



An Roinn Oideachais
agus Óige
Department of Education
and Youth

Senior Cycle Level 2 Learning Programme: Design and Do Elective Module

For introduction to schools in September 2026.

Prepared by the National Council for Curriculum and Assessment (NCCA)

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Introduction

The Senior Cycle Level 2 Learning Programme (SCL2LP) consists of a range of curriculum areas, each designed on a modular basis. There are four curriculum areas at the heart of the SCL2LP: Numeracy; Communication and Literacy; Personal Care; and Electives. Design and Do is an elective module.

Design and Do is designed for a minimum of 60 hours of teaching time/class contact time over two years.

Module title	Recommended time in hours
Design and Do	60

Rationale

The Design and Do elective module aims to develop students’ understanding of design and the design process. It provides learning experiences for students that involve them using a range of materials and tools. Students engage with the iterative design process, which enables them to become creators and collaborators, preparing them for real-world challenges. By guiding students through all aspects of the design process, the module enhances critical thinking, enables creativity and supports decision-making. The Design and Do module equips students with hands-on experiences in handling cutting and assembly tools, while emphasising the safe use of tools. This helps build their confidence and supports their independence.

Design and Do contributes to the development of senior cycle key competencies and vice-versa. When this happens, all learning across senior cycle is supported and the development of important life skills that are essential to student independence is promoted. Students stand to benefit in many ways as they progress in learning pathways and as they transition to life beyond school.



Continuity and progression

This module builds upon students' learning and experiences with the Primary School Curriculum and the Framework for Junior Cycle. In particular, learning through the Design and Do module builds upon students' development of the junior cycle key skills of Managing self, Staying well, Communicating, Being creative, Working with others, and Managing information and thinking. The module also promotes development and learning in areas such as literacy, numeracy, language, motor coordination, mobility and leisure skills. Students may already be familiar with the design process as it is applied in many junior cycle subjects such as Wood Technology, Graphics, Engineering, Applied Technology, Home Economics and Visual Art.

The elective aims to develop students' senior cycle key competencies of Participating in society, Working with others, Communicating, Cultivating wellbeing, Thinking and solving problems, Being creative, and Managing learning and self, as well as providing students with a sense of achievement and confidence in their learning. Students are given opportunities to demonstrate how learning acquired here can be linked to prior learning, to other modules and curriculum areas, wider school activities and life outside of school, applying their learning in areas such as Communication and Literacy, Numeracy, Personal Care, Cookery, Looking after my environment, Visual Art or their Area of Special Interest. Learning acquired here can be transferred across multiple areas of learning. This helps to reinforce learning and progress students' ability to communicate, interact, be creative, express themselves and explore ideas in a variety of ways. This supports students beyond school and provides them with a sense of achievement and confidence as they transition to the world of work, study or further services beyond school.



Teaching and learning

The Design and Do elective module emphasises active participation, social engagement, experiential and sensory learning focusing on guided discovery. The learning environment should encourage practical activities and project-based learning. There are five stages to the design process; Ask, Imagine, Plan, Create and Test. Students will design and create by applying the design process to create a solution to a problem or a need.



Figure 1: The design process

Students should be encouraged to engage with a variety of materials, tools and techniques, identify their preferences and begin to understand the concept of design and making in a meaningful way.

Through the exploration of various materials such as paper, cardboard, wood, plastic, textiles, fabrics or metals, students will gain practical knowledge about material properties and how they can be used, which will inform their decision-making. Schools have the flexibility to provide and/or choose their own materials depending on available resources and their students' interests.

This module places a strong emphasis on the safe and effective use of cutting and assembly tools, providing students with the opportunity to build confidence and proficiency in handling tools. Cutting tools may

include: scissors, craft knives, rotary cutters, saws, guillotines and wire cutters, as appropriate to the student. Assembly tools may include: screwdrivers, spanners, hammers, Allen keys, staple guns, glue guns and clamps. Temporary joining techniques may include clamping, screwing, magnetic fasteners and sewing. Permanent joining techniques may include gluing, welding and nailing.

Students will learn essential techniques for manipulating materials such as cutting, folding, and bending, to create specific designs and structures. They will also experiment with different methods to discover new ways to work with materials, shaping and forming them into specific designs or structures. By experimenting with different manipulation techniques, they will discover innovative ways to work with materials.



Design and Do activities can be structured in a way that helps students build physical skills and coordination, while allowing for individual strengths and abilities. Many tasks support the development of fine and gross motor skills, supporting students to improve strength, control and coordination as they work through the design process.

A project-based approach encourages students to plan, create and refine prototypes and models, fostering an iterative learning process. Therefore, students may participate in individual activities as well as being involved in activities with a partner or as part of a group, and should be given many opportunities to experience the fun, enjoyment, creative and the social aspects of Design and Do, as students engage with their peer group and the broader community.

When planning tasks for students, teachers can carefully consider equipment, technology and exploratory activities that suit the individual needs of their students. For some students, the starting point may simply be becoming familiar and comfortable with the different textures, sounds or smells of the materials used. Where appropriate, incorporating digital and assistive technologies can support students' learning and participation. Visual aids, raised line drawing tools, adaptive tools for making and creating, communication devices, and visual or object cues can all help students engage more fully with the Design and Do elective module.

Module: Design and Do

Module descriptor

Students engage with each stage of the design process, choosing appropriate materials. This enables students to recognise creative activities they enjoy, motivating them to engage with the design process within and outside of school. Students should follow safety practices when manipulating materials, such as using tools correctly and wearing appropriate protective clothing. Students may be guided and supported in their engagement with each stage of the process.

Students learn about Students should be able to

The Design Process	
Ask	a. identify a need or a problem b. ask questions to understand the need or problem c. identify and name various materials
Imagine	d. identify a solution to the need or problem e. recognise what materials could be used for the solution to the identified need or problem f. compare the properties of different materials
Plan	g. develop and present creative ideas for the identified solution h. identify own skills and preferences in creating their identified solution i. identify the steps needed to create their identified solution i. identify the materials needed for their identified solution
Create	k. follow examples, familiar techniques or processes in creating their identified solution l. follow a step-by-step plan to create a simple model or prototype of their solution m. use different materials to create solutions and prototypes of solution
Test	n. refine or change their solution based on testing or feedback o. recognise the impact material choice has on the environment
Manufacturing and material manipulation Techniques for manipulating materials to create innovative designs and structures.	p. identify and name different cutting tools q. demonstrate safe handling of cutting tools, including proper grip and usage r. cut materials following marked lines or patterns s. use cutting tools to create simple prototypes or projects t. distinguish between temporary and permanent joining techniques u. demonstrate basic techniques for manipulating materials v. shape and form materials into specific designs or structures w. combine different materials to create a composite project x. experiment with different manipulation techniques to discover new ways to work with materials

Students learn about Students should be able to

Evaluating the design
and structure

- y. describe their work, using appropriate language or terminology
- z. describe challenges encountered



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