

# **Investigating Project Based Learning**

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Secondary Senior Managers' Sabbatical - Term 2, 2016

## **Acknowledgements**

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I would like to thank the schools that I visited for being so welcoming. I really appreciated their honesty and willingness to share their journey, including the highs and lows, with me.

These were:

Emmanuel College (Melbourne, Australia)  
St Joseph's College (Melbourne, Australia)  
Bristol Metropolitan Academy (Bristol, UK)  
Digitech Studio School (Bristol, UK)  
High Tech High (San Diego, US)

## **Executive Summary**

This report explains the findings of an investigation into the use of Project Based Learning (PBL) in secondary schools and its relevance to whole school change at WEGC.

The investigation looks at current research about the benefits of using PBL, focusing mainly on use to: improve engagement, develop 21<sup>st</sup> century skills and support students in career pathway planning; and links to the Learning to Learn principle in the New Zealand Curriculum (NZC). Methodology includes visits to see PBL in action in 5 very different schools and gathering feedback from student about the positives and negatives of PBL. Discussion with students highlights how well the structure of PBL supports them to develop autonomous learner skills.

The findings suggest that PBL is a highly useful teaching and learning tool and recommends the use of resources from three key organisations: Buck Institute of Education, Edutopia and the Innovation Unit.

## **Purpose**

The purpose of the sabbatical was to develop my understanding of PBL and to support building school capacity to use PBL in teaching and learning.

This focused on:

- developing my personal knowledge of PBL
- investigating the current research and data about the success of PBL
- exploring the different ways that PBL is currently being delivered in schools
- developing a programme/framework and set of resources that could be used to support the use of PBL
- developing a professional learning programme to support teachers in their learning about PBL

## **Background and Rationale**

### **Current situation at Wellington East Girls' College**

WEGC is a central city girls' school with around 1,050 students. The diverse student population reflects the makeup of the eastern suburbs of Wellington, with approximately 50% of European descent, 16% Maori, 18% Asian, 11% Pasifika and 4% of Middle Eastern descent.

While retention, attendance and achievement have increased over the last 6 years, we have recently seen a plateauing of this improvement. Anecdotal evidence from teachers identified a number of students who are "passive achievers". These being students who participate in the formal requirements of school (attend lessons, complete assignments and achieve enough credits to gain NCEA at each level) but who are reliant on their teacher to set, in detail, the work and only deeply engage with assignments they see as directly linked to gaining NCEA credits. While these students are meeting qualification standards they are not necessarily developing the skills and aptitudes needed to be successful in the 21st century world. This is a common issue across many schools nationally.

Data gathered in 2014 through the Wellbeing@School (NZCER) survey suggested that while the vast majority of students "felt that they belong" in school, some did not feel that it was fully engaging them.

In 2015 WEGC made significant changes to the timetable creating extended learning times of 100 minutes across the week. These longer lessons were designed to give opportunity for more in-depth working with a focus on developing 21st century skills and increasing engagement with learning. To support this shift Bring Your Own Device (BYOD) was introduced in Year 9, and encouraged at other year levels. While significant changes to teaching practice have happened, continued learning is needed to further develop teacher capacity to deliver high quality, engaging lessons in the extended learning times. PBL is seen as being part of this development.

Further to the timetable changes junior Learning Hubs are being trialled, with a view to all Year 9 and 10 classes being in Learning Hubs in the near future. A hub, at WEGC, is a learning community of teachers and students organised around a teaching class. It aims to support teachers to develop modern teaching and learning practice through collaboration and create a coherent curriculum that intellectually engages all members of the community.

A coherent curriculum will make meaningful connections between learning areas through using shared approaches, collaborative teaching strategies and common strategies around skills development. It will use contexts for the learning so that students can make connections with their prior learning and areas of interest.

The aim of this sabbatical was to increase my understanding and skill in using PBL so that I could connect up with, and build on, work already undertaken to develop 21<sup>st</sup> century teaching and learning in the school.

## **Methodology**

The professional activities undertaken during the sabbatical included:

- Investigating the international research and resources currently available through three key organisations: Buck Institute of Education, Edutopia and The Innovation Unit
- Gathering information about the different ways that PBL can be delivered in schools
- Visiting schools identified as good practitioners to see what PBL looks like in action
- Developing a framework and resources that could be used in school
- Developing a professional learning programme to support use of PBL

The schools visited were:

Emmanuel College (Melbourne, Australia)  
St Joseph's College (Melbourne, Australia)  
Bristol Metropolitan Academy (Bristol, UK)  
Digitech Studio School (Bristol, UK)  
High Tech High (San Diego, US)

My key focuses were on use of PBL to:

- increase engagement with learning
- develop 21st century skills
- support students in career pathway planning and developing work ready skills

## **Findings**

### **Research**

#### **What is Project Based Learning?**

PBL happens when students gain important knowledge, skills and dispositions through planning and carrying out an assessed project that culminates in the public presentation of a product, publication or presentation to an expert.

#### **What are some of the benefits of using PBL?**

PBL gives students opportunity to:

- engage with authentic real world issues
- have voice and choice
- develop inquiry skills
- build 21st century skills
- develop self-management skills
- develop links with a wider community

In some cases there is also a focus on developing digital skills.

Successful projects offer opportunities for students to:

- solve a challenging, real world question or problem
- use sustained inquiry
- collaborate with others
- give and receive ongoing critique of their drafts
- produce multiple drafts
- present publicly to an expert and gather feedback

The public nature of the final presentation increases the stakes for students. Inviting people from the community offers an opportunity for students to gather feedback from a real life expert and creates a space for them to discuss their thinking and ideas.

PBL can increase student engagement and, when done well, builds competencies valuable for the modern world. It is a teaching and learning method where students gain knowledge and skills by working for an extended period of time to investigate and respond to complex real-life questions, problems, or challenges.

## Research supporting the use of PBL in schools?

There is much research available about the positive impact of PBL, and for my focus of looking at why PBL is a useful for increasing engagement, developing 21st century skills and preparing students for future career pathways. Below are some of the findings.

The Innovative Learning Environments (ILE) project by the Organisation for Economic Cooperation and Development/Centre for Educational Research and Innovation (OECD/CERI) identified concrete cases of innovative learning environments from around the world, analysed how young people learn and studied which conditions and dynamics allow them to learn better.

Contributions from Learning Futures highlighted the importance of engagement with learning for current and future success and stated that:

“Among the world’s developed countries, there is growing concern about the quality of the learner experience. This manifests itself most obviously in dropout rates; in mediocre levels of achievement, and in disengagement with a boring and irrelevant experience. Moreover, focusing on dropouts masks a bigger issue, because it only takes account of the visibly disengaged. There is a much larger group of people who do reasonably well in school but do not become self-motivated, self-directed learners: they may appear to succeed in a highly-controlled, assessment-driven environment but struggle when left to their own devices in university, or when looking for a job. The 21st century requires people to be lifelong learners (because technology, politics, economics, and the environment are changing so quickly), and this demands a shift away from being schooled, to engagement in learning” (Hannon, 2012, p.1) PBL was identified in this paper as an approach that held particular promise in making schools more engaging for students.

In 2013, following of a review of key studies looking at the impact of PBL, Buck Institute for Education published a summary of research on the positive effects of PBL.

PBL was shown to yield a number of benefits for students, ranging from deeper learning of academic content to stronger motivation to learn. Looking specifically at how PBL supported 21st century learning goals, several promising areas were identified including:

- Academic achievement
- 21st century competencies
- Equity
- Motivation
- Teacher satisfaction

(Buck Institute of Education, 2013, p. 1-2)

Looking more specifically at the skills developed through use of a PBL framework, in the 2014 report, *Closing the Skills Gap: companies and colleges collaborating for change*, The Economist Intelligence Unit Limited identified the top three skills desired by employers for the workplace as being: Critical thinking and problem solving, Collaboration/teamwork and Communication (The Economist Intelligence Unit Limited, 2014, p. 4).

Thinking about the steps of PBL, with a focus on connecting to a clear goal, the use of critique to improve the product and using specialists in the field. Hattie suggests that “visible teaching and learning occurs when learning is the explicit goal: when there is feedback given and sought and when there are active, passionate and engaging people, including teachers, students and peers participating in the act of learning”. (Hattie as cited in Victoria Department of Education and Early Childhood Development, 2010, p. 1)

A 2013 study by Microsoft Partners in Learning and Pearson Foundation Study, conducted by Gallup, explored the relationship between 21st century skills developed in the classroom, student aspiration in schools, and perceived work quality later in life.

Findings detailed that:

“Developing 21st century skills in the last year of school is positively correlated with higher perceived work quality later in life. In fact, those who have high 21st century skills development are twice as likely to have higher work quality compared to those who had low 21st century skill development.”

“Across the 21st century skills included in this study, real world problem solving is the most significant driver of higher work quality; however, only 63% of students report often developing this skill in their last year of school.”

(Microsoft Partners in Learning and Pearson Foundation Study, conducted by Gallup, 2013, p. 4)

## **Links to New Zealand Curriculum**

Aspects of PBL link directly to the learning to learn principle central to the New Zealand curriculum vision of lifelong learning.

“Learning to Learn is an active, intentional process that needs to be specifically taught. Learning to learn, sometimes called learning autonomy or self-regulation of learning, is an aspect of managing self. It is itself a competency, that is, a bundle of skills, knowledge, attitudes, and values that, together with metacognition, enables people to take control of and improve their own learning and develop “learner identities”. (*The Learning to Learn Principle*, 2012, p. 1)

PBL offers students opportunities to, particularly, develop learning autonomy.

NZCER research suggests six emerging and interconnected themes to underpin a future oriented learning system:

- Personalising learning
- A curriculum that uses knowledge to develop learning capacity
- New kinds of partnerships and relationships
- New views of equity and diversity
- Rethinking learners' and teachers' roles
- A culture of continuous learning for teachers and educational leaders

(Bolstad, Gilbert, McDowall, Bull, Boyd & Hipkins, 2012, pp 3-5)

A curriculum that includes well-structured PBL would go a significant way to reaching this goal.

## **School Visits**

The schools that I visited used very different models to implement PBL.

### **PBL as part of the Curriculum**

In these schools PBL was integrated as part of the curriculum, within or across subject areas.

#### **St Joseph's College (Melbourne, Australia)**

PBL was in the process of being introduced.

2016	Year 8 only
2017	Years 8 and 9
2018	Years 7, 8, 9 and 10

#### **Overview**

Projects are designed using the New Tech Network (NTN) model.

Subjects are linked together for cross curricular projects, eg:  
English/Humanities/Religious Education and Science/Physical Education

Where possible classes were timetabled into rooms next to each other

Projects and assessments are linked to National Curriculum and NTN rubrics

Echo technology is used - a Learning Management System (LMS) developed by NTN, designed to support the use of PBL

#### **Professional Learning**

- Lead teacher worked closely with Paramata Marist College (Sydney, Australia) and then provided two days of intensive professional learning (PL) at St Joseph's College
- Teachers attended the New Tech Network Conference designed to develop the skills and knowledge required by teachers new to PBL
- Echo LMS contains professional learning options
- On-line NTN training is used

## **Emmanuel College (Melbourne, Australia)**

PBL was in the process of being introduced at Years 7, 8, 9 and 10

### **Overview**

Projects are designed using the New Tech Network (NTN) model.

Projects are completed within one subject area with the exception of English/Maths who are not doing projects and Humanities/Religious Education who are tied together for team teaching

Projects can run for one - two semesters

Projects and assessment are linked to National Curriculum and NTN rubrics

Echo technology is used - a Learning Management System (LMS) developed by NTN, designed to support the use of PBL

Three teachers work together to design a project, which is then critiqued by students before being put out to year level teachers

### **Professional Learning**

- Domain leaders lead the professional learning for their team
- Echo LMS contains professional learning options

### **Outcomes are reviewed using:**

- Student voice
- Exam results
- Pre and post assessments
- Engagement questions in the Catholic Education Commission Victoria (CECV) School Improvement Framework Survey

### **Additional**

Following feedback from students that not all members of the groups were working as a team and completing a fair share of work, Emmanuel College developed a system where students applied to be team leaders, and were interviewed for this position. Once the team leaders were decided, the other students then applied to join the group that they wanted to be in. All the team leaders then worked together to choose the groups across the classes. This way students were encouraged to commit to their team fully because this improved their chances of being in their group of choice in the next round.

## **PBL as a week long activity**

### **Digitech Studio School (Bristol, UK)**

In this school students complete a week long project once a term. The school works closely with community organisations and businesses to create and run the projects. For some students these projects lead to ongoing work experience opportunities.

This is a new school, opened in September 2015, with a current intake of just Year 10 and 12 students.

Projects are held in a one week block/term, led by outside agencies.

In addition to the projects, Year 10 complete one week of Work Experience at least twice a year and Year 12 have one day of Work Experience a week.

### **Examples of projects**

- Working with an IT company to create advertising for a specific product
- Rolls Royce are currently working to break the land-speed record. A team came in from the motor company to lead a project where students were challenged to design and build the fastest model vehicles.

## **PBL as a studio within a school**

### **Bristol Metropolitan Academy (Bristol, UK)**

In this school students, in a studio within the school, work exclusively using PBL. The school works closely with community organisations and businesses to create and run the projects. Students at this post 16 studio are completing a Creative and Media Diploma

The course was designed by Cabot Learning Foundation, Arts Council England and Boomsatsuma - a creative agency and creative education provider. This is an entirely project led and business-like media course, which runs as a commercial arts agency

The school works closely with community organisations and businesses to deliver practical, real-world products for the community.

### **Examples of projects:**

- A joint project with Bristol City Council supporting Bristol's bid to be internationally recognised as a Green Capital 2015

- A joint drug prevention project with the local health board
- Students are currently working with Bristol City Football club to try to increase diversity in their fan base.

### **PBL as whole school learning**

#### **High Tech High (San Diego, US)**

In this school teaching and learning happens through multiple cross curricular projects.

Students have named subjects: Science, Humanities, English, Maths. Sometimes subjects are taught individually and sometimes in cross curricular lessons.

Projects are well structured and scaffolded to teach students the skills required to complete projects successfully.

Classes are combined, then project teams are created. Teaching happens with the smaller teams, depending on the needs of the student groups.

Opportunities are developed for students to connect with outside agencies

#### **Examples of projects:**

- Creating artwork that will increase empathy and connection between people
- Creating a real life, accurate time keeper

## **Student Feedback**

When speaking with students on school visits, I was particularly struck by, how well they could talk about their learning.

Where PBL was particularly successful students:

- could articulate learning goal
- could articulate success criteria
- planned their work
- monitored progress along their plan
- used feedback to improve the quality of their work

Students talked about:

- The power of getting feedback and really appreciated it when experts from the community were involved
- While presenting their ideas and products to strangers was initially challenging they found that this helped them to develop confidence to work with a wider range of people.
- Now understanding that when you are trying to solve a real life problem, you will probably not find the perfect answer first time, and that this is ok. Instead by collaborating with others you can all bring your ideas, and work together as a team to find the best solution.

**The positives of PBL identified by students included:**

- Increased engagement with learning
- Using what they were learning to do something positive for the community
- Working in-depth with other students
- More involvement with the real world
- “Teachers didn’t just give you the answers all the time, instead, when you were not sure of something, they asked you more questions. This way you learned the process of solving problems for yourself”

- A sense of achievement
- Increased confidence when working with a wide range of adults
- No longer feeling threatened or shamed by feedback
- Choice given to engage with workshops as needed
- Learning how to work successfully with a team
- Developing leadership skills

**The negatives of PBL identified by students included:**

- Working with a team can be difficult if you don't get on
- Sometimes people in your team don't do the work
- Presenting your ideas to an adult that you don't know can be stressful

## **Resources**

There is a wealth of accessible research and resources available through Buck Institute of Education, Edutopia and The Innovation Unit, and a large, international community focused on supporting the integration of PBL into schools around the globe.

In 2008, Paul Hamlyn Foundation and Innovation Unit launched the Learning Futures programme to find ways to improve engagement and achievement in secondary school. As part of pack of resources for teachers I recommend two valuable on-line resources produced by Learning Futures.

### **The Engaging School; A Handbook for school leaders**

Following a two year development and research programme, this handbook gives advice for school leaders about how they can improve engagement and achievement in their schools using the Engaging School's model. (Price, Jackson, Horne, Hannon & Patton, 2012, pp. 2-4)

### **Work that Matters; The teacher's guide to project-based learning**

Developed by the Learning Futures project in partnership with High Tech High, this is a comprehensive guide to planning and completing high quality projects. It includes examples of projects and guided questions to support teacher understanding of the process. Tips, templates and protocols are included to support completion of activities. (Patton, 2012 )

Resources produced by Buck Institute of Education contain a wide range of rubrics designed to support schools to use PBL. These include teacher rubrics to help with design and planning of projects and student rubrics to guide students in collaboration, critical thinking, creativity and innovation and giving presentations.

Further on-line resources, templates and rubrics can be found at Buck Institute of Education and Edutopia. Once register these can be used and adapted free of charge.

A set of resources has been created for WEGC that introduce PBL and cover all key aspects of planning and completing a project.

## **Implications / Next Steps**

WEGC strategic goals for 2016 - 2020 include:

Strategic Goal 1: Tauria: Improve student engagement with learning

Strategic Goal 3: Kaiako: Enhance teacher involvement in the professional learning community

Strategic Goal 4: Design a 21st century curriculum to support pathways for our diverse learners

The current annual plan identifies a priority of developing teacher capacity in effective pedagogies to support delivery of Inclusive, Blended and Coherent teaching and learning. PBL is a particular focus for developing a coherent curriculum.

While PBL is a teaching and learning tool that could be used at all year levels, in reality the initial focus will be on use in Years 9 and 10 Hubs. While PBL is already being used in some curriculum areas, the plan for 2017 is that all Hubs will complete one project per term. This may be across two or more subject areas as part of the curriculum or may be as an off timetable activity during the term. The decision as to how the projects will take place will be made after the teachers have met and got to know the strengths and interests of the students in each class.

With the ongoing pressures of NCEA in the senior school it is less easy to see how PBL can fit into the curriculum at Years 11 - 13. This does not mean that it should not also be considered as part of an ongoing development plan, indeed it is currently being used in a number of senior courses. Some subjects and assessments lend themselves more easily to the use of a project framework. Some subjects have a natural synergy and a greater potential to work together. It would definitely be of benefit for senior subject areas to develop opportunities to work with experts in the community.

One ongoing strategic priority for the school is to continue developing a 21st Century curriculum. A key resource for this work is the 21st Century Learning Design (21CLD) rubrics created for the Innovative Teaching and Learning Research project.

In this research the six skills, vital for modern living, are identified as:

- Collaboration
- Knowledge construction
- Self-regulation
- Real world problem solving and innovation
- Use of ICT for learning
- Skilled communication

(Microsoft Partners in Learning, 2012, p. 2). PBL gives a framework to develop all of these identified skills.

A programme of PBL professional learning workshops are planned for 2017.

## **Conclusions**

While not a new framework, the resurgence of interest in using PBL as part of teaching and learning, has come with significant new research and resources being produced. There is much research available that highlights the positives of using PBL in schools, and for me, most interestingly, the use of PBL to increase engagement, develop 21<sup>st</sup> century skills and support students to become work ready.

There are a number of different PBL models currently being used in schools. Undertaking school visits gave me an opportunity to see some of these in action. Our challenge at WEGC is to find the best way, for our student community, to integrate PBL into the curriculum. This may look different in the junior and senior school. An initial focus on developing use of PBL for Year 9 and 10 students should help to build junior students' capacity as autonomous learners that will then support achievement in later years.

Feedback from students on school visits highlighted the importance of using real life issues or problems to engage learners. Projects that were connected to personal interest allowed students to work on activities and issues that they felt strongly about. A bonus of using real life contexts is that even when the projects are not directly linked to areas of interest, they continued to improve students' belief that they can have an impact on the world around them.

PBL has strong links to the Learning to Learn principle identified in the New Zealand Curriculum and developing the skills needed to be a lifelong learner. The PBL focuses of setting goals, creating work plans/timeframes and using feedback to make improvements to final products supports development of these skills. Using the PBL framework ensures that these skills are explicitly spoken about and given time for. For many students, these are skills that need to be actively taught.

Opportunities offered through PBL have been identified by students as making them feel more ready for work. Research suggests (The Economist Intelligence Unit Limited, 2014) that skills developed during PBL are those most desired by employers and lead to greater work quality later in life. The PBL focus of working in teams gives students the opportunity to develop the collaboration skills so valued by future work places. While students (and adults) find this challenging at times this is a vital 21<sup>st</sup> century skill that must be developed. I particularly liked the way that Emmanuel College was developing structures to support students to engage with group working. They were using student leadership, rather than teacher punishment or fear of poor grades, to encourage each individual to contribute to the team.

When visiting the Bristol Metropolitan Academy and Digitech Studio School I was really struck by the impact that working with outside agencies was having on the students and how it was not only engaging them with the work in school but also opening their horizons to new pathway possibilities and developing work-ready skills. Designing projects that involve outside individuals or organisations, either as the assessing experts or in a teaching/mentoring capacity, could expand students' understanding of future career options. Developing knowledge and skills related to particular pathways could help students to find career goals and engage more fully with learning at school.

I believe that while project completion conditions may vary greatly depending on factors such as; knowledge and experience of teacher, planning expertise and resources, links to experts, time constraints, etc, there can always be benefits in undertaking projects as part of a wider curriculum.

This sabbatical has been of great benefit to me as it has given me the time to investigate in-depth at how PBL works and how it can be applied to teaching and learning. While I was sure that it was a useful strategy before this time, I am now convinced that it has even more potential than I previously believed. In addition to developing my understanding of how to use PBL and the potential it has in a school, this time has also reignited my thinking about what 21st Century teaching and learning means and how we help students to develop the autonomous learning skills required to be a life-long learner.

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## **Websites**

**Buck Institute for Education** website: [www.bie.org](http://www.bie.org)

**Edutopia** website: [www.edutopia.org](http://www.edutopia.org)

**The Innovation Unit** website: [www.innovationunit.org](http://www.innovationunit.org)

**Bristol Metropolitan Academy** website: [www.bristolmet.bristol.sch.uk](http://www.bristolmet.bristol.sch.uk)

**Digitech Studio School** website: [www.digitechstudioschool.co.uk](http://www.digitechstudioschool.co.uk)

**Emmanuel College** website: [www.ecmelb.catholic.edu.au](http://www.ecmelb.catholic.edu.au)

**High Tech High** website: [www.hightechhigh.org](http://www.hightechhigh.org)

**St Joseph's College** website: [www.sjc.vic.edu.au](http://www.sjc.vic.edu.au)

## **Appendix**

### **The Buck Institute for Education**

The Buck Institute for Education (BIE) is a non-profit organisation based in the US that works with teachers, schools and districts, both in the US and internationally to support delivery of quality Project Based Learning. They believe that “Project Based Learning is a transformative teaching method for engaging ALL students in meaningful learning and developing the 21st Century competencies of critical thinking/problem solving, collaboration, creativity and communication”. BIE provides resources and learning opportunities to develop educators capacity to design, assess, and manage projects that engage and motivate students. The work is research based and used internationally.

### **Edutopia**

Edutopia is part of the George Lucas Educational Foundation, an organisation based in the US developed to identify and spread innovative, replicable and evidence-based approaches to helping students learn better. Edutopia works to help educators to implement learning strategies that empower students to think critically, access and analyze information, creatively problem solve, work collaboratively, and communicate with clarity and impact. Edutopia provides resources and support for educators in the US and around the world.

### **The Innovation Unit**

The Innovation Unit is an independent, not-for-profit social enterprise based in the UK. It was established in the DfES (Department for Education and Skills) - as part of the measures in the White Paper 'Schools - Achieving Success' which followed the Education Act 2002.

The Innovation Unit works with a number of organisations and groups across the Education, Health and Social Care and local government sectors. Projects in education focus on 21st century learning, student engagement, raising achievement and developing partnership hubs across school.

A programme that is currently being run by The Innovation Unit is Learning Frontiers. Learning Frontiers is a programme being carried out together with the Australian Institute of Teaching and School Leadership (AITSL). It started in Autumn 2014 and is now working with schools across Australia. The programme is founded on the research that deep engagement in learning has a long and lasting effect on students, with the potential to overcome the impact of social background and predict positive outcomes in adult life over and above academic performance.

## **Schools Visited**

### **Bristol Metropolitan Academy (Bristol, UK)**

Bristol Metropolitan Academy is part of the Cabot Learning Federation. Co-education, Years 7 - 13. Bristol Metropolitan Academy opened in 2009.

Statement from the website (2016):

In 2014 Bristol Met began a venture in tandem with a creative arts team, Boomsatsuma. This is a new approach to post-16 study that bridges the gap between school and chosen progression route to further/higher education or the workplace. This course is a project-led and business-like media course, working as a commercial design agency. The agency delivers practical, creative services created by the students for the community.

(2016)

### **Digitech Studio School (Bristol, UK)**

Digitech Studio School is part of the Cabot Learning Federation. Co-education, Year 10 and 12. Digitech Studio School opened in 2015.

Statement from the website (2016):

Free to attend and funded by the Department of Education, Studio Schools seek to address the growing gap between the skills and knowledge that young people require to succeed, and those that the current education system provides. They pioneer a bold new approach to schooling, which includes project based learning and paid work placements. This approach ensures students' are ready for the real world, are employable, and will excel in their working careers.

Digitech is the first Studio School of its kind in Bristol and specialises in digital, high tech and creative sectors

### **Emmanuel College (Melbourne, Australia)**

The College is part of Edmund Rice Education Australia. Co-educational, Years 7-12 (Notre Dame Campus) and Boys, Years 7-12 (St Paul's Campus).

Statement from the website (2016):

Our aim at Emmanuel is to help the young women and men of the College to be their best and become highly functioning, resilient adults who can think independently and make a difference in our world. This development is pursued in an environment of unconditional respect where students are valued, listened to and work together.

### **High Tech High (San Diego, US)**

Statement from the website (2016):

High Tech High is an international partner of Learning Futures. High Tech High (HTH) operates eleven schools: two elementary (5-11), four middle (11-14), and five high schools (14-18).

High Tech High is guided by four connected design principles—equity, personalization, authentic work, and collaborative design—that set aspirational goals and create a foundation for understanding our approach.

High Tech High school projects integrate hands and minds and incorporate inquiry across multiple disciplines, leading to the creation of meaningful and beautiful work. Students engage in work that matters to them, to their teachers, and to the world outside of school.

### **St Joseph's College (Melbourne, Australia)**

The College is part of Edmund Rice Education Australia. Boys, Years 7 - 12. St Joseph's College opened in 1935

Statement from the website (2016):

The College has a broad curriculum, designed to engage students in a way which promotes excellence and builds self esteem. The College allows students to take responsibility for their learning by encouraging them to make well informed choices, in interesting and challenging subjects. Our dedicated Staff are experts in boys' education and work as team members to develop the potential of students in our care.