

RELEVANT, REAL WORLD LEARNING EXPERIENCES FOR STUDENTS IN THE SENIOR SECONDARY SCHOOL

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PURPOSE

The purpose of this report is to review the literature on personalising learning for students, with a focus on project-based, real-world experiences and to develop a model to be used in the senior school at Campion College.

EXECUTIVE SUMMARY

The vision of what a school system may look like once it adopts a personalised approach to learning can be summed up by the following adaptation of Charles Leadbeater's thoughts on a personalised learning school.

Imagine a school in which each student has a daily timetable, made up of different combinations of common building blocks. Some are short intense periods of study, others last much longer than the standard 60 minute lesson. Much of the learning is done in small groups, some as a class and other sessions are one-to-one. Learning is context based often involving projects of the student's or group's interest. Learning takes place in the school environment, in the home and in the community. Learning experiences involve teachers, other students, parents and community mentors. The way a student's learning is designed to progress has been discussed by staff, with the student and their parents. The student's Mentor keeps in touch with parents, usually at least once every two weeks. All students take part in sessions that build up their learning skills. They reflect on what they enjoy about learning and what they find hard. By the time they take NCEA they are practised in a variety of techniques to accelerate their learning and make it more rewarding. Teachers design the formal learning that goes on in the school but do not deliver all of it. Teaching assistants assist in the delivery. This allows students who need more intensive attention to get it. All lesson plans, complete with homework, are held on the internet. There is a strong reliance on cloud based technology. Students can follow what the teacher is doing on their laptops. Electronic records make it easier for students to keep track of their performance, for the school to work out where it needs to deploy resources to address emerging problems and to share with its many partners. Learning takes place in many different spaces across the school and the community, not just in classrooms. Teachers have rooms to prepare lessons, talk to parents and conduct one-on-one sessions with students. Many students are learning at other partner schools, other providers or with employers. Much of the learning occurs in conjunction with community groups. This allows for real life learning experiences. The school collaborates with local counterparts to share resources and make better use of specialist knowledge. (adapted from Leadbetter, 2005, p. 8)

One of the difficulties in many secondary schools in New Zealand is finding a way to incorporate the ideas presented in current educational research on future oriented learning and apply these within a secondary school setting without completely redesigning the school curriculum. A complete redesign is a high risk model that most schools are not prepared to contemplate. This report is an attempt to personalise the learning experience within the senior secondary school. It proposes a way forward which bridges the gap between a current conventional curriculum and one that allows students to begin to “shape their own learning, engage in relevant real-world learning opportunities, and (provide) opportunities for personalised pathways.”(Bolstad 2012, p 18) It is an initiative that is based on student choice and it is relatively easy to adapt to meet student demand. It recommends offering relevant, real world projects as a further option subject for students and to align these projects with NCEA assessment by either dovetailing with current classes, receiving specific guidance during ‘tutorial’ classes or by using external providers for specific NCEA Standards.

There are eight areas that Champion College currently has an emphasis on or has in place that help contribute to the introduction of real-world learning projects. These are:

- 1) A focus on a safe and orderly school environment.
- 2) A focus on the effective monitoring and responding to student academic progress, achievement and future pathways.
- 3) A focus on whanau connectedness and student guidance.
- 4) A focus on student and staff goal setting.
- 5) Encouraging the development of the total person.
- 6) Encouraging self-directed learning.
- 7) Encouraging effective e-learning strategies.
- 8) Creating ‘flexible spaces’ in the College timetable structure.

There are three further areas that could be considered in greater depth to assist with the implementation of real-world learning experiences. These are:

- 1) Giving consideration to a credit based academic course in place of a subject based course.
- 2) Greater encouragement of differentiated classroom teaching practice.
- 3) Developing modern learning environments.

This review offers the following five guidelines that could be used to help shape relevant, real-world projects for students:

- 1) Student inquiry learning.
- 2) Internship.
- 3) Working in groups.
- 4) Exhibition of learning.
- 5) NCEA focussed assessment.

The review concludes with a description of how real-world projects could be introduced into Champion College. It offers students the choice of remaining with a conventional curriculum or making the move to working more directly in and with the wider community.

LITERATURE SEARCH

A search through the literature on personalising learning and real-world experiences has resulted in the following focus areas: personalising learning, real-world projects, prior knowledge, e-learning, development of the total person and differentiated classroom programmes. Each of these areas has an impact in developing a model for the introduction of relevant, real-world learning experiences for senior students.

Personalising Learning & Real-World Projects

Personalising learning is a “process in which schools tailor the teaching and learning towards achievement for all students and where students and their families develop as active partners in effective learning”. (Hargreaves, 2004; Leadbeater, 2005)

Personalising learning is embedded in the principles of the New Zealand Curriculum (2007) which state that “These principles put students at the centre of teaching and learning asserting that they should experience a curriculum that engages and challenges them, is forward-looking and inclusive, and affirms New Zealand’s unique identity.” (MOE, 2007, p. 9)

Personalising learning forms one of the six themes highlighted in the research on ‘Supporting future-oriented learning and teaching: A New Zealand perspective conducted by Bolstad, Gilbert et al (2012). They state that “the idea of personalising learning is simple and familiar in the sense that it is about trying to build learning around the needs of individual pupils, something that has been practised by many good teachers for years. However, it is much more complex when interpreted from a 21st century perspective. Here, the emphasis is on a major systems-level shift. It calls for reversing the “logic” of education systems so that the system is built around the learner, rather than the learner conforming to the system. Personalising learning aligns with the idea that education systems must move away from an Industrial Age “one-size-fits-all” model. It requires schools to radically rethink how they operate. Many of the basic building blocks of traditional education: the school, the year group, the class, the lesson, the (whiteboard/projector) and the teacher standing in front of a class of thirty children, have become obstacles to personalised learning. Personalised learning means differentiated provision to meet differentiated needs. All the resources available for learning - teachers, parents, assistants, peers, technology, time and buildings - have to be deployed more flexibly. Personalising learning also challenges us to think about what *new* resources may be needed to support learning, and how learners can access these - including resources that have not traditionally been thought of as part of the schooling system” (Bolstad, Gilbert et al, 2012, p. 17).

The researchers also state that personalising learning could focus on three areas: “genuinely involving students in shaping their own learning, engaging students in relevant real-world learning opportunities and providing opportunities for personalised pathways.” (Bolstad, Gilbert et al, 2012, p. 19)

The report develops this further by suggesting that “personalising learning can be achieved by supporting students to learn through authentic, relevant, real-world contexts, where students’ interests, aptitudes and the issues and opportunities within their own communities can form the basis for learning. In deep expressions of practice, students are involved in the key aspects of decision making, and can fully

experience the messiness of a real-world project, complete with the unexpected changes in direction, opportunities and challenges that can arise.” (Bolstad, Gilbert et al, 2012, p. 20)

The reviewers conclude that in the future students will “actively co-construct their own ‘catalogue’ or ‘menu’ of products and design the products. With informed help from older, more knowledgeable others (usually education professionals), students (will) carry out a need assessment for themselves and, using this, conceive and design their own programme of learning. A key role of the adult education professional is to help the learner connect with a range of information sources, suppliers, and possible collaborators” (Bolstad, Gilbert et al, 2012, p. 65).

The New Zealand secondary school system has a long way to go before it is providing a schooling experience similar to that outlined above.

The New Zealand Education Review Office (E.R.O.) has produced a number of national reports on the direction of education. They conclude that “generally, schools are not developing and managing their curricula in ways that are responsive to learners... some schools do not make use of the information they have about students to design a curriculum that responds to their strengths, interests and learning needs” (E.R.O. 2012, p. 12).

ERO has found that “some schools are not positioning students at the centre of learning and teaching. Students have simply been forgotten amongst the daily business of “delivering” education, including meeting the requirements of NCEA...Too many of our most vulnerable students, especially in secondary schools, are the unlucky recipients of a curriculum that is fragmented and bears no relationship to their cultural backgrounds or to contexts that have relevance and meaning for them. The curriculum they experience takes no account of their strengths, interests or next steps.” (E.R.O. 2012, p. 13)

In a later report ERO goes on to state that there is “the need for schools to be far more innovative in responding to the individual pathways of each of their students. Effective secondary schooling is moving away from offering a programme that is suitable for most students, and towards identifying and responding to the aspirations, strengths, culture and needs of every student” (E.R.O. 2013, p. 1).

Viviane Robinson, in her book on ‘Student – Centered Leadership’ states that “Students are more motivated to learn if the lesson connects with their experience and interests. The connection makes the teacher more attractive and the material more comprehensible and relevant.” (Robinson, 2011, p. 134)

Robinson also found that “when teachers offer active learning opportunities and more student choice, student attendance increases and classroom disruption decreases. In general we know that (students) are more engaged in schooling when they feel in control of their learning, are actively participating in the learning process, are interested in the topic being studied and are able to respond to the challenge before them. They are much less motivated by classes where they are cast in the role of passive recipients of knowledge to be delivered by the teacher.” (Bryk,

Sebrina, Allensworth, Luppescu and Easton, 2010, p. 104 as cited in Robinson, 2011 p. 132)

Robinson states that “student engagement in learning has three aspects: behavioural, emotional and cognitive... Attendance at school, presence in class and participation in extracurricular activities are indicators of behavioural engagement... Identifying with their school, and liking at least some of their teachers, classes and extracurricular activities are indicators of emotional engagement... Thinking about what is supposed to be learned, planning how to complete learning tasks and checking their own work are indicators of cognitive engagement... In a safe and orderly environment these 3 types of student engagement will be associated with strong student learning.” (Wang & Holcombe, 2010 as cited in Robinson, 2011, p. 127)

We often use measures of students’ engagement in school such as attendance, behaviour and participation in activities both within the class and extra curricula as indicators of student learning. Robinson, however, points out that even though “lesson activities and teacher feedback are carefully aligned to the intended outcomes, students may not engage with the activities. Students are cognitively engaged when they are actively thinking about the material. It is important that being behaviourally engaged or “on-task” is not taken by teachers or their evaluators as equivalent to being cognitively engaged. The latter is best assessed by asking students what they are trying to learn and how they will know when they have been successful. Cognitive engagement may be low because the material may assume prior knowledge that the students do not have, or conversely, may present ideas that students already know. Learners may be disengaged because they do not feel emotionally connected with the material, with the teacher, or both” (Robinson 2011 p. 91).

Robinson further observed that “students are more motivated to learn if the lesson connects with their experience and interests... The key to making such connections in the classroom lies in well-designed units of work that connect academic concepts with relevant ideas, skills, and activities.” (Robinson, 2011 p. 134)

ERO found “few examples of curriculum innovation for academic learning programmes. Schools were usually opting for traditional subject disciplines, which operated in yearlong courses. Few schools attempted to develop academic courses that spanned two or more curriculum areas.” (E.R.O., 2013, p. 22) They concluded that “the traditional departmental structures make it difficult to develop the sort of inter-disciplinary learning and assessment that is promoted in The New Zealand Curriculum.” (E.R.O., 2013, p. 22) Their evaluation identified “the need for schools to be more innovative to meet the needs of all their students. It signal(ed) that the future success for secondary school students is dependent on schools identifying and responding to the aspirations, strengths, culture and needs of their students.” (E.R.O., 2013, p. 24)

These ERO reports follow on from earlier reviews regarding good practice in secondary schools. Notably the ERO report on Enterprise Education began by offering a definition for enterprise as the provision of “authentic learning. This involves students solving real problems for an actual audience or client.” (E.R.O.,

2011, p. 2) ERO recognised in this report that “timetabling is seen as a significant obstacle to schools having a flexible approach to learning.” (E.R.O., 2011, p. 3) They emphasised that “enterprise learning can engage the diverse range of students in secondary schools. Highly academic students can benefit from a project with a business partner that challenges their ability to cooperate, solve problems and present ideas to a variety of audiences. Similarly, less able students, including those who are disengaged, can be motivated by learning that has a clear purpose.” (E.R.O., 2011, p. 11)

Other Research to Take into Account:

a) Prior Knowledge

Hattie believes that prior knowledge is a key component of making learning visible. He states that teachers must start any lesson planning “with a deep understanding of what each student already knows and can do, and how the instruction is aimed at increasing the progress and levels of achievement for each of the students. The primary concern is to add value to all students, wherever they start from, and to get all students to attain the targeted outcomes.” (Hattie, 2012, p. 38)

Robinson reinforces this same concept commenting that “students learn and remember more when key ideas are presented in ways that connect with their prior knowledge and experience (Bransford, Brown & Cocking, 2000)...If students’ learning opportunities are integrated and cumulative, rather than fragmented and rushed, students are more likely to be engaged and successful” (Robinson, 2011, p. 85).

b) E-Learning

Noeline Wright in her report commissioned by the New Zealand Ministry of Education on ‘E-learning and the Implications for New Zealand Schools’ (2010) states that there “appears to be a strong desire in 21st century students to learn collaboratively and socially, mirroring their experiences of what social networking affords them. In these kinds of learning environments, students rather than teachers are at the centre of the learning experience. In order for students to learn in such student-centred contexts, the teachers’ role is to facilitate the opportunities, using appropriate pedagogical processes and e-Learning affordances” (Wright, 2010, p. 24) She emphasises that “the notion of audience is significant, since it points to an underlying learning motivation for students, and suggests that e-Learning affordances may make finding and keeping authentic audiences much easier than it has ever been.” (Wright, 2010, p. 18)

c) Development of the Total Person

ERO notes that in effective schools “students identified their future pathways or directions and these were used to shape the school’s curriculum and related systems...The responsive schools typically had a strong focus on students developing self-management and leadership opportunities within,

and in addition to, the students' courses". (E.R.O., 2013, p. 9) ERO found that these schools had "a range of extra-curricular activities in which senior students could develop leadership. For most of the schools in this group, showing responsibility across sporting, artistic, cultural or spiritual domains (in addition to academic ones) was an important school objective. Schools varied in how this was emphasised, according to their communities, but the essential quality was based on the concept of developing well-rounded citizens." (E.R.O., 2013, p. 12)

d) Differentiated Classroom Programmes

ERO's report on Boys' Education also emphasised aspects of personalising learning when it reported that in effective schools "relevant teaching and learning was a common strength" (E.R.O., 2008, p. 1) and that the "learning emphasised the importance of teachers knowing students well and being able to personalise programmes and differentiate lessons accordingly." The report stated that the "more personalised approach motivates boys and the teacher is able to spend more time facilitating individual learning rather than managing whole class behaviour." (E.R.O., 2008, p. 27)

RELEVANT REAL-WORLD LEARNING MODELS

The research by Bolstad, Gilbert et al (2012) stated that "personalising learning could focus on developing relevant real-world learning opportunities for students". A search of the literature shows a number of models that attempt to engage students in learning through this approach. This report has focused on three of these models: project based learning, problem based learning and big picture learning. A brief description of each follows:

1) PROJECT BASED LEARNING:

Project-based learning asserts that students learn best by experiencing and solving real-world problems. It involves:

- Students learning knowledge to tackle realistic problems as they would be solved in the real world.
- Increased student control over his or her learning.
- Teachers serving as coaches and facilitators of inquiry and reflection.
- Students (usually, but not always) working in pairs or groups.

Project-based learning involves students being presented with a complex task and the findings are then reported back in some form of presentation, and/or creating an actual product or artifact. The programme usually follows a student inquiry model of learning which starts from the position of student prior knowledge.

Project based learning has been in place in schools internationally for many years. The main criticism of this approach to learning is that the inquiry phase has not been rigorous enough in design and assessment. It is most effective when the following criteria are met:

A) A Realistic Problem or Project

- a) Aligns with students' skills and interests.
- b) Requires learning clearly defined content and skills (e.g. using rubrics, or exemplars from local professionals and students).

B) Structured Group Work

- a) Groups of three to four students, with diverse skill levels and interdependent roles.
- b) Team rewards.
- c) Individual accountability, based on student growth.

C) Multi-faceted Assessment

- a) Multiple opportunities for students to receive feedback and revise their work (e.g., benchmarks, reflective activities)
- b) Multiple learning outcomes (e.g., problem-solving, content, collaboration).
- c) Presentations that encourage participation and signal social value (e.g. exhibitions, portfolios, performances, reports).

As a model for engaging students in relevant, real world learning experiences there is merit in this approach. One of the advantages is that because variations of this model have been in place internationally for many years there are banks of 'tried and tested' projects that can be used to assist in student choice selection. A disadvantage of this model is that most schools adopt a class wide approach to a project. This concern relates to the type of project chosen and how you ensure that all students in the 'class' are engaged. A possible solution for this is to create projects around groups of students. The group effectively becomes the 'class'. The solution to managing multiple projects is to have the learning student focused through an enquiry approach that has a strong reliance on e-learning technologies.

2) PROBLEM BASED LEARNING

Problem based learning can be defined as presenting students with an unresolved problem which may generate a number of possible causes and solutions. Students generally work in groups over a defined period of time to resolve the problem. Some approaches to problem based learning require a new problem to be presented each day; others have problems to be resolved over a much longer time frame.

In this approach to student engagement students determine what they need to learn, derive the key issues of the problems they face, define their knowledge gaps, and pursue and acquire the missing knowledge. "Teachers act as facilitators and tutors, asking students the kinds of meta-cognitive questions they want students to ask themselves... Authenticity forms the basis of problem selection, embodied by alignment to professional or 'real world' practice." (Strobel, 2009, p. 2)

Problem based learning has been used extensively in the field of medicine as a training tool. The key is providing well thought out problems that have meaning

for all learners. Problem based learning has proven effective in long term retention of learning.

As a model for engaging students in relevant, real world learning experiences problem based learning is recognised as one further form of context based learning that has merits for some situations. Problem based learning has a place when there is relevance for the students, however, if the overall intent is cognitive engagement of students in their learning then not all engagement activities need to be problem based.

3) BIG PICTURE LEARNING

A major problem with adopting the above models of practice is that what is of interest to one person doesn't necessarily interest their classmate. Big Picture learning is a model that looks to overcome the above limitations. Big Picture learning was developed in America in 1995 by Dennis Littky and Elliot Washor and is an attempt "to personalize education that is unique for each student. (The belief is) that learning best takes place when each student is an active participant in his or her own education, when each student's course of study is personalized by advisors, parents and mentors who know the student well, and when school-based learning is blended with outside experiences that heighten personal interests. (The assumption is that) students learn and work best when they are passionate and interested in what they are doing. Having students explore their interests is an important step in helping students figure out who they are and what kinds of work and learning will motivate them." (p. 1)

Big Picture Learning focuses on 10 distinguishing features. The following six features are most relevant to this report:

- a) **Learning in the Real World:** The most important element of the education at a Big Picture Learning school is that students learn in the real world. The main component of every student's education is the LTI (Learning Through Internship/Interest). In this internship with an expert mentor in the field of the student's interest, the student completes an authentic project that benefits the student and the mentor at the internship site. The projects are connected to the student's interests and meet the needs of the mentors, and are the main root to deepening student learning and academic growth.

- b) **One Student at a Time:** The philosophy of educating one student at a time expands beyond "academic" work and involves looking at and working with each student holistically. Each student's work is documented on an individual learning plan created and updated each quarter (or trimester) with the learning team (the student, parent(s), advisor, and whenever possible, internship mentor) in a learning plan meeting. All the components that make up the student's learning experience – the curriculum; the learning environment; the use of time during the school day; the choice of workshops or college classes; the focus and depth of investigation – is developed based on the student's individual interests, talents, and needs.

- c) Authentic Assessment:** Assessment criteria is individualized and fit to each student based on the real world standards of the student's project (as gauged by the student's mentor). Students... are not assessed by tests and are not given grades. Assessments instead include public exhibitions (one per quarter or trimester which tracks student growth and progress, quality of work, and academic depth in the learning goals), weekly check-in meetings with advisors, weekly journals, yearly presentation portfolios, and transcripts (which translate the Big Picture Learning design in a way that (universities) can understand).
- d) School Organisation:** Big Picture Learning believes that all students should have the opportunity to learn in a place where people know each other well and treat each other with respect. Schools must be small – small enough so every student has genuine relationships with adults and other students and no one falls through the cracks. From assessment tools to the design of the school building itself, a truly personalized school approaches each student and situation with a mind to what is best for the individual and for the community.

The organizing principle of Big Picture schools is to educate one student at a time. In order to carry out this design, Big Picture Schools should not exceed 150 students and no more than fifteen students make up an advisory. Students work individually as well as in small group learning environments around authentic topics both in and outside of school.

- e) Advisory Structure:** The advisory structure is the core organizational and relational structure of a Big Picture school. It is the heart and soul of the school and is often described as the “home” and “second family” by students. The goal is for all Big Picture Learning students to be a part of a small advisory of no more than fifteen students with one advisor who works with the students throughout their entire high school career. The advisor's role is to manage each student's individual, personalized learning plan and Learning Through Internship/Interest (LTIs) placement. To do this, the advisor must build a relationship with each student and his/her family (this includes home visits and one-on-one meetings with each student). Though certified in one area, the advisor does not “teach” his or her subject area; rather he or she needs to draw on many disciplines to meet the needs of each student, each student's project, and to design advisory activities. The advisor is a coach, mentor, teacher, manager, and often – friend
- f) Parent/Family Engagement:** Big Picture Learning believes that parent/guardian engagement in a child's learning is essential to student success. Big Picture aims to involve families in all aspects of student learning. By bringing students out into the community and bringing the community into the school, the schools become community assets and positive, learning-rich contributors to their surrounding neighbourhoods, towns, and cities. Parents and families regularly participate in learning plan

meetings and attend exhibitions. Families serve as resources, providing information about their child's strengths, weaknesses, and lives outside of school. They also serve as resources to the school community by connecting the school with potential LTIs and mentors; many parents and family members serve as mentors themselves.

The remaining four distinguishing features of Big Picture Learning schools are: School culture, leadership, professional development and school/university partnerships.

Big picture learning offers many features that are to be encouraged in a personalised approach to learning. This approach to schooling has been adopted by a large number of schools internationally and is now making its presence felt in New Zealand. One of the advantages of this model is that it is recognised that schools must be a fit for their communities and therefore a number of schools adopt aspects of the above distinguishing features. These schools are often referred to as Big Picture Inspired schools. The Big Picture Learning model has helped develop the proposed practical application promoted in this report.

Acknowledgement must also be given to several schools who have adopted aspects of the above models and who have had an influence on this report. These schools include: Albany Senior High School, Hobsonville Point High School and Papamoa College from within New Zealand and Nueva School and Paramatta High School internationally.

PRACTICAL APPLICATION: CAMPION COLLEGE, GISBORNE

This review is focused on the importance of relevant real world learning contexts for student engagement in learning and how these could be introduced into the senior school curriculum. The senior school curriculum has been chosen to give academic legitimacy to the initiative and because the senior curriculum often dominates the curriculum and assessment structure for the whole secondary school curriculum. Taking into account the above literature findings and models presented, this report proposes a way forward for the design of a senior secondary school curriculum which looks to bridge the gap between a current conventional curriculum and one that allows students to begin to “shape their own learning, engage in relevant real-world learning opportunities, and provide opportunities for personalised pathways.” (Bolstad 2012 p. 19) It is based on the premise of student choice. It is not a model that is ‘forced’ upon students but is offered as another ‘subject’ option. If the initiative has strong appeal to students it is relatively easy to scale the programme up to meet demand.

THE INITIAL FOCUS AREAS

There are eight initial focus areas that Campion College has adopted that assist with the implementation of real world learning projects:

1) A Focus on a Safe and Orderly School Environment

It is important to have school wide systems in place to monitor the safety and orderliness of the school environment and to ensure the ongoing safety of students and staff. This remains a strong prerequisite before any flexible initiatives can be developed. Robinson (2012) states that “if students and staff do not feel physically and psychologically safe, if discipline codes are perceived as unfair and inconsistently enforced, then little progress is likely in the improvement of teaching and learning”. (p. 125)

2) A Focus on Effective Monitoring and Methods of Responding to Student Academic Progress, Achievement and Future Direction Setting

There are a number of initiatives currently being used by schools and the MOE has a focus around this. Hattie takes this one step further with his emphasis on ‘teacher-know thy impact’ which highlights the impact of teacher professional learning and development on student learning.

3) A Focus on Whanau Connectedness and Student Guidance

Teaching and learning are built on developing strong and supportive relationships with students and whanau. It is important to have active involvement of students and their parents or wider whanau in the discussions and decision making involving student subject choices, career directions and progress. There are a number of terms that schools use to describe these roles ranging through deans, academic advisors, learning mentors, advisory groups, tutor teachers etc.

At Campion we have used the term learning mentor. The learning mentor is a permanent member of staff who has 70 – 80 students in their care. They meet formally with students and their families at least twice a year to review progress to date and to establish the next learning steps.

4) A Focus on Goal Setting

As part of the guidance process there should be a strong emphasis on goal setting. Goal setting for students is an important part of the learning process “because it forces decisions about relative importance – about what is more important in this context, at this time, than the other important things”. (Robinson, p45) When the learning becomes more personalised and multiple pathways are being followed by students, goal setting helps identify for all involved what is to be achieved within the given timeframe.

5) Development of the Total Person

ERO recognised that effective schools have programmes in place that strengthen the school culture. This is important. In developing a model that emphasises

personalised pathways it is critical to also emphasise the connectedness of students with the school and the wider community. This avoids creating a 'supermarket' approach to schooling in which the student looks to take only components of the schooling on offer. At Campion College development of the total person is a cornerstone of our Catholic education system.

6) Encouraging Self-Directed Learning with Students

It is recommended to have a system established that promotes a flexible approach to learning, where students take greater responsibility for their learning and move on and off site to pursue their learning goals and community contacts. "The frontline of learning is not the classroom but the bedroom and the living room. Our education's biggest untapped resource is the (students) themselves." (Leadbeater, p. 3) This approach helps establish the school culture for a more personalised approach to schooling. In a practical sense, a focus on self-directed learning also frees up teachers to focus on those students who need assistance at that time.

7) E-learning

E-learning enables anyplace, anytime learning. This allows the students to connect with each other, with their teachers and with community specialists in a collaborative way. Collaboration can extend globally. It encourages individual pathways within a communal grouping. It will provide learning opportunities in both the conventional classroom curriculum and in real-world projects. It allows flexibility in curriculum delivery.

8) The Timetable Structure

The success of any initiative is often dependent on the way the timetable is structured. Many secondary schools recognise timetable complexity as a major hurdle in providing more flexible pathways for students. "Timetabling is seen as a significant obstacle to schools having a flexible approach to learning." (E.R.O., 2011, p. 3) The design of the timetable needs to be carefully considered to enable student choice and flexibility to be viable.

Campion College manages this flexibility by operating 7 option lines with each subject comprising: 1 x 100 minute period, 1 x 50 minute period, 1 x 50 minute 'tutorial' period and 1 x 50 minute homework 'Prep' period. Students are encouraged to take five or six subjects but a seventh subject is possible within the timetable structure. The seven option lines allow for a broad range of subjects to be available to students. The tutorial period increases flexibility. The negative aspect is that there is less direct teacher class contact time. E-learning has been emphasised as a means to overcome this.

To position students to take part in real-world learning experiences Campion College has adopted a number of other timetable initiatives that encourage a flexible approach to learning. These include: tutorial classes on Fridays, Gold Card students, Trade Training programmes with E.I.T. Polytechnic on Fridays and a greater reliance on e-learning.

- a) **Gold Card Students:** Those students who have shown an ability to manage their own learning are eligible for a 'Gold Card'. This allows them flexibility in what and where they choose to study on Fridays. They may work on-site or off-site. Interim reports are given on students every 4 weeks. Students lose their Gold Card privilege if the quality of their work drops. They are then required to remain in specified tutorial classes until they regain their Gold Card in the next assessment period.
- b) **Tutorial Classes:** Each Friday, tutorial classes run for each subject. These take the place of the '4th period' in a conventional programme model. Tutorial classes are organised on a 50 minute basis to allow six timetable lines to be covered in the day. In the tutorial class no whole class new teaching delivery is introduced by the teacher. Students work with other students and are assisted by the classroom teacher in solving problems raised during the week or in continuing with their investigations or research projects. Students move to each tutorial class that corresponds with their subject timetable. Tutorial classes are compulsory for students who are not involved in real-world projects, attending trade training programmes or who do not hold a 'Gold Card'. These students must attend the tutorial class that corresponds with their timetable option lines. This means that those students who are less motivated in school remain under supervised teacher direction throughout the week.
- c) **Trade Training:** Friday is chosen as the Tutorial day at Campion College as a number of students are already involved in off-site learning through Trades Academies, Gateway, Star programmes and work experience programmes. These students can take part in these programmes without disruption to their other studies. This also has the effect of reducing the number of students on site on the Fridays which allows teachers to focus on those students requiring extra support in tutorial classes or to work with students on their real – world projects

There are three further development areas that could be considered in greater depth to assist with the implementation of real-world learning experiences.

1) CREDIT COURSE STRUCTURE

In place of students studying 5 or 6 subjects in a course where the NCEA standards are largely predetermined, this report proposes that students will be encouraged to build their programme of learning with an emphasis on completing a set number of credits in the year. NCEA is a 60- 80 credit course. For simplicity purposes the credit component for a student for a one year school programme could be based on studying 100 credits. Unique 'subjects' can be developed that are specific to small groups of students and that qualify for NCEA course endorsement if desired. The emphasis will be on the quality of the

credits. The guidance given to students by their Learning Mentors (or equivalent) ensures that they meet any university entry criteria, other career prerequisites and course endorsements and plan for that as they progress from year to year.

2) DIFFERENTIATED CLASSROOM TEACHING

Many courses at Campion College already have an optional credit component built in to the programmes. This could be developed more fully. This means that while 16-18 credits/subject is offered as the average number of credits, students may choose between 4 credits (ie: just taking part of the course because it reinforces an aspect of their real-world project learning) to 24 credits or more (if they combine the subject with their real world project or if they take on the extension credits in the course). This allows students to focus more intensely on a subject or work at a rate commensurate with their academic ability and interest in that subject. The number of actual credits undertaken by any student will vary depending on career aspirations and academic ability but this will be a conscious decision, and planning for the subsequent work load will be part of the guidance and whanau negotiation process undertaken between the students, parents and their Learning Mentors. This allows students to take a range of 'subjects' and standards that are tailored to suit career interests (i.e. engineering, health sciences)

3) MODERN LEARNING ENVIRONMENTS

It is not imperative to alter the physical environment to align with the changes outlined in this report however if the opportunity presents itself it can assist with the implementation of the curriculum changes proposed. Many school buildings in our educational system were constructed for a different educational age.

RELEVANT, REAL WORLD LEARNING PROJECTS

Based on the readings undertaken to date the design of a curriculum that opens student learning to relevant, real- world learning projects could take into account the following five guidelines:

1) STUDENT INQUIRY MODEL OF LEARNING

Projects will be developed using the student inquiry learning model. This is an approach to learning that is based on the investigation of questions, scenarios or problems. This involves the student starting with what they know and being stretched to areas of new knowledge and application. The learning is carefully facilitated by the project adviser and community mentor who between them hold a detailed understanding of the curriculum and assessment requirements and the community organisation expectations and knowledge. Student goal setting will be included as will teacher inquiry into the learning (teacher- know thy impact). This allows for either a project based or problem based approach to the learning.

2) INTERNSHIP

This forms a significant part of the real-world experience. There is an expectation that each student or group will take up an internship as part of their project. An internship involves the students conducting their inquiry for a named organisation or industry. At the exhibition of learning phase of the project the students should be able to demonstrate that they have made a positive contribution to the organisation and that the organisation has benefitted them. The organisation has assisted by providing a mentor to liaise with the students and help direct and critique the project. The added benefits are that the students are contributing positively to the organisation and wider community's understanding and the students can also use the opportunity presented in the internship to determine if they have an interest in a particular career and whether the organisation has an interest in them. The internship can form a further step a student takes on exploring their career path.

Internships require the student to meet regularly with their learning mentor, their school project adviser and their community mentor to monitor progress and seek advice. This can be achieved through electronic communication and/or through face to face discussions that occur on Fridays or at other times during the week that suit both parties.

3) WORK IN GROUPS

Students will be encouraged to work in groups. Learning is communal. Student to student interactions around learning are at least as effective as teacher to student interactions. Students are encouraged to work as part of a group within the limitations allowed for with NCEA assessment requirements. Students in a group could come from multiple year levels.

4) EXHIBITION OF LEARNING

Students present their learning to an audience. Learning becomes reinforced through presentation. Presentation can increase community connection and real world experiences. Exhibition of learning also offers an opportunity for celebration. Progress presentations form part of the formative assessment.

5) NCEA ASSESSMENT

Assessment will be based on NCEA in most situations. Most projects will involve deep learning in one or more specialist subject areas that the student is studying as it is most likely that their interest will already be apparent in one or more of the subjects they are studying. It may be feasible that a student studying for a Scholarship exam is able to deepen their understanding by aligning their project with the exam assessment standards. Students are supported by their subject teachers to identify suitable NCEA standards that they may be able to incorporate into the project. Students will either align aspects of their project with conventional classroom programmes or look to other assessment providers in the wider educational community (ie: Virtual Learning Networks, Te Kura, etc).

THE PROJECT DESIGN

Students will have the opportunity to shape a project that is relevant and of high interest to them and one that will have an impact in the community. The project allows the student to connect culturally with the learning and for a diversity of ideas to be explored as they are in control of the design and the direction of the project. The project promotes personalised learning pathways.

Each project will be kept manageable, tight and progressive. Parents will be involved in the development phase of the project. Students will be able to articulate their learning intentions and progression.

The projects are optional for students. They are treated as another subject that can be studied. The length of time given to the project can be determined by its design complexity. The mechanics of introducing a project could take the following format:

- a) The project outline will normally be developed in the year prior to being undertaken to allow for NCEA alignment within the school. A range of suggested topics will be provided (with possible NCEA standards) and made available to students as part of the senior course booklet. This will help broaden the students understanding of project possibilities; especially in the early stages of introduction.
- b) The student develops the outline of their project with their learning mentor and family as part of the subject choice selections made in Term 3 each year. The learning mentor maintains the overall guidance with the student and their family.
- c) The student is appointed to a project adviser. The project adviser is a teacher with specialist subject knowledge in the general learning areas that the student is undertaking their project in. The project adviser maintains the academic direction of the project and provides ongoing monitoring and advice to the student. The project adviser will be allocated teaching time on Fridays to work with groups of students involved in real-world projects.
- d) If the student's learning takes them into other learning areas outside the adviser's area of expertise then the adviser coordinates the support for the student with other more appropriate teachers. The student meets with their project adviser on Fridays.
- e) The student approaches a community mentor to provide additional support for the project. The community mentor helps in the development of the project and offers guidance on the project as part of the internship that the student undertakes in the wider community. The intention is for the student to be active in pursuing their project with assistance from the learning mentor and project adviser.

- f) The student confirms the NCEA standards that will align with their project in consultation with their learning mentor, parents, project adviser, community mentor and subject teachers in a meeting held in December (after completion of NCEA exams).

- g) Subject and NCEA support is provided by the student joining existing classes that are taking place within the conventional programme where possible, attending tutorial time with specific teachers or through external providers such as other local schools, the polytechnic, the wananga, Te Kura and the Virtual Learning Network.

Staffing: The advantage of this model is that it does not require a significant cultural shift from the current school structure for Campion College and the success of the programme lies in the hands of the students. If very few students undertake relevant, real-world projects then tutorial classes remain intact and only a small number of hours are committed to the employment of project advisers. As more students undertake projects the tutorial class numbers will reduce and tutorial classes will be grouped as multi-level classes. The more students involved in real-world project work the less there would be taking part in tutorial classes on a regular basis.

With students out of the conventional classroom programme on Fridays due to trade training, gateway, star, internships, peer tutoring and those holding Gold Cards there is more time available for teachers to work with those students requiring extra support or providing advice with their real-world projects.

This model provides a way of introducing real-world learning opportunities for students that is student interest driven and optional. Students can choose a conventional curriculum or look to develop interests further if these are not being emphasised within the classroom programme.

REAL WORLD PROJECT EXAMPLE

The following is an example of real world project that may have relevance to a group of students and which has links to cross curricular NCEA assessment.

1) ETHICS Level 2/3 NCEA

Inquiry Question: Conduct an inquiry into a contemporary ethical issue. Choose from one of the following issues: abortion, euthanasia, in vitro fertilization, stem cell transplants, capital punishment, war.

The following NCEA Assessment Standards may be applicable to this inquiry?

SUBJECT	STANDARD	DESCRIPTION	CREDITS	PROVIDER
English	AS91475	Produce a selection of fluent and coherent writing which develops, sustains, and structures ideas	6 Credits Internal	Campion
English	AS91476	Create and deliver a fluent and coherent oral text which develops, sustains, and structures ideas	3 Credits Internal	Campion
English	AS91477	Create a fluent and coherent visual text which develops, sustains, and structures ideas using verbal and visual language	3 Credits Internal	Campion
Religious Studies	AS90826	Analyse the response of a religious tradition to a contemporary ethical issue.	6 Credits Internal	Campion
Biology	AS91602	Integrate biological knowledge to develop an informed response to a socio-scientific issue.	3 Credits Internal	Campion or off site
Social Studies	AS91599	Examine personal involvement in a social action(s) that aims to influence policy change(s)	6 Credits Internal	Off site
Health	AS91464	Analyse a contemporary ethical issue in relation to well-being	4 Credits Internal	Off site
Media Studies Level 2	AS91254	Demonstrate understanding of an ethical issue in the media	3 Credits Internal	Off site

A potential 25 Achievement Standard credits are available at a first glance depending on the focus of the inquiry. Other credits may be applicable. The

internship could involve working with a particular advocacy group (ie: Voice for Life, Nathaniel Centre) or public health unit to raise awareness of the issue or produce resource material or make submissions to government. Students can meet with their project adviser on Fridays to discuss progress and requirements in regard to the Achievement Standard or they could join the curriculum class if the timetable and assessment period allows. Students can meet with the organisation mentor to gain a deeper understanding of the issue and how to help inform public awareness or debate or how to make a contribution to the organisation.

Other projects could be developed around: engineering, health sciences, etc.

CAMPION COLLEGE DRAFT -7 LINE SENIOR TIMETABLE – 2015

Based on 3 periods per 'subject' - 150 minutes/week

Times	MON	TUES	WED	THURS	FRI
8.30-8.40am	VERTICAL FORM	VERTICAL FORM	VERTICAL FORM	VERTICAL FORM	VERTICAL FORM
8.40-9.30am	A Class	G Class	F Class	G Class	<ul style="list-style-type: none"> ▪ Real World Projects ▪ Trades Academies ▪ Tutorial Classes A-F lines ▪ Gold Card flexibility
9.30-10.20am	B Class	Leadership			
10.20-10.40am	INTERVAL	INTERVAL	INTERVAL	INTERVAL	
10.40-11.30pm	C Class	C Class	D Class	E Class	
11.30-12.20pm	D Class				
12.20-1.10pm	LUNCH	LUNCH	LUNCH	LUNCH	
1.10-2.00pm	E Class	A Class	G Class 1.10-1.40	B Class	
			Assembly 1.40-2.10		
2.00-2.50pm	F Class		Sport 2.10-		

REFERENCE LIST

- Bolsted, R., Gilbert, J., McDowall, S., Bull, A., Boyd, S., Hipkins, R. (2012). *Supporting Future-Oriented Learning and Teaching*. New Zealand Council for Educational Research. Retrieved from www.educationcounts.govt.nz/publications.
- E.R.O. (2008). *Boys' Education: Good Practice in Secondary Schools*. Wellington: Education Review Office. Retrieved from www.ero.govt.nz
- E.R.O. (2011). *Enterprise in the New Zealand Curriculum*. Wellington: Education Review Office. Retrieved from www.ero.govt.nz
- E.R.O. (2012). *Evaluation at a Glance: Priority Learners in New Zealand Schools*. Wellington: Education Review Office. Retrieved from www.ero.govt.nz
- E.R.O. (2013). *Secondary Schools: Pathways for Future Education, Training and Employment*. Wellington: Education Review Office. Retrieved from www.ero.govt.nz
- Hargreaves, D. 2004 *Personalising Learning: next steps in working laterally*, Specialist Schools Trust.
Retrieved from <http://www.sst-inet.net/affiliation/articles/176.aspx>
- Hattie, J., (2012). *Visible Learning for Teachers. Maximising Impact on Learning*. London: Routledge
- Leadbeater, C. 2005, *The Shape of Things to Come: personalised learning through collaboration*, Demos.
Retrieved from <http://www.teachernet.gov.uk/publications>
- Littky, D., Washor, E., (2014). *Big Picture Learning*. Retrieved from [ww.bigpicture.org](http://www.bigpicture.org)
- Ministry of Education. 2007. *The New Zealand Curriculum*. Wellington: Learning Media.
- Robinson, V., (2011). *Student-Centered Leadership*. San Francisco: Jossey-Bass
- Strobel, J. & van Barneveld, A. (2009). Is PBL effective? A meta-synthesis of meta-analyses comparing problem-based learning to conventional classroom learning. *Interdisciplinary Journal of Problem Based Learning*, 3(1), 44-58.
- Wright, N., (2010). *E-Learning and Implications for New Zealand Schools: A Literature Review*. New Zealand: Ministry of Education. Retrieved from www.educationcounts.govt.nz/publications.