

The Integrated Curriculum

Introduction

Hello. My name is Sarah Thompson. I am a current Adolescent Guide and alumni of the college.

I spent 13 years as a student of the college; 5 years as a Guide and collectively 26 years involved with this community.

I am passionate about this community and I want to share with you - the parents of our current Year 6 students - the integrated curriculum of our Land and Community Program.

Throughout this presentation I'm going to provide an overview of the rationale for the program's design, an overview of how that program's design comprehensively meets the Australian Curriculum; an explanation of the purpose of key lessons and practical work, and an insight into how the adolescents will be evaluated and receive feedback.

Rationale for the Project's Design

First, let me explain the rationale for using the project's design to integrate the curriculum.

Maria Montessori was astonished that during the time of physical, emotional and intellectual turmoil that we call adolescence, that most cultures immobilise children behind desks rather than let them put their energies into meaningful projects.

This program, by contrast, empowers students with the knowledge that learning is lifelong, that it requires the head and hand to be interconnected and that it can be found anywhere through purposeful projects and community life.

Nowhere else in the world do we isolate experiences based on predetermined categories, except in education. Human beings exist within, and are part of, an interconnected world hence the importance of creating an integrated curriculum where the adolescents are able to immerse themselves in the whole experience and not just one aspect of it.

Through participation in the program the adolescents will start to see the interconnections within their work and as they progress they begin to seek and look for less obvious links which require deeper investigation.

The Land and Community Program is designed to meet the developmental needs of the adolescent and support their growth and independence as they transition from the child they once were to the adult they will soon become.

Most schools develop curriculum like independent islands with no real consideration for the entire development of the adolescent. The land based projects are designed using an integrated approach by a team of generalists with the assistance of specialists to ensure a connected and comprehensive approach to learning.

For example, there's a section of the technology curriculum which focuses on analysing how motion, force and energy are used to manipulate and control electromechanical systems. In a mainstream context this would be covered in the confines of a technology class with limited time. This integrated approach allows us to combine this curriculum strand with others from the science curriculum which focuses on the object's motion, energy forms, transfers and systems.

Enabling the adolescents more time to dive deep into the content to understand and experience it.

This quote from Dr Maria Montessori highlights the value of the MIC site and the adolescent's direct access to this limitless field for exploration, learning and discovery.

Work on the land connects them intellectually, physically and spiritually. This learning, although initially focused on this site, has scope to be applied much broader, and globally.

Learning doesn't have to look like this...it can look like this.

(slideshow)

Overview of Curriculum

Let's move on to how the program will meet the Australian Curriculum - also known as the ACARA requirements.

The key lessons and practical work are focused on a land-based issue or project to meet every aspect of the Australian Curriculum in an integrated way. In addition to key lessons and practical work, the micro-economies - or student-run businesses - embed the economics, business and mathematics curriculum in a purposeful way, as well as the technology and arts curriculum through the design of products.

Community Life plays an integral role in adding meaning to the civics and citizenship curriculum through seminars, community meetings, event organisation, grace and courtesies and interactions with peers.

Another important element of the curriculum is the Clubs and Teams, which provides students opportunities to explore, and experiment with creative and physical endeavours, as well as meet HPE curriculum points and build social skills.

It's important to recognise that each of these elements play a key role in the development of the adolescent. Time and care has been taken to ensure there is a balance between each of these areas and that the program meets the academic, social, emotional and physical needs of the adolescent.

The pie chart on the right is an accurate representation of the distribution of hours at MIC devoted to each part of the curriculum.

The integrated curriculum will be delivered through land-based projects designed around water, food production on the farm, the rainforest and bushland, and the buildings and structures around the adolescents.

Over the two years, students will immerse themselves in the curriculum which is interwoven into everything they will do and experience.

The Wonderful World of Water

The Wonderful World of Water project is an excellent example of how study of water can be the vessel for the integration of all subject areas. It allows for the study of volume, measurement geometry and rates of water loss to the soil in mathematics. It's very clearly connected to all areas of science, but in particular, the study of ecosystems, water chemistry and classification of microorganisms. The study of ancient river civilizations such as Egypt and the River Nile or China and the Yellow River is easily integrated into this subject and meets the history and geography curriculum.

Water is also a common theme in books and film which can be analysed and explored in detail meeting the English and Media Arts curriculum. For example, water represents a way to cleanse or generate life, rainfall foreshadowing disaster or symbolising human tears or emotions.

There's also a book called *Up from the Sea* which is an excellent literature study as it's a powerful novel in verse, meaning both novel and poetry, about how one teen boy survived the March 2011 tsunami which devastates his coastal Japanese village.

The Arts curriculum can be linked through elements of watercolour, or hydroacoustics, which is the passion of sound artist Leah Barclay, who we have worked with to record the soundscapes of our aquatic ecosystems.

And of course, for Health and Physical Education, the students would undergo water safety training and first aid as well as have opportunities for water based activities such as swimming, surfing, water polo, sailing, kayaking and the like.

Overall, the opportunities for meeting the curriculum through exploration of the land is truly limitless.

I'm not going to go through all of this, but if you'd like to pause the video and read through a more detailed explanation of the ways a project would meet the curriculum requirements, feel free to do so.

Year 1 denotes the content will be covered in the first year of the couplet and Year 2, in the second. The order in which an adolescent may experience this, depends on when their adolescent journey begins.

Meeting the Australian Curriculum

This program meets the Australian Curriculum content through key lessons and practical work, which is explicitly stated through our comprehensive mapping documents.

The Australian Curriculum achievement standards are met through our innovative evaluation portfolio which I will explain shortly.

This is an example of the Land and Community Program's science curriculum mapping document. It explicitly shows how each Australian Curriculum content descriptor, which is what content we must cover, is covered by the projects over the course of the two years.

So, your adolescent might not cover cell biology at the exact same time as their mainstream peers. But by the end of the two year program, they will have a deep and rich understanding of cell biology, and its applications to real world projects.

Now let's talk about the purpose of Key Lessons and Practical Work in the Land and Community Program. The Key Lessons take the Australian Curriculum elements from every aspect of the Australian Curriculum and endeavour to build the adolescent's skills and knowledge in order for them to apply it to their practical work and land based projects. While building of skills and knowledge is extremely important, the key lessons are also an invitation to the adolescents. They are designed to inspire and ignite the curiosity within the adolescents to explore, discover and learn more than what is prescribed by the Australian Curriculum.

The purpose of Practical Work, at its core, is to connect the head and the hand. Practical Work gives the adolescents opportunities to use their knowledge and skills and apply them to meaningful projects which deepens their learning experiences and understanding. It also provides for adolescents to use their bodies and recalibrate their physical skills as they grow and develop.

There is immense support for Practical Work in education from neuroscientists all around the world. There's a whole body of research dedicated to it called Embodied Cognition. Brain researchers conclude that the body is an intrinsic part of cognition. That the parts of our brain

that control perception and movement of our bodies are also involved in knowledge representation. This supports the absolute necessity of connecting the head and the hand when facilitating learning.

Support for connecting the head and the hand is also seen in business and industry. Japan is famous for their efficient and safe railways system and research attributes this to a unique way of working. Japanese rail workers use a method called shisa kanko, also known as the pointing-and-calling system developed by the Kobe Railroad Administration Bureau. It follows the principle of associating one's tasks with physical movements and vocalisations to raise focus and attention. The introduction of this system of connecting the head and the head was shown to reduce workplace errors by 85 per cent. This is such a substantial improvement in focus and concentration - it is hard to deny the importance of Practical Work for learning.

The ones with hands and no head, and the ones with head and no hands, are equally out of place in the modern community. Dr Maria Montessori.

Evaluation and Feedback

What about evaluation and feedback, also known as assessment in mainstream?

While all feedback and evaluation is provided to the adolescent to promote a growth mindset and student agency over their learning, the adolescents will be constantly receiving feedback throughout their work within the projects as their work side-by-side with adults and peers.

This is the nature of meaningful projects. The adolescents will soon discover whether or not they have been successful and find ways to improve, either through verbal feedback or through observation of the work they have produced.

After the submission of a draft or assessment task, adolescents will be provided formal written feedback via the Google Classroom digital platform in order for the adolescent to build upon their current skills and identify areas to improve upon.

There will also be regular advisor conferencing with the adolescents to reflect upon evaluations and determine learning goals. These conferences will allow adolescents to see how they are progressing and areas that need more focus for well rounded development of skills and understanding.

Each assessment item completed by an adolescent contributes to their average evaluation for their relevant subject areas and achievement standards. This evaluation is recorded via the Evaluation Portfolio.

Well, what is the Evaluation Portfolio?

Well, over the course of two years, students and their advisor will collect evidence of their achievement across all Australian Curriculum standards and record them in a digital portfolio. Students will be evaluated on a 5-point scale and this will be recorded via their Evaluation Portfolio document.

In mainstream education, learning, assessment and evaluations are fixed and permanent, allowing for no acknowledgement of growth or development and are based on predetermined modes of assessment only.

In contrast, the Evaluation Portfolio is designed to share the curriculum achievement standard with the adolescents and provide them with the agency to identify their strengths and seek innovative ways to demonstrate their knowledge and understanding of the curriculum content. There is an emphasis on growth, and the ability to improve on previous samples of work through new learning and redemonstration of knowledge and understanding.

The image inside the little computer screen is a snapshot of some strands of the English curriculum. The Evaluation Portfolio document is a living document that records the assessment items which demonstrate the adolescent's understanding of the curriculum standards. It then provides an average subject evaluation at the bottom of the document so students can see how they are progressing.

When I say living document, I mean that alongside their advisor the adolescent has the ability to identify an area of their portfolio where they believe they can demonstrate a higher level of understanding than previous samples of work, and improve on their average subject evaluation.

Learning is not stagnant. It is ever evolving and growing, so their assessment should reflect that.

The adolescents will have the opportunity to present their knowledge and understanding in an almost limitless number of ways, including through written pieces, oral presentations, and creative endeavours.

Here I have listed some examples of types of evaluations they may experience.

If you're interested in knowing more about Dr Maria Montessori's thoughts on adolescence, her book *From Childhood to Adolescence* is a must read. And if you'd like to know more about the support of head and hand learning from scientists and businesses, here are the references I mentioned earlier.

Thank you for your time and I look forward to meeting all of your soon-to-be adolescents during transition week later in the year.