

Impact project: Integrating the curriculum

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A number of purpose-built, open-plan schools with flexible timetables enable students to learn via integrated curricula passion project courses. Can a similar learning opportunity occur in a school with single cell classrooms, a traditional timetable, and where expert teachers are not always available at the same time?

This blog post covers the following points:

- What is curriculum integration?
- Why does it matter?
- What an integrated curriculum can look like: Impact Project

WHAT IS CURRICULUM INTEGRATION?

Curriculum integration has varying definitions, and this has troubled researchers and hindered teacher understanding (Drake & Reid, 2020). Broadly, curriculum integration refers to teachers combining the concepts, content and skills from two or more subjects into a particular topic. Arrowsmith & Wood (2015) define three different forms of curriculum integration:

Transdisciplinary	Where courses or research questions cross disciplines to extend beyond the scope of a single discipline or area of instruction. In this approach, subject boundaries are often collapsed or merged. A primary focus is on student-centred inquiry and learning through real-life contexts (Beane, 1997).
Interdisciplinary	Disciplinary boundaries still remain, but the disciplines are connected more explicitly than in multidisciplinary learning through a focus on skills such as critical thinking or communication skills, which are emphasised across learning areas rather than within them.
Multidisciplinary	An approach where a number of disciplines may be used to address a topic. In this process a discipline is not changed or influenced by another. For example, a central concept or theme is examined with each subject area addressing the theme through their lens during the same time frame.

WHY DOES CURRICULUM INTEGRATION MATTER?

Providing opportunities for integrated curriculum learning is not a new or recent trend. The roots of curriculum integration can be traced to the early 1900s (McPhail, 2018), but despite a long history, curriculum integration has not been seen frequently at secondary school. This is possibly due to teachers being trained as subject specialists, and the nature of traditional school timetables often means that teachers work in their curriculum area only, leaving limited opportunities for collaboration outside their area of specialization.

However, in the last decade as teacher education and rigid timetables have altered, different forms of curriculum integration are emerging in a number of secondary schools in New Zealand. Drake (1998) argues: “The world we are living in is changing, and education must change with it. If we live in an interconnected and interdependent world, it only makes sense that knowledge be presented as interconnected and interdependent (p. 24).”

In our rapidly changing society, curriculum integration offers more holistic and joined-up thinking where learning is experiential and student-centered, with an emphasis on real-world problems (Arrowsmith & Wood, 2015). There is also a focus in the New Zealand Curriculum for curriculum integration:

While the learning areas are presented as distinct, this should not limit the ways in which schools structure the learning experiences offered to students. All learning should make use of the natural connections that exist between learning areas ... (Ministry of Education, 2007, p. 16).

IMPACT PROJECT

In 2020 I taught a new Year 13 University Entrance course called Impact Project. Impact Project broadly fits into the transdisciplinary approach defined by Arrowsmith & Wood (2015) above. Students combined one or more subjects with Impact Project to conduct a major project over the year. For example, one student applied her skills from Painting to Impact Project by creating a mural for the local preschool:



Combining Painting and Impact Project to create a mural for the local preschool

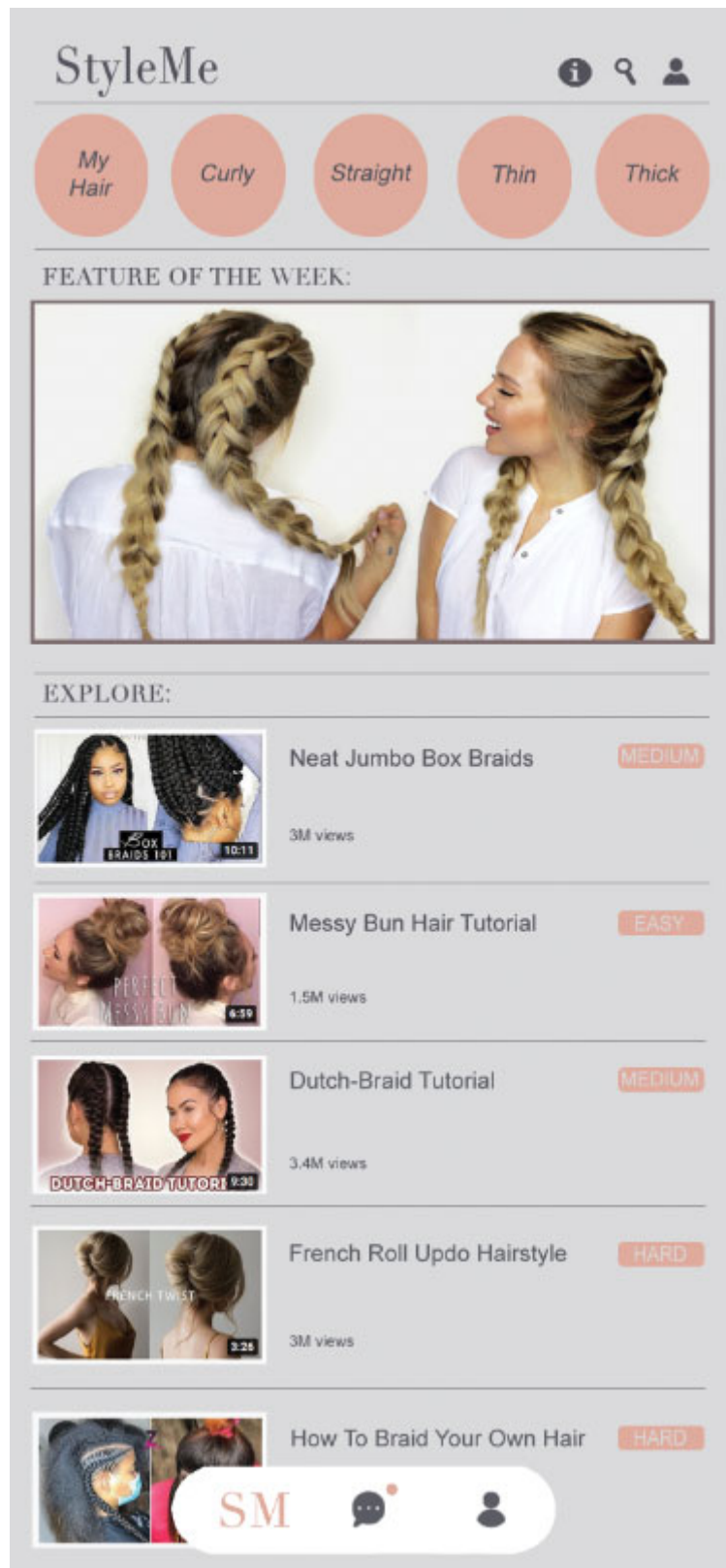
The image below shows the timetable at my school. Option classes occur twice per week and each option class is for approx 100mins. The yellow highlight represents when Year 13 Painting occurs on the timetable and the pink highlights when Year 13 Impact Project occurs:



Hagley College Timetable Senior 2020

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:30-10:15	Option 3	Option 1	8:20-9:20 Staff Meeting	Option 2	Option 5
10:15-10:45	Interval		9:40-11:30 Option 4	Interval	
10:45-12:35	Option 2	Option 5	Interval 11:30-11:40 11:40-12:20 Tutor	Option 6	Option 7
12:35-1:20	Lunch	Lunch	Lunch 12:20-1:00	Lunch	Lunch
1:20-3:00	Option 4	Option 6	1:00-2:40 Option 7	Option 3	Option 1
3:00-5:00	Option 8	Option 9	Option 9	Option 8	
5:00-9:00	Option 10	Option 11	Option 12	Option 13	

There have been a few occasions where students have integrated three areas of study. Examples include: Business Studies, Digital Technologies and Impact Project to create an app for young people to style their hair; and Computer Science, Digital Technologies and Impact Project to create a website for the elderly to link with people in the community.



Combining Digital Technology, Business Studies and Impact Project to create an app for young people to style their hair.

This transdisciplinary approach of 'connecting the curriculum' appears to have worked well this year at my school. Many students could see that with their Impact Project at the centre of their work, the other curriculum areas 'feed in' to help their project creation:

Because I am working on a children's book, I am connecting with many teachers from many departments who I wouldn't normally connect with, so far, I have met with teachers from many areas, most who I don't even have classes with. Some areas include textiles, fashion, creative writing and art and many more to come (Student R).

There is no right or wrong approach with curriculum integration (Arrowsmith & Wood, 2015). I can see that the transdisciplinary approach I have taken with Impact Project in 2020 has advantages and disadvantages:

Advantages	Disadvantages
Students learn in specialist classrooms with specialist teachers during dedicated class time.	There was no shared physical location where the two subjects could be worked on at the same time with the input of two teachers.
No alteration to existing school timetable.	Students had to personally make the connection between the two or more subjects.
Students maintain the opportunity to develop a positive teacher relationship with 1 teacher and approximately 25 students.	Students didn't have many opportunities to see teachers working/teaching together.
Students can easily link the Achievement Standard assessments to the teacher and content.	

Before undertaking a "Connected Curriculum" approach, McPhail (2020), recommends that the following principles should be considered:

- Consider what it is that the students will learn that they would not otherwise learn by bringing two or more subjects together.
- Only use Curriculum Integration in selected parts of the curriculum and carefully assess its effectiveness.
- Plan for Curriculum Integration at the subject concept level once a topic has been chosen.

- Use Curriculum Integration to deepen learning that has already occurred in a single subject setting.
- Introduce subject concepts in a planned, sequential, and logical way and revisit them in a spiral fashion.
- Ensure that sufficient time and subject expertise are available when planning for Curriculum Integration.

Conclusion

A transdisciplinary approach of integrating the curriculum appears to have been effective at my school this year. The project management components of Impact Project work well when combined with another curriculum subject which is based on students creating a physical project outcome. Creating meaningful, genuine connections between curriculum areas has resulted in quality learning for students. As my school begins its rebuild in 2021, and new teaching and learning spaces are developed, there will be more obvious opportunities to integrate the curriculum which may overcome some of the disadvantages I have identified above. Sharing my findings with fellow teachers at my school and beyond is important, so too is further investigating integrated curriculum opportunities in other subject areas for 2021 and beyond.

[Find out more about the Dr Vince Ham eFellowship and read Nathan's research report](#)

References

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Nathan Walsh

Nathan Walsh, Leader of e-Learning at Hagley College, was a recipient of the Dr Vince Ham eFellowship in 2020. His role is focused on how e-learning can support best practice teaching and learning. His research project examined how project-based learning can result in deeper learning within a traditional school timetable.