

# TECHNOLOGY



## SCOPE AND SEQUENCE

## Early Childhood Band of Development

### ELA 25 – The student designs, makes and appraises using technology

**Markers of Progress:** By the end of the early childhood band of development, students develop design ideas through trial and error, drawing and modelling. They use a range of common classroom materials and equipment to make or model products. They explain their design ideas and choices using techniques and materials to make them. They talk about what they like and dislike about familiar products and built environments and describe their design features in relation to intended uses or purposes.

Preschool Students have the opportunities to learn about:	Kindergarten Students have the opportunities to learn about:	Year 1 Students have the opportunities to learn about:	Year 2 Students have the opportunities to learn about:
<p><b><u>Expressive Self</u></b> 25.EC.4 design and make drawings, structures and models by experimenting with ideas and a variety of materials, tools and techniques</p> <p><b><u>Analytical Self</u></b> 25.EC.7 use materials and tools safely</p> <p>25.EC.2 features of familiar products designed for particular uses and purposes</p>	<p><b><u>Expressive Self</u></b> 25.EC.1 designing, making and appraising objects and built environments (e.g. models, dioramas, toys, simple machines, props and sets for performances, displays, learning areas, play spaces, gardens)</p> <p><b><u>Analytical Self</u></b> 25.EC.7 use materials and tools safely</p> <p>25.EC.6 choose and use a range of classroom materials and tools to make products</p>	<p><b><u>Expressive Self</u></b> 25.EC.4 design and make drawings, structures and models by experimenting with ideas and a variety of materials, tools and techniques</p> <p>25.EC.8 talk about and explain their own designs and products</p> <p><b><u>Analytical Self</u></b> 25.EC.2 features of familiar products designed for particular uses and purposes</p> <p>25.EC.7 use materials and tools safely</p>	<p><b><u>Expressive Self</u></b> 25.EC.1 designing, making and appraising objects and built environments (e.g. models, dioramas, toys, simple machines, props and sets for performances, displays, learning areas, play spaces, gardens)</p> <p><b><u>Analytical Self</u></b> 25.EC.3 features of built environments around them and how they have been designed and built by assembling and arranging components for particular purposes (e.g. classroom, playground, houses and community facilities)</p> <p>25.EC.5 initiate and contribute to design ideas (e.g. suggest ideas for a class design project, comment on strengths and limitations of design ideas, make and present drawings, contribute to a display)</p> <p>25.EC.7 use materials and tools safely</p>



## Later Childhood Band of Development

### ELA 25 – The student designs, makes and appraises using technology

**Markers of Progress:** By the end of the later childhood band of development, students use a design process to make a product or built environment for that particular purpose. They construct drawings, models or procedures to develop, modify and communicate their design ideas. They choose and safely use appropriate, tools, techniques and materials to implement their design. They appraise their design, explaining factors considered, problems encountered, decisions made and how well it works. They know about some of the developments in familiar technologies and describe some of the effects on these people's lives.

Year 3 Students have the opportunities to learn about:	Year 4 Students have the opportunities to learn about:	Year 5 Students have the opportunities to learn about:
<p><b><u>Expressive Self</u></b> 25.LC.6 follow a procedure to make a product (e.g. models, constructions, cooking)</p> <p><b><u>Analytical Self</u></b> 25.LC.1 the design process (e.g. identifying needs and wants; clarifying the design task; generating, recording and experimenting with ideas; selecting and using materials and tools; making a product or built environment; and evaluating the design solution)</p> <p>25.LC.7 use materials and tools safely and take care of equipment</p>	<p><b><u>Analytical Self</u></b> 25.LC.1 the design process (e.g. identifying needs and wants; clarifying the design task; generating, recording and experimenting with ideas; selecting and using materials and tools; making a product or built environment; and evaluating the design solution)</p> <p>25.LC.5 record, evaluate and present their design ideas and solutions (e.g. explain their design – factors considered, choices of materials, tools and techniques, problems encountered and modifications made – and evaluate the strengths and weaknesses of their design solution)</p> <p>25.LC.7 use materials and tools safely and take care of equipment</p> <p>25.LC.8 evaluate a product or built environment against its intended uses or purposes</p>	<p><b><u>Analytical Self</u></b> 25.LC.2 basic properties of materials used in familiar products and built environments (e.g. paper products, fabric, paint, wood, metals, plastics and concrete)</p> <p>25.LC.3 historical developments in familiar technologies and how they have impacted on people's lives (e.g. transport, communications, preservation and cooking of foods, lighting and heating)</p> <p>25.LC.4 develop a design by generating, testing and refining ideas, and selecting and experimenting with tools, techniques and materials to create a functional design solution</p> <p>25.LC.7 use materials and tools safely and take care of equipment</p>



## Early Adolescence Band of Development

### ELA 25 – The student designs, makes and appraises using technology

**Markers of Progress:** By the end of the early adolescence band of development, students undertake design projects according to specified design criteria. They select and use suitable tools and materials and apply practical skills and techniques to create a product based on their design brief. They use a range of tools, materials and processes appropriately and safely. They understand and use technical language associated with particular materials and processes appropriately and safely. They understand and use technical language associated with particular materials, equipment and processes. They identify factors they have taken into account and evaluate their own design. They describe the development of particular technologies and their impact on people’s lives and society.

Year 6 Students have the opportunities to learn about:	Year 7 Students have the opportunities to learn about:	Year 8 Students have the opportunities to learn about:
<p><b><u>Analytical Self</u></b>  <b>25.EA.1</b> the design process (e.g. understanding design criteria; researching, generating and testing ideas; selecting and using tools, materials and processes; producing and evaluating solutions)</p> <p><b>25.EA.3</b> functions of tools and processes, and safety in their use and storage</p> <p><b>25.EA.4</b> technical language associated with materials, equipment and processes</p> <p><b>25.EA.6</b> work independently or in collaboration with others to create design solutions according to specified design criteria</p>	<p><b><u>Analytical Self</u></b>  <b>25.EA.2</b> properties of different materials used in particular areas of technology (e.g. food ingredients, fabrics, construction materials, electronic components)</p> <p><b>25.EA.3</b> functions of tools and processes, and safety in their use and storage</p> <p><b>25.EA.4</b> technical language associated with materials, equipment and processes</p> <p><b>25.EA.6</b> work independently or in collaboration with others to create design solutions according to specified design criteria</p> <p><b>25.EA.7</b> use a design portfolio to record and evaluate design ideas and decisions (e.g. use ICT to plan, develop and document design projects)</p> <p><b>25.EA.8</b> develop and apply practical skills and techniques to construct products to specified criteria and to modify their designs and production processes, as necessary</p> <p><b>25.EA.9</b> use a range of tools, materials and</p>	<p><b><u>Analytical Self</u></b>  <b>25.EA.4</b> technical language associated with materials, equipment and processes</p> <p><b>25.EA.5</b> how and why particular products, systems or built environments have been developed and their impacts on people’s lives and society</p> <p><b>25.EA.6</b> work independently or in collaboration with others to create design solutions according to specified design criteria</p> <p><b>25.EA.8</b> develop and apply practical skills and techniques to construct products to specified criteria and to modify their designs and production processes, as necessary</p> <p><b>25.EA.9</b> use a range of tools, materials and processes appropriately and safely (e.g. handling and storing materials, safe lifting practices and use of electrical appliances)</p> <p><b>25.EA.10</b> evaluate potential risks in the products or processes they design and plan to manage these risks</p>



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