MINISTRY OF EDUCATION
TE TĀHUHU O TE MĀTAURANGA

Materials and Processing Technology Learning Matrix

Curriculum Level 6

Learning Area Whakataukī/Whakatauākī:

Kaua e rangiruatia te hāpai o te hoe; e kore tō tātou waka e ū ki uta	*Do not lift the paddle out of unison; our canoe will never reach the shore.*

Materials and Processing Technology is a consolidated subject that is being developed to support the vision in the NCEA Change Package (2019) of an optional, broad, and foundational qualification at NCEA Level 1. The Significant Learning identified in this subject provides for coherent foundational learning across the consolidated subject and is assessed by fewer standards. This allows for specialisation at NCEA Levels 2 and 3.

Big Ideas			
Outcomes are developed to respond to people's needs through Materials and Processing Technology practice	**Purposeful outcomes encourage auahatanga of Materials and Processing Technology practice**	**Authentic Materials and Processing Technology contexts inspire fit-for-purpose outcomes through manaakitanga**	**Sustainability through kaitiakitanga underpins ethical intervention by design in Materials and Processing Technology practice**

Significant Learning

- Ākonga will understand how materials and processing practice impacts on people by considering the following mātauranga Māori principles: kotahitanga, whanaungatanga, manaakitanga, kaitiakitanga, and tikanga.
- Ākonga will learn to be respectful and open-minded whilst considering the cultural safety of themselves and others.
- Ākonga will learn about and understand the safe use of chosen materials, tools, and equipment whilst developing an outcome.
- Ākonga will consider the impact of the outcome on the end user(s).

At Curriculum Level 6, ākonga will…

- explore and apply world views to the development and creation of outcomes
- learn about the impact of and on society of outcome development
- explore tikanga Māori and Pacific materials and processing techniques as a foundation for outcome development
- understand that tikanga influences outcome development
- learn about traditional and contemporary materials and techniques and how they relate to each other
- understand the importance of manaaki whenua (caring for the land), manaaki tangata (caring for the people), and economic factors in sustainable design for generations now and into the future
- understand the importance of materials and process selection for performance, aesthetics, and sustainability
- understand, use, rangahau (research), and apply design thinking principles
- develop auahatanga (innovation) skills through technological practice
- explore planning and testing whilst developing an outcome
- develop and apply practical skills to solve authentic problems or realise opportunities
- understand that outcomes are designed and developed to address a need or opportunity for a person, whānau, or community
- use evaluation to determine an outcome's fitness for purpose
- develop communication skills that support working with others.