classes, in here you have to kind of talk to everybody – especially if your projects connect. When we were all building furniture together you learn what the real person is like. In here you're allowed to talk with everybody but if you want to be quiet – if you want silence then people respect that.

The same student five months later said:

We all do our work in our own way but we share ideas in the group. I enjoy that. It was hard to share at first because in the general program [mainstream classes] we are used to people taking your ideas because we've got to do the same topics. In Big Picture we make it our own even though we are doing the same topic, it means it is less competitive. People have different things they are good at and present their work differently. People are encouraged to get out of their comfort zone too. At Town Hall we would discuss everyone's ideas and give suggestions.

We are more equal here. We can just say to [advisory teacher] "I'm just going to the library, be right back." Or choose to go and sit outside and get fresh air. Having that flexibility has helped me. I organised an excursion to the zoo for one of my projects and went with another couple of students. It really helped. (Student)

This connection was clearly evident in the Exhibitions observed during this research the behaviour of the other students was uniformly supportive of the student exhibiting. This included spontaneously clapping when the student was introduced; giving the exhibiting student hints; responding to questions posed by the student exhibiting; and asking questions at the end of the Exhibition based on knowledge of the student and a desire to help them relax and explain unexplored aspects of their chosen topic. This kind of peer support cannot be underestimated because many students find such presentations in normal classroom settings to be awkward, embarrassing and intimidating. Here there was a clear sense of collective support. Whilst peer questions were typically based on interests and immediacy rather than challenging, all students appeared to be on the same side. They also provided useful written feedback to the presenters based on warm (things they liked) and cool (things to think about) feedback.

Advisory Teacher (AT) - supporting, extending and deepening

ATs¹¹ negotiate student Learning Plans, convene meetings with students, parents and mentors, in order to develop the plans and discuss progress, investigate learning opportunities at worksites, and imagine their connection to the student learning goals. They also broker and monitor Internships in the community. They would be expected to coach or find support for students in learning domains that may be outside their own discipline. In addition, they help students develop depth in extended projects and exhibition development and are involved in one-to-one counseling of students. These are personal and professional skills not always needed by classroom teachers.

ATs are classroom teachers too. They need to know how to assess the educational potential of a particular experience; how to convene and facilitate the class as a group; how to entice students individually, in groups or as a class to invest their time and engagement with an idea, text or task. They need to encourage metacognition by students by linking one experience to the next, week by week, month by month.

They need to know how to connect their own efforts to the larger vision of the school and to the work of their colleagues. They need to know how to help students develop their literacy and numeracy capacities. They also need to know when to be tight and when to be loose – they need to know when to intervene and when to withhold and how to distinguish what should be corrected from what should be overlooked. They need to know when and how to exercise their legitimate authority as knowledgeable and caring adults even in the face of resistance.

The role of Advisory Teacher - Supporting, challenging, deepening

One student's perspective over time:

I don't see Ms X as my teacher. I see her as an advisor – someone I can ask to help me if I need it. We have a good connection. She is cool. (Student)

11. Ibid

The same student 5 months later explained:

I'm able to ask the AT any questions about outside of school or inside of it and they give helpful answers. (Student)

And one year after that:

My relationship with the [AT] is amazing. She is really helpful with school work and stuff at home. It makes doing all the work easier to have someone to talk to about it. She checks in with me every Monday and I let her know how TAFE is going and my job. They are more involved in our lives than I expected. (Student)

And another student from another school explains how:

Everyone's at different stages, so you check-in with the teacher once a week, so they know you're on track - and just get going to where you have to be. Instead of the teacher standing at the front telling us what to do, he says, "Okay, you tell me what you're doing, and if you need something then you let me know and we can try and sort that out". It's more like we're telling the teacher what we're doing, instead of him telling us what we have to do. It felt weird at first, but now I'm getting used to it. And I'm a bit more in control. I understand more what I have to be doing. (Student)

And later in the year:

My relationship with the AT is more like a friendship than with other teachers. I have discussed problems with him. It will help us grow up that we have to behave differently in general school to Big Picture. (Student)

Being able to negotiate time has helped me academically. It takes the stress out of it. I'm doing really well. It also helps me that we sit down with the teacher and discuss what mark we deserved. This one-on-one feedback helps me know what I can do differently in the future. (Student)

In all schools the ATs had a strong presence at the Exhibition. Generally, the AT did not speak until the end of the Exhibition although one AT was more interventionist and probed the students throughout the Exhibition. Where the student was anxious, the teacher provided the immediate support to enable them to continue with/commence the Exhibition. Their presence was warm, task focused and challenging. They endeavoured to get the students to expand, explain and deepen what they had exhibited. All ATs ensured that the students reflected on their learning about self and learning about learning.

A few students in the Big Picture environment had not maintained their previously expressed enthusiasm and interest. They indicated a need for greater structure and support than was offered at their school (1 school) or greater subject choice (1 school). This indicates that the work is ongoing – one student at a time. It never ends for the AT.

Real world learning - connecting to people in the community

This theme describes the ways in which students are learning in community-based contexts that allow them to interact with people, places and objects outside the school. Students learn how to negotiate their way in the adult world through a range of strategies including informational interviews, shadow-days, Internships with expert mentors, authentic tasks, and Exhibitions.

At this early stage, however, Internships were only operating effectively in a few schools and only a small number of students were able to engage in fully developed Internships. But even so students were benefiting from their 'leaving to learn' experiences.

Students identify valuable learning as taking place when they move into the community and engage with people and authentic tasks through Internships. Those who did were inspired, clarified their career goals, and learnt many important skills. For example,

They've connected to the professor of linguistics at UWA, a linked-in professor at UWA and a professor of Aboriginal studies from UWA. [Name of student] as a white fella from [another country] has been invited by the Noongar elders to help write the Wikipedia page on Noongar... He went off on his own over the holidays and taught himself Noongar grammar and vocab and has analysed it and written an online English to Noongar dictionary with one of his

friends... They've entered that Young Innovators competition and they've been shortlisted for that... He's in year 10 and he's learned sophisticated grammar and on his own went off and analysed Afrikaans and Swedish to look for a particular pattern ... (Teacher)

Attending other institutions doing work harder than what school offers:

I have found it hard to manage myself with the TAFE course. It has shown me how much motivation matters. I didn't understand the commitment of a Cert IV. I just need to put my head down. It has helped in the Cert IV that I have had the experience in Big Picture because there is lots of talking to lecturers and group work. Taking feedback in Big Picture is essential. That has helped me at TAFE as we all have to get up and talk to the class. How we do this matters as we need to get the class engaged in our joint project. (Student)

And another student:

Last time we spoke I was interested in marine biology but my interests have changed, ever since my learning for shadow days, internships and especially going to the vets. The internships are really good for helping us think about our future. Now I want to work with animals, possibly as a vet, or somewhere in medicine. My interest in being a vet was sparked by my dog Marley getting something stuck in his intestine. We were able to be involved in looking after him. I was able to get an internship at a vets and I was able to do a lot more than I thought I would. I watched all the surgeries and even helped. On one occasion I actually helped with the monitoring of the heartbeat. I also did cleaning duties and things like that but I got to see every side. The vet suggested that I try to do biology and chemistry at school. After the internship with the vet I did some study into radiation – with the x-rays. And outside school I researched vaccinations, oxygen saturation and things like that. (Student)

Post-school plans - looking to the future

This theme captures the students' plans and goals for their imagined future. It includes the ways in which students' think about their future careers and the extent to which schools support them or not. It describes some of the conversations, strategies and experiences that appear to assist students by linking their present learning with future possibilities.

Students are given opportunities to explore their interests and future career aspirations. Over the research period many students appeared to gain greater clarity around future pathways and chosen careers. For others, the experience opened new possibilities. Some schools emphasised the importance of students becoming experts in the pathways available to them. Students had mapped and implemented plans including completion of relevant Cert IV qualifications. Some students had left Big Picture to implement the next stage of their career pathway (e.g. moving to TAFE or moving into an ATAR pathway in mainstream school.

The table in the section to follow (pp. 28-29) shows the extent to which students were exploring post school possibilities. We also see evidence of this thinking in just two of the portraits attached at the end of this report. (See Appendix Two)

Developing Post School Plans – supporting life beyond school

In one school the focus of the Exhibition was student pathways post-2015. These year 11 students invested a lot of time and energy over the last year trying to identify the steps necessary to implement a post-school pathway. It was clear from the Exhibitions that they had invested heavily in this process. They reflected on their learning especially the role of research and support from their Advisory Teacher. Importantly, they identified a variety of actions to make their Post School Pans a reality. There was a strong sense of taking responsibility and ownership in order to obtain relevant TAFE qualifications that would enable them to achieve their goal, which also involved university courses, whilst still attached to the Big Picture Academy.

See William's portrait on pages 34-35. There you can read how the dual focus on his interests and his exploration of post school options led him to new ventures, new foci and new pathways – without losing his initial passion.

Exhibitions – a site of learning and connection

Exhibitions are the opportunity for students to present their work to their AT, peers and family. It is one of the ways

they show they are meeting their learning goals. Exhibitions are a central part of the authentic assessment that is a Big Picture distinguisher.

As we outlined in Combined Report 2 Exhibitions play a key role in enabling students to gauge their learning and develop new skills and confidence in presenting their learning to others. Some students found Exhibitions to be very stressful experiences. Some saw this as positive. A couple not. Exhibitions are highly valued by parents who were consistently impressed with their child's learning and capacity to express their learning.

In this section we want to pick up on the contribution of the Exhibition to student learning as a particular case study. Given its unique place in the Advisory we want to shed light on exactly how it enhances student learning and authentic assessment practices in schools.

At all Exhibitions a parent and/or guardian was present, and for a few Exhibitions, other family members were present too. One younger (adolescent) brother who was present at his sister's Exhibition had attended each Exhibition and arranged it with his teachers so that he could attend. The AT was always present along with other students from the Advisory.

Students generally presented on their interest projects together with reflections on the nature of learning itself. The Exhibition process requires students to not only reflect on the content of their chosen project but to deepen their understanding by linking to subject knowledge. It also requires them to reflect on how they engaged with the task and what they understand about themselves as an individual and as a learner through the experience. Students showed great awareness of their strengths and challenges as they openly discussed what they had learned about themselves. Students talked about behaviours such as a tendency to procrastinate, to get caught up in the minutiae, to obsess or avoid things. Parents/guardians and ATs explored with them how to use this self-knowledge for future learning. For some students, this awareness allowed them to identify new strategies to help them respond to new learning opportunities and avoid past mistakes.

Based on classroom observations in Round Three we identified some key features of the Exhibition that support deeper learning:

Invited, interested and inquiring – the role of parents/guardians

There was a range of behaviour by parents and/or guardians at the Exhibitions. All took an obvious interest in the process and the content of the material being presented. Some clearly had been involved in the student's preparation for the Exhibition and in a few cases were called on by students to answer content questions or offered additional information on behalf of the student. Some offered feedback (both congratulatory and challenging) on the Exhibition and additional advice regarding next steps for the student. Some asked more probing questions to ascertain whether the student had considered relevant issues in their project. Their presence in the Advisory appeared to be unremarkable and relaxed for all concerned: the student exhibiting, other students and the AT.

Accountability - making learning visible

It was apparent from the discussions with various students and ATs that the Exhibition was a "moment of truth" which motivated them to apply themselves seriously to their studies. These features of the Exhibitions are important structurally and pedagogically because they serve as a significant means of ensuring not only public transparency and depth of learning to a wider audience but also improved social and emotional outcomes for all students. However, a depth of learning was not apparent at all Exhibitions, it takes time and practice. This is in line with some Advisory Teachers seeing the need for further inquiry or capacity to communicate the depth of learning.

Those that have done [Exhibitions] are evolving, are getting better. I think we as a staff are getting better at supporting them and talking them through. We're still trying to get depth with all their work in general but it's improving even there... I'd still like to a see greater sense of metacognition with the seniors and in general depth of content and theories... For some it's... trying to get depth [in their project work], and for some it is actually just getting that depth of learning reflected in their Exhibitions. Sometimes it is "I know that you have a greater understanding of those concepts than you have just presented." (Teacher)

Family – families are enrolled too

Families play an important role in students' education. From helping students develop their Learning Plan to participating in events, parents are an integral part of the educational community. This process empowers parents to play an active role in their child's education and in the school community. They participate in quarterly learning plan meetings, they are involved in student exhibitions of learning and are expected to attend an orientation for new families and a number of school functions throughout the school year.

Enhanced relationships – new opportunities and conversations

The two portraits – William and Mary - at the end of this report highlight the pivotal role of family engagement in the BPE design. We wish to briefly allude to their stories from the point of view of their parents to highlight how family relationship develop in a more personalised learning environment.

Mary's mother explains how the decision to enrol in the BP school provided a sense of optimism about her daughter's future and her own dreams for her.

When Mary was asked to leave the school she was at before I told her she couldn't drop out. She really wanted to. I'm very happy that she did try this school. I don't want her ending up a statistic – a teenage mum with no job, getting benefits. I wish this school was around when I was at high school – I left school at 14 and haven't been back since. (Mother)

Likewise, William's mother describes how her relationship with her son improved. My relationship with William is changing. When he was in mainstream he'd arrive home angry, drop his bag down. I'd ask how his day was. He'd just say "bad." Now he wants to talk to me because he's interested in being at school. The Exhibitions are good for him to push him a bit more and good for his confidence. They give him an opportunity to reflect on how he's going... The other kids give him positive feedback and are encouraging. At his first Exhibition he was sweating, breathing fast... now he can talk confidently. I wish that I'd had Big Picture when I was at school. I would have stayed at school rather than dropping out in Year 10 and going into a low paying job. Now I'm 38 and at university at last. I had the potential back then but just didn't want to be there.

In mainstream I had a lot of trouble getting him to school and his attendance record was really quite low. But now he enjoys coming to school. (Mother)

4. How does this work enhance aspirations?

The Big Picture Academy research project sits within a funding context designed to raise and support the aspirations of secondary school students from disadvantaged backgrounds. The term aspirations itself is not without difficulties. It is neither neutral nor innocent as it brings a particular set of assumptions, beliefs and values about young people especially those from low SES backgrounds who are more often than not deemed to be unambitious. In other words, the student is perceived to be deficient or lacking (e.g., lazy, lack of motivation, low IQ, dysfunctional families, troublesome and so on) hence the focus on 'fixing' the individual rather than the context in which learning takes place. As Carter-Wall and Whitfield (2012) explain it, "What may look like "low aspirations" may often be high aspirations that have been eroded by negative experience" (p. 4).¹³ Against this backdrop, Big Picture Education seeks to create the relational networks and pedagogical practices that will enable all young people to flourish. This is the pivotal role of the Advisory and AT (see previous section).

Linked to the relational aspect of aspiration building is a view that students require the capabilities necessary to negotiate their way in the world. These are most often related to the economic and social contexts in which students' lives are shaped, for example poverty and/or wealth. The question becomes to what extent is family

 $^{12. \ \} See \ description \ of the \ MAP4U \ project \ at \ https://www.ncsehe.edu.au/murdochs-aspirations-pathways-university-project-map4u/?doing_wp_cron=1423210648.6372709274291992187500$

^{13.} Carter-Wall, C., & Whifield, G. (2012). The role of aspirations, attitudes and behavior in closing the educational attainment gap. York, UK: Joseph Rowntree Foundation.

culture and school culture working in harmony? We know students come to school with different language, experience, knowledge, skills, dispositions, desires, needs and dreams (cultural and economic capital). Under these circumstances Big Picture Education seeks to build each student's capabilities by assisting them to: (i) identify the kinds of lives they want to lead; (ii) providing them with the skills and knowledge to do so; and (iii) helping them to understand and change their circumstances for the better (Sen, 1992; Appadurai, 2004).¹⁴

In identifying how student aspirations develop in a Big Picture Academy the most obvious target is to examine what they say about their imagined futures especially as it relates to careers and educational pathways. However, we recognise that students have a variety of non-career aspirations too. The following excerpt from a student portrait¹⁵ shows a wide range of non-career aspirations for a flourishing life. For example: responsibility; leadership; sport umpiring; personal fitness and sport; balance of endeavour and relaxation; entrepreneurship; and flexibility.

I have responsibility as a year 12 to uphold what is needed and pass it on to the year below. I try to be an all-rounder and keep the respect level for everyone. That's part of being a leader, at school and outside of school. Life is getting a hold of me. I've worked at a number of jobs – at a cycle shop, at a nightclub and at a restaurant/tavern. I also do footy umpiring. This is my third season and I have been chosen to be the league number one boundary umpire for the grand final. I worked hard to ensure this place – training hard every week and being focused on game days. Although my main focus is school, I like having a life outside school. I am still doing Mixed Martial Arts twice a week. Because I'm 18 and I find that I'd get loose on the weekend and come back to the week refreshed – having a bit of fun on the weekend helps – not to the extent of destroying brain cells.... Hopefully I'll start a clothing brand. It's been a little idea in the back of mind for a while... I still don't know what I want to do, whether I should move out, whether I should travel... I just like to go with things. (Student)

We saw in the analysis of the second round of interviews that most students were starting to clarify their career goals and identify the necessary steps to implement their post-school plans. There was no evidence of a deficit/ deficiency of aspirations in the student data obtained. On the contrary the *Combined School Reports 1 and 2* from round one and round two show all students held high aspirations for themselves. This continued to be the case in the third and final round of interviews with students. The students interviewed had a wide variety of careers they were interested in. Supported by their AT and others they had undertaken preparatory steps to facilitate their future education and training, careers and life. These steps included:

- regular discussion with the AT (and peers) on their interests and passions;
- regular discussion with the AT (and peers) about their career plans and pathways:
- online research into tertiary and further education courses;
- contacting TAFEs and universities to obtain relevant information;
- organising Shadow Days;
- organising and participating in Internships;¹⁶ and
- enrolling in relevant TAFE courses alongside their school work.

Depending on the AT and the student, there may be more intense support from the AT for some students whereas others are encouraged to be more self-sufficient. Each student had taken unique steps to clarify and identify their post-school options and pathways. However, what remained consistent across all students was the ongoing conversations with their AT about their interests, passions and future plans. We continue to grow our understanding of what a *pedagogy of aspirations* might look like.

- 14. Sen, A. (1992). Inequality re-examined. Cambridge, MA: Harvard University Press; Appadurai, A. (2004). The capacity to aspire: Culture and the terms of recognition. In V. Rao & M. Walton (Eds.), *Culture and public education* (pp. 59-84). Stanford, California: Stanford University Press.
- 15. A portrait was constructed from the interview with each student. This was taken back to the students who were able to comment and make changes
- 16. Of note was a decrease in Shadow Days and Internships undertaken at two schools while a third school was strengthening its approach to Internships.

Table D below shows a snapshot of changing student aspirations linked to future careers over the 18-20 month period students were interviewed.

Student	Year level 2015	Initial aspiration (1st term 2014)	Current aspiration (3rd term 2015)	Steps taken and intentions
Anita	11	Initially: Pastry chef End 2014: Dept of Child Protection worker	Beautician	Enrolled in an online Diploma in Beauty in Term 3, 2015 2016: Considering leaving school to work
Bob	11	Video game de- signer	Accountant	Currently enrolled at TAFE in Cert IV in Digital & Interactive Game Design, 2015 2016: Cert IV in Bookkeeping and Accounting 2017: Diploma in Bookkeeping and Accounting 2018: Bachelor of Accounting Murdoch Uni
Camileo	11	Initially: Architect, carpenter or engineer End 2014: Carpentry	Camileo had gained an apprenticeship as a plaster in mid- 2015 and was not interviewed	Internship in café Researched different career options Currently apprenticed
Tyler	11	Initially: Bricklayer or army. End 2014: Carpenter or airforce	Tyler moved suburbs and changed schools 2015 and was not interviewed	Bricklaying and carpentry courses 2016: ?
Elizabeth	9	Drummer in a band or doctor	Elizabeth chose not to be interviewed in 2015	2016: Yr 10
Emilie	11	Not sure – maybe marine biology at uni. Changed mind every term	Photography and business	Shadow Day with surfboard artist 2016: Yr 12
Hayle	10	Not sure – maybe music	Law	Internship with Member of Parliament Online research for possible universities 2015 2016: ATAR
Jarrad	12	Not sure – sports science, sports psychology, armed services	Graphic design	Has applied to do Cert III in Graphic Design and Printing, Term 3 2015 2016: TAFE Cert III Graphic Design Longer term: To start his own clothing brand.
Jennifer	10		Exploring. Early 2015 – tattooist. Late 2015 – bricklayer, tiler, psychologist	Try-a-Trade Interest project in Psychology 2016: Vocational course at school
Jon	10	Marine biology	Medical field: doctor, vet, nurse	Long term Internship at veterinary clinic 2014 and 2015 2016: ATAR

Student	Year level 2015	Initial aspiration (1st term 2014)	Current aspiration (3rd term 2015)	Steps taken and intentions
Jones	11	Genetics, physics, chemistry	Unsure Science based	Intensive at Curtin – anti-matter studies in 2014. 2015: Moved to mainstream ATAR 2016: ATAR 2017: University
L	9	Law and music	L left the school mid 2014	
Lily	10	-	Hairdresser	Various internships Has applied for 3 TAFE courses (Hair and Style Design; Beauty and Makeup; Fashion) with possibility of starting in 2015. 2016: Vocational course at school
Mary	11	Personal trainer	Personal trainer or something with animals	Informal internship with personal trainer in 2014 2016: Traineeship in business plus Cert I and Cert II in Personal Training. Also possibly certificates in hospitality.
Mia	10	Author	Not sure	2016: ATAR
Mickey	11	Initially: Zoologist veterinarian End 2014: marine biologist or vet	Mickey returned to mainstream in 2015 and was not interviewed	Internship as a dog groomer Lot of conversation with Advisory Teacher about future.
Renee	11	Unsure	Renee left at the end of 2014 and is at TAFE studying Cert III in IT	Explored baking 2015: TAFE 2016: ?
Rose	11	Childcare	Teacher's Aide in special needs	Thursdays placed in a special needs school. 2016: Traineeship at special needs school. Cert II in Teachers Aide or Cert II in Community Services
Sally	11	Initially: Beautician End 2014: uni degree – botany or biochemistry	Sally had left the school end Term 3 2014 and was not interviewed	Internship at beauty salon (2014) 2016: ?
Т	10	Sport teacher	T left the Big Pic- ture program early in 2014	Shadow Day at primary school with sports teacher (2014) 2016: ?
Wendy	10	Something with children	University degree – maybe psychology, career with children	Shadow Days and Internship at Day Care Centre, Primary School, Community Health Nurse 2016: ATAR
William	11	Professional gamer	Computer science – artificial intelligence	Online Cert IV in Programming (enrolled July 2015) Cert II – IT 2016: Year 12 2017: Murdoch Uni via OnTrack Sprint

Table D: Changing student career aspirations 2014-2015

We gain a much greater appreciation of how student aspirations develop by listening to the stories of one AT as he talks about two of his students and their learning journey (refer to page 18 for earlier quotes related to Kiah and Loretta)

Kiah's journey

Kiah made the choice to return to mainstreaming at the end of her first year of Big Picture. As one of the most proactive students in obtaining an internship in physical therapies, she found her passion in physiotherapy. Kiah went to visit real clients in their home and worked with her mentor to do assessment and basic treatments. In her investigations of the required training for physiotherapy, she realised what subjects she needed and that being in the mainstream would be the best option for her to obtain the background knowledge and skills. Her parents were hesitant and when the Advisor met with them, they expressed that if it was not for Big Picture, their daughter would not been so determined and directed in her finding her passions. They knew that if it wasn't for Big Picture, she would not be as confident in dealing with people to negotiate the 'real world' and have a sense of purpose. They, and Kiah, were extremely grateful for the opportunities that Big Picture offered and the skills that she developed to be a true active participant in the 'Real World'. Traditionally, students struggle to get into physiotherapy or occupational therapy for so-called 'work experience'. Kiah took the lead and did a fantastic series of Internships that even university students would not be able to obtain. (AT)

Loretta's journey

Loretta continued to flourish in Big Picture. She floated in working on developing her passions and interests and was lost. Her work on her family history posed more questions then she answered and she had to battle her own personal demons whilst balancing the demands of school. If it was not for Big Picture, who knows what Loretta would be doing now. Then, out of the blue, she came to her advisor and talked to him about learning about child birthing techniques. She said that she always loved children and that she found the medical side of it fascinating. She went about working on developing an authentic project. She worked closely with her peers, the child-care teacher at the school and the Big Picture School Coach. Her research became an in depth exploration of her passion and her exhibition and final product was something to be proud of. This young lady, who in her first exhibition broke down with anxiety and fear, got up in front of her parents and peers and was able to talk about the childbirth process, in graphic details. She then applied and was admitted to the nursing pre-placement programme in Nursing. Her research skills that she developed in her personal history project gave her the ability to develop a real research question, to find the valid sources and communicate it carefully. The successes, and sense of flow (c.f. Mihalyi Csikszentmihalyi) allowed her to get excited and intrinsically motivated to work towards her goals. . If she was in mainstream, she would have been stuck with labelling diagrams of the human body and would be demotivated and, well, lost. Instead, she found her sense of purpose and a dynamism that most young people do not have. Her parents, and Loretta, are grateful for the Big Picture programme. Her mother often commented that she now how a daughter that wanted to come to school and wanted to learn. Prior to this, they had a said daughter who hatted school and what it brought to her life. School became meaning and purposeful. (AT)

Both Kiah and Loretta's stories reveal something about the conditions in which aspirations are enabled. In both stories the emphasis is on creating the conditions in which young people can develop the capabilities to explore and negotiate their way in the world. There is a focus on strengths and assets of students rather than pathologies and weaknesses. These students were provided with an alternative framework for understanding 'success' and failure' in education and work. Their AT has created a context in which they can think differently about their futures. This involves identifying the barriers and obstacles they face whilst developing the skills and knowledge to lead the kinds of lives they desire.

Concluding remarks

Pulling the main ideas of this report together we can make a number of general observations. First, statistical data (e.g., ATAR, NAPLAN, PISA) collected by education systems cannot adequately capture the benefits of teachers, students and parents engaging in more authentic and personalised learning approaches. We can only properly comprehend the work of teachers and students by getting up close and personal to their daily lives and practices. Paying attention to the realities of students' lives provides a much richer insight into 'doing' school differently and the implications for student learning based on the stories of real students, teachers and parents, in real schools.

Second, there is an acknowledgment that mainstream schooling or a 'one size fits all' approach to education is not working for a growing number of students. In response, some students actively choose to enrol in a different way of 'doing' school where they feel a greater sense of ownership, belonging, and mattering. Others are simply "pushed" out of mainstream schooling and searching for an alternative school.

Third, personalised approaches provide numerous benefits in terms of student engagement, deep learning, aspirations, and wellbeing. Throughout this research we heard time and time again about the positive effects of personalisation. The attempt to implement the Big Picture design for learning has resulted in students re-engaging in learning with a greater sense of purpose and relevance. Furthermore, there is evidence of enhanced relationships with family and peers, growing confidence and the development of capabilities to manage their own learning and futures.

Finally, such outcomes can only be achieved through a deliberate approach to changing school culture, structure and pedagogy. This kind of change takes time, perseverance, resources and leadership. Pivotal to this process is a willingness to engage in self-reflection with a view to better understanding and improving practice. Along the way, there are tensions and contradictions as participants negotiate alternative ways of thinking and acting. We hope this report based on the stories of students (and their teachers and parents) provides a foundation for ongoing conversations based on a spirit of optimism and hope.

THE BIG PICTURE EDUCATION DISTINGUISHERS

The Big Picture Education design is a dynamic approach to learning that has been changing the lives of students, educators, and communities in Australia since 2006. The design is based on three foundational principles: firstly, that learning must be based on the interests and goals of each student; secondly, that a student's curriculum must be relevant to people and places that exist in the real world; and finally, that a student's abilities must be authentically measured by the quality of his or her work.

There are a number of design elements that, in combination, distinguish Big Picture Education from other designs of schooling. These elements or 'distinguishers' influence everything that advisory teachers, leaders, students and families try to do in a Big Picture school or program.

The distinguishers are:

1. Academic rigour: Head, heart and hand

Big Picture schools have a strong intellectual purpose for each and every student. Students are continually challenged to deepen their learning and improve their performance across five learning goals: quantitative reasoning, empirical reasoning, social reasoning, communication skills and personal qualities. A high standard of academic work is expected of all students.

2. Leaving to learn: Learning through internships

Students work two days a week in an interest-based internship with a mentor from the community on an intellectually rigorous real-world project that is connected to their learning goals.

3. Personalisation: One student at a time

With the help of the advisory teacher and parents, each student develops a learning plan that explores their interests and passions, and identifies personal learning goals, authentic project work and wider curriculum requirements. This plan is reviewed and updated regularly.

4. Authentic assessment

Each term the students exhibit their portfolios of work to a panel made up of the advisory teacher, family, peers, the mentor, and others from the community. They provide evidence of progress against their learning goals and they reflect on the process of their learning.

5. Collaboration for learning

Students work in one-on-one or small group learning environments around their interests both inside and outside the school. Through internships, the community plays an integral role in the education of the students.

6. Learning in advisory

Students are in an advisory group of no more than 17 students and an advisory teacher. They stay in the same advisory for much of their secondary education. The advisory teacher manages each student's learning plan and ensures that all learning goals and the National Curriculum are covered.

7. Trust, respect and care

One of the striking things about Big Picture schools is the ease with which students interact with adults in both the school and the wider community. A culture of trust, respect and care is shared between students and adults, as well as among students themselves.

8. Everyone's a leader

In Big Picture Schools, leadership is shared among the principal, staff, students, family, and community partners. Opportunities for leadership are created for everyone.

9. Families are enrolled too

Big Picture schools aim for real family engagement. Parents or carers are regarded as essential members of the learning team, beginning with the application process and progressing through to learning plan development, exhibitions and graduation.

10. Creating futures

All students are expected to graduate from school to further learning. They are prepared for, and connected to, opportunities for learning at university and/or other further education.

11. Teachers and leaders are learners too

New ideas constantly emerge as part of the learning cycle process. Teachers and leaders in Big Picture schools and programs regularly attend to new ideas and learn new ways of working. They develop reflective practice and find ways of sharing this learning with others.

12. Diverse and enduring partnerships

A Big Picture school has a strong focus on building and creating external partnerships. These include partnerships with: the family, mentors, local councils, businesses, universities, TAFE colleges and other training providers. These partnerships give students the opportunities to pursue their learning and achieve their goals.

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Appendix 2: Case Studies: Two student portraits

Student learning is a multifaceted and complex process. Secondary school students are at a period of their lives where they are potentially learning to understand themselves and their world. This intra-personal learning is supported strongly by stable relationships with peers and significant adults. In the Big Picture classroom the Advisory teacher is of pivotal importance. Supportive relationships are key for interpersonal learning also – the social and emotional learning that underpin the capabilities needed to function effectively in adult environments. These vital aspects of student learning occur contemporaneously with the expansion of student knowledge through research and study. To provide a greater sense of how the Big Picture environment works we shall take an up close and personal look at the lives (portraits) of two students from two different schools.

These two students are not exceptional within the cohort of students in this research project. The portraits enable the reader to gain a better appreciation of how schooling impacts on real people in real schools. The portraits have been developed and expanded after each round of interviews thus enabling some sense of the student's changing goals, opinions and feelings. The use of portraits over time allows us to better comprehend how students experience mainstream schooling and the ways in which an alternative setting like the Big Picture Academy allows them to re-engage and flourish. The draft portraits were taken back to students for them to confirm and/or modify. The students were very excited to see their stories come to life and have meaning for others. In addition, relevant comments from parents have been included to enrich the student's own story.

To begin, a word on the use of portraiture is appropriate. Sara Lawrence-Lightfoot (Lawrence-Lightfoot & Davis 1997), the pioneer of this approach to research and documentation in the social sciences, argues that portraiture is a method which combines:

systematic, empirical description with aesthetic expression, blending art and science, humanistic sensibilities and scientific rigour. The portraits are designed to capture the richness, complexity, and dimensionality of human experience in social and cultural context, conveying the perspectives of the people who are negotiating those experiences. The portraits are shaped through dialogue between the portraitist and the subject, each one participating in the drawing of the image. The encounter between the two is rich with meaning and resonance and is crucial to the success and authenticity of the rendered piece (p. 3).

Thus student voice is presented here as a key component to answering the research question: "How do student engagement, learning and aspirations develop in a Big Picture Academy?"

William - Learning through gaming

William has completed two years in a Big Picture Academy in a large outer Metropolitan secondary school. He was encouraged by his mother to apply for the program on the basis that he would be able to explore his interests. He has autism. His mum looked after the family until recently and has now started university. His dad has had a variety of jobs. Neither his parents went to university. William would like to study IT and science at university. His aspirations changed over the period from professional video game player to video game designer to IT that benefits society.

Interview 1, Week 8, Year 10, 2014

In mainstream class I have been told off for talking about what I am interested in. Here are can explore my interests. If I were in mainstream I'd be doing boring work, looking at a whiteboard, copying notes down, stuff like that. In Big Picture teachers aren't hammering me with homework I don't care for. I can do my own thing at home. I can follow in-depth one thing all term without jumping from one subject to the other. I have the power to choose what I do. My friends in mainstream envy me. At the moment I'm looking at being a professional gamer... I've been in the top 800 for Australia in one of the tournament I was in. In Borderlands I've been at the top of the leader-board for a week for killing the boss.

Mum's perspective ...
In mainstream I had a lot
of trouble getting him to
school and his attendance
record was really quite low.
But now he enjoys coming
to school.

At the beginning of term and I sat down and did my matrix (learning plan). It was confusing because I didn't see how to include maths or science. I eventually found out there is a lot in maths in professional gaming. For example, there is a way of calculating "critical damage" in Borderland 2. [Advisory Teacher] helped me to work out the formula. Mum came to school for the meeting to discuss my matrix (learning plan). It felt good to have my mum, [Advisory Teacher] and me to sitting down talking about my work. My mum stopped viewing gaming as me being lazy. She is now supportive of me becoming a professional gamer. I now talk with her about what I'm learning. My Mum's very proud of it.

I have also included communication from English in my matrix. I saw other kids doing commentaries on videos they are doing and that gave me ideas. I've had a YouTube channel since 2005 and have been uploading videos of random game plays without commentary. Some of my subscribers are saying I should do commentary so I'm going to start doing that. I feel that I play the game well enough to teach people how to play it. I've been able to include history by looking at some of the content of one of the games – Call of Duty. For the Nazi zombie assignment they

Mum's perspective ...

I'm extremely happy that William is in Big Picture. I've noticed that he's come out of his shell a bit more. He's not a very social kid and finding his passion has really helped him. He's even had a haircut – something I've been trying to get him to do for years. He has low self-esteem and before he used to hide behind his hair. He's also more open and talks to me about school and what he's doing. I think he's feeling a bit more confident. At one of his presentations he stood in front of the class with his hair off his face, oozing with a little bit more confidence in himself.

actually put in a lot of German Nazi history. In Big Picture I'm learning stuff I would never have known because I was just playing the game. Now I have the time to research the game. That feels good.

[Advisory Teacher] works well with everybody and understands us all. She knows what we are at all interested in and tries to help us develop the ideas we come up with. Because she knows us she can give relevant suggestions. She suggested I make a video with snippets from my YouTube channel for my Exhibition. I really like having just one teacher – like in primary school. There is more trust. It is frustrating in high school constantly having to meet new teachers all the time.

For my internship I'm looking at being an IT teacher helper at a primary school. Next week I'm going to e-mail the teacher at the local primary school. I might go down to watch this term and start the internship next term.

Big Picture helps me achieve what I'd like to in the future. They don't criticise me because I want to get paid to play video games. They are very supportive. They didn't give up because I couldn't get an internship as a professional gamer.

Mum's perspective ...

My relationship with William is changing. When he was in mainstream he'd arrive home angry, drop his bag down. I'd ask how his day was. He'd just say "bad." Now he wants to talk to me because he's interested in being at school. The Exhibitions are good for him to push him a bit more and good for his confidence. They give him an opportunity to reflect on how he's going... The other kids give him positive feedback and are encouraging. At his first Exhibition he was sweating, breathing fast... now he can talk confidently.

I wish that I'd had Big Picture when I was at school. I would have stayed at school rather than dropping out in Year 10 and going into a low paying job. Now I'm 38 and at university at last. I had the potential back then but just didn't want to be there.

Updated from Term 4 interview, 2 December 2014
I'm going a bit more in-depth in my learning about the game
I play, Borderlands. I've taken recommendations from the
community on the internet and incorporated it into my game.
I've been learning that I can learn from everything that I do in
life. It used to be a hobby but now I view it as something that
is teaching me about how computers work, formulas and how
to get the final result. I am now testing the game, playing the
game and recording the results. It's my aspiration to make video
games in the future.

In mainstream I would get bored and then I would start rebelling. I like school a bit more in Big Picture because I know that when I get to school it's not going to be as boring. I like having my own corner, desk and place to put my stuff so that I can go back and refer to it. Being part of a small group helps a lot because I don't have to be around different people every hour.

I know where I would like to work and what I need to do to get there. I need to graduate from university and get 2 years work in gaming experience first. I've looked into Murdoch University because it is close and offers the courses I want. I need to get an ATAR in English of 70 or more and a WACE and a lot of other stuff. I've been up to Murdoch a couple of times – at the Open

Day and for an event specifically for students to look at courses in the media area.

Updated 11 August, 2015

Things have been going pretty well this year. I enrolled in a Cert IV in Programming online a month ago. I'm swaying back and forth over what I want to do. Computer science is a definite. Initially I was interested in games technology but now I want to do something that is more useful to society – something that benefits the public. I've been looking at artificial intelligence. I'm also doing a Cert II in General IT and ATAR maths and ATAR English.

There are pros and cons in being in Big Picture. I appreciate the support of the Advisory Teacher. She has helped me to get into the Cert IV. I don't like it when the spotlight is on me, when I have to do Exhibitions. I get anxious and nervous but it is good. You have to learn to speak in front of people eventually, and it is better to practice with people who are in the same boat. I have discovered that I am capable of public speaking, but just hadn't bothered trying in the past.

My goal is to graduate from year 12 next year with good results. I intend to go to Murdoch University doing OnTrack Sprint after I finish school. That is a four week programme in December.

My relationship with the Advisory Teacher is good. She comes in talks to me and I feel I can trust asking her about things. She knows me well, my strengths and weaknesses. I don't mix with the other students much. I've never been the social type.

If I wasn't in Big Picture I wouldn't be attending school. Big Picture provides a safety net. The portfolio entry to university is really helpful. I think my learning at Big Picture is deeper than in mainstream. I wouldn't have gone into the Cert IV. If I had just done ATAR and failed, I'd be screwed.

Mary - The school can help me be what I want to be

Mary lives with her mum and her step-dad. She has been two years at the Big Picture inspired school, a small, specialised school in an outer metropolitan suburb. Her attendance has been consistent unlike in mainstream school. Mary's parents are happy to see Mary attending school and enjoying it. At first they weren't sure that the change was a good idea. Neither her mum nor her step-dad finished high school. Mary had largely given up on school before coming to this school. She comes from a marginalised social group

Initial interview Year 10, Term 1, 2014

I didn't like it at the mainstream school I was at. The teachers didn't help with my work and there were too many kids. Things started going wrong at the end of third term in Year 9 and in fourth term I stopped going. Now, I come every day except when I'm sick.

I get much more out of the school than the other school. The teachers care more about your problems. My teacher helps me with my problems.

We do the same amount of work here but the way the teacher explains that makes it much easier. I want to work on my maths with my teacher.

The teachers here treat us more like friends. I talk to my teacher about family and stuff. Sometimes I ask to talk to her outside. They treat us how I want to be treated and give us more support. They treat us with respect, like anyone would want. Here everyone is like a big family because it is a smaller school. When someone is down,

Mum's perspective...

When Mary was asked to leave the school she was at before I told her she couldn't drop out. She really wanted to. I'm very happy that she did try this school. I don't want her ending up a statistic – a teenage mum with no job, getting benefits. I wish this school was around when I was at high school – I left school at 14 and haven't been back since.

everyone helps to pick them up. We all have similar experiences and we all "get" each other. We know the same stuff and have the same experiences.

I want to do personal training when I finish school. My mum's friend is a personal trainer so she is helping me out. I still have to do the research. The school can help me be a personal trainer. It does a lot of things for us. They are interested in helping us.

If Big Picture approach was used in all schools, more students would come to school.

Updated from interview 18 November 2014

Things have been going well this year. I have a teacher who understands maths so it is getting easier. She takes her time to explain things and so now my scores have gone up above half. Before, I was getting very low scores. Also my attitude has changed. Before I thought that maths was a waste of time but now I see that I will probably need it with the job I want – to be a personal trainer. I need to work out all sorts of things moneywise – how much to charge people, costs of equipment and all that. To help me get a job as a personal trainer I have been helping out with my mum's personal trainer. I'd go in the mornings and on the weekends. I did it myself and it felt good. He told me that I needed to learn a lot because I'm not a people person. He told me to give eye contact and talk to people.

I've made new friends with everybody and I'm getting on with the teachers. My teacher has changed this year but I get along with the new ones too. The new teachers actually talk to us and get to know us not like in mainstream school. I'm happy with my work. And the attitude I get from school, I take back home. So my home life is going good. I am happier.

In my exhibition I presented all the work that I'd done and that included a project on Muay Thai. I already fight that but I looked up the origins, what body parts they use, the equipment and the art of eight limbs.

Mum's perspective...

This school suits Mary because it is more laid-back. They do more hands-on time with activities rather than sitting in class all day. It has more of a family feeling and students are not just a number. They look out for each other. The majority of kids here haven't been given a chance. Here they feel that they are wanted, that they are somebody. In mainstream school they just another person in a class.

I've changed in a good way since I started here (at this school). It will be easier for me to get a job now because I can look at the person and won't have to look away. Before I didn't like conversing with people and would yell at them. Now I can talk to people.

Updated from interview 23 September, 2015

Things have been going well this year, although there has been a bit of drama with the girls. That's been sorted out and we're getting on with it – we are civil to each other. We had a meeting and sat and talked it through.

I have been exploring a couple of things for my future career – a personal trainer, which I was looking at before, and something to do with animals – I can't remember what. Next year (2016) I want to

do a traineeship in business where I go into the workplace one day a week. I will probably also do a Cert I and Cert II in Personal Training. I am also thinking of doing certificates in hospitality. That will help me to be able to give my clients options for healthy eating.

Since starting here I have become more comfortable speaking to people, like this interview. I have been trying to get some part-time work and have been able to go and speak to shop managers when I give them my resume. I've been trying to get work in retail or fast food or anything.

Since I started at the school, I've changed a lot. Recently I've started taking more time with my appearance. My attitude towards other people has also changed for the better.

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