An tSraith Shóisearach do Mhúinteoirí





Cluster Delivery 2018/19

## Wood Technology









## **Rationale**

Each subject of the technology suite offers the student different experiences which contribute towards their education in technology education. As a result, preparing students for learning in the technology subjects is not just about teaching towards the technology but towards the skills that are fundamental to the technology subjects and are transferable into other areas of their learning. Skills that encourage the student to problem-solve through creation, innovation, communication, collaboration and exploration, all of which are developed in an active learning environment where students can advance their ideas from conception to realisation.

Wood Technology is a subject that will allow students to explore and learn about a key natural resource that nature has provided. Trees and wooden material have a unique relationship with nature and humankind. The sustainable use and management of this natural resource is important as the world faces the challenges of the 21st century. From habitats to construction or recreation to oxygen creation this resource can play a significant role in wellbeing of our planet. To this end it is important that citizens be given the opportunity to become knowledgeable about this resource, exploring its heritage and potential as a material for the future.

In Wood Technology, students will explore the natural and made world through the medium of design, seeking out opportunities to creatively and innovatively apply the material/resource in making and shaping their environment. Wood as a material resource has seen much innovation and change. Technological advances have created significant opportunities to expand the use of wood as a resource for a broad range of applications. However, the uniqueness of this material and craft is that many of the traditional applications and processes are still of value, transcending the test of time.

Learning in this subject will be active and student centred, with learners collaborating in the pursuit of knowledge and in the safe management of the technology classroom environment. Through the challenges posed by the design-based philosophy of the subject, students will develop the relevant knowledge, skills and values to bring ideas from conception to reality in a way that will allow them to be expressive, creative and innovative.

Wood Technology Specification p.4

## **Rationale Activity**

Read the rationale and then communicate your thoughts on what our subject can bring to the student experience of Junior Cycle.

Paragraph 1
Paragraph 2
Paragraph 3
Paragraph 4

## Aim

The study of Wood Technology at junior cycle aims to:

- enable students to develop the necessary conceptual understanding, disciplinary skills and subject knowledge to design and create artefacts of value
- empower students through designing and making, whilst developing an awareness of sustainability and the use of natural resources
- develop a range of core design skills and relevant manipulation skills through modelling and processing wood and other materials
- develop the confidence and resilience of students through engagement with the uncertainty of design challenges
- encourage students' innovation and creativity through recognition and appreciation of their capacity to design and create

Wood Technology Specification p.5

Explore the common threads throughout the aims.

## **Statements of Learning**

SOL 15: The student recognises the potential uses of mathematical knowledge, skills and understanding in all areas of learning.

SOL 19: The student values the role and contribution of science and technology to society, and their personal, social and global importance.

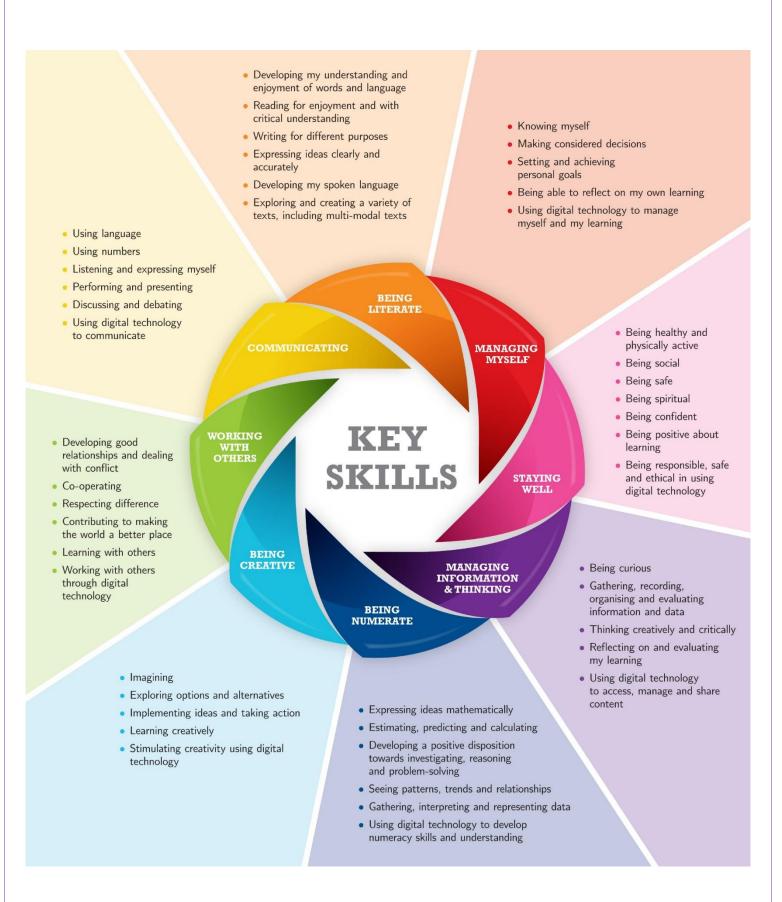
SOL 20: The student uses appropriate technologies in meeting a design challenge.

SOL 21: The student applies practical skills as she/he develops models and products using a variety of materials and technologies.

SOL 23: The student brings an idea from conception to realisation.

SOL 24: The student uses technology and digital media tools to learn, work and think collaboratively and creatively in a responsible and ethical manner.

## **Junior Cycle Key Skills and their Elements**



## Student Learning Journey

2019/2020

1st Year

Wood Technology introduced

Learning through engagement with learning outcomes

2020/2021

2nd Year

CBA 1

Wood Science in our Environment

Units of Learning

Units of Learning

Learning through engagement with learning outcomes

2021/2022

3rd Year

CBA 2

Self-Analysis and Evaluation

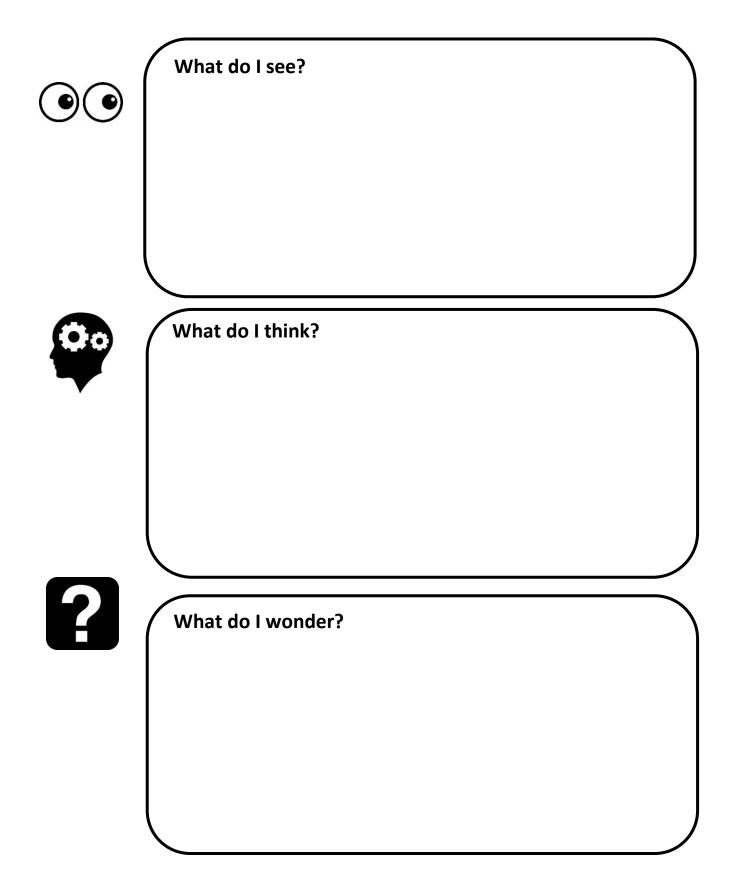
Project

Final examination

Learning through engagement with learning outcomes

Student Learning Journey

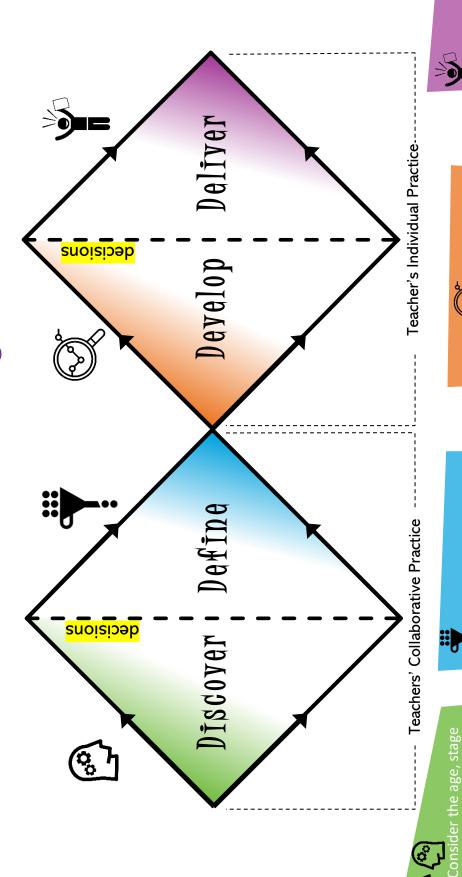
## See, Think, Wonder



## **Debate notes**

Our Points	\
Counter arguments to consider?	\

## **Double Diamond Design Process**





Develop ideas for how students could experience this

iow will I know they al learning?

Using your own classroom context, decide on the learning experiences that will best support your students in experiencing the chosen learning outcomes.

Ensure assessment aligns with the learning outcomes and their action verbs.

Identify the learning outcomes for your unit of

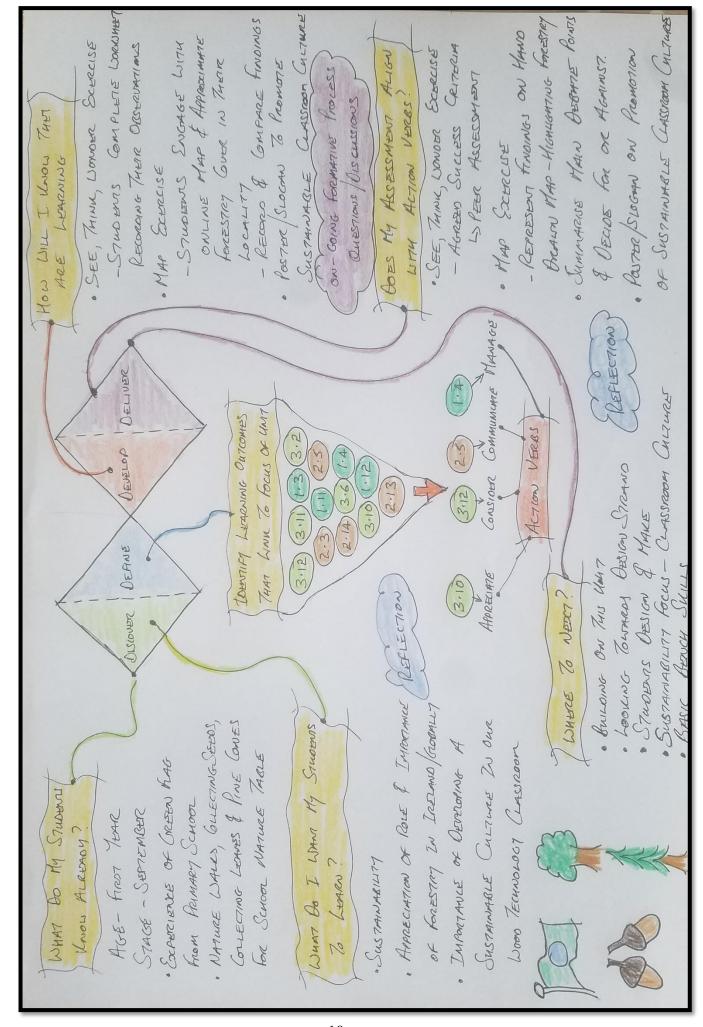
What learning do we want to

Identify the key learning for students using action verbs to support your thinking.

Consider how we will assess student learning.

earning outcomes.

## Our unit of learning from session 2



## **Reflection**

What are the key messages you have taken from the rationale and aims?





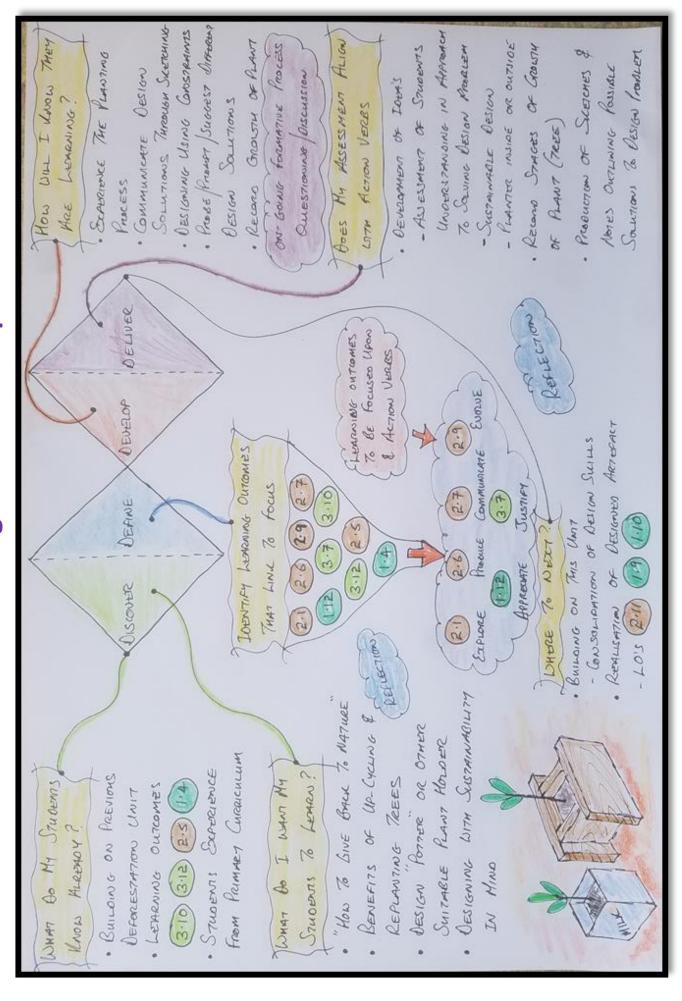
## **Reflection**

What are the important factors to be considered when designing a unit of learning?

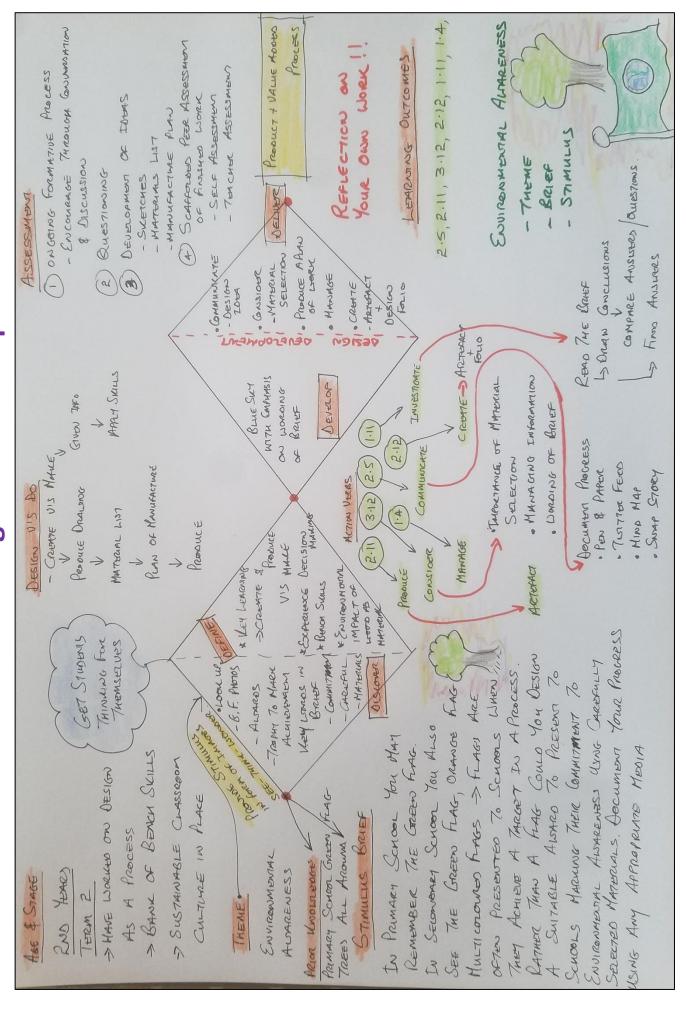




Possible next unit of learning to follow sample unit in session 2



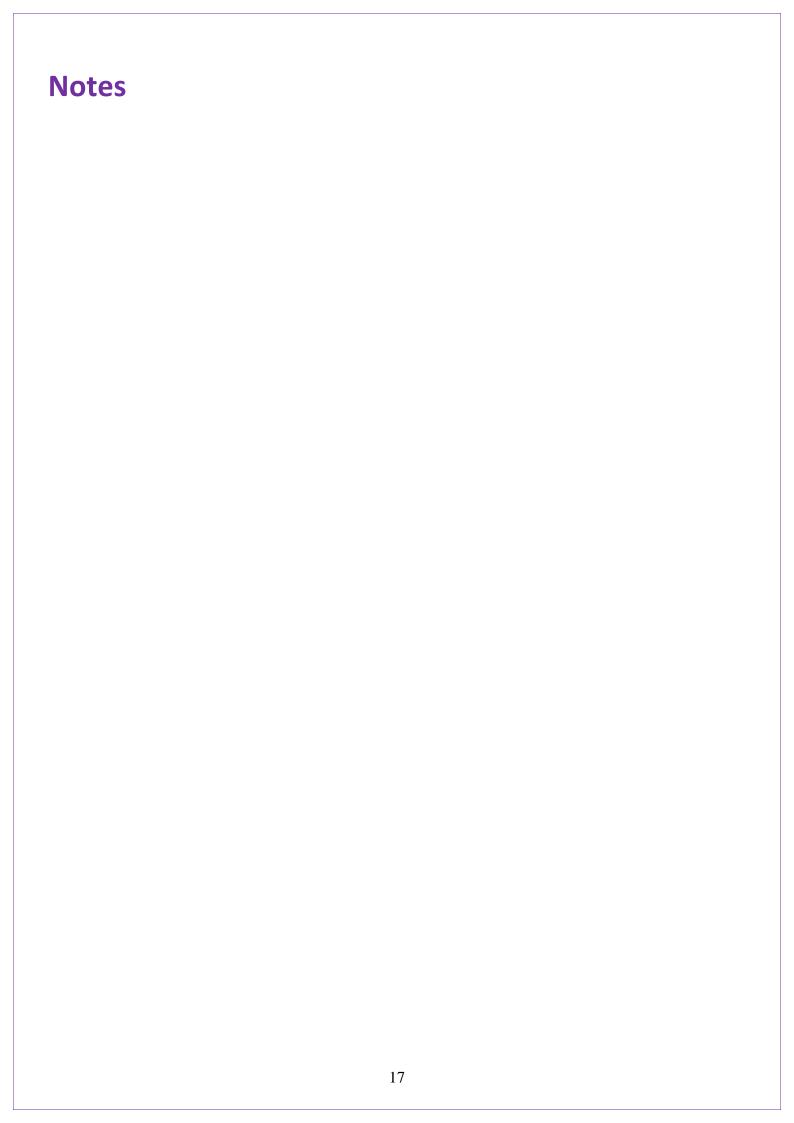
Possible next unit of learning to follow sample unit in session 2



## What are my next steps?

When I go back to school tomorrow	
	=
Over the next couple of months	
Nautusas	
Next year	
What new strategies could I use in my classroom	

# Notes 16



## **Junior Cycle Terminology**

Classroom-Based Assessments (CBA): Classroom-Based Assessments are best described as the occasions when the teacher assesses the students using the specific tasks set out in the subject specification. The tasks are clearly described, as are the criteria for assessment to support teacher judgement. The criteria are found in the features of quality linked to each Classroom-Based Assessment. Although the assessment is similar to the formative assessment that occurs every day in class, in the case of Classroom-Based Assessment the teacher's judgement is recorded for Subject Learning and Assessment Review, and, is used in the school's reporting to parents and students.

**Features of Quality**: The features of quality support student and teacher judgement and are the criteria that will be used by teachers to assess the pieces of student work.

**Formative Assessment** (Framework p.35-36): The junior cycle will be underpinned by the further integration of formative assessment as a normal part of teaching and learning in classrooms. Formative assessment involves teachers and students reflecting on how learning is progressing and deciding next steps to ensure successful outcomes. A vital part of formative assessment is the feedback that teachers provide to their students. Through a range of assessment activities, the teacher helps the student to identify what has been achieved and where there is room for further learning and development. To facilitate the type of learning envisaged above, the role of the teacher and the dynamics of the teacher-student relationship will evolve. Teachers will place a greater emphasis on integrating assessment into their teaching, so they can better monitor students' progress in learning and identify how they can support students to reflect on and critically analyse their own learning.

Junior Cycle Profile of Achievement (Framework p.46): The JCPA will reward achievement across all areas of learning as applicable: Subjects, Short Courses, Wellbeing, Priority Learning Units, other areas of learning. The JCPA will draw upon and report on achievement across all elements of assessment including ongoing, formative assessment; Classroom-Based Assessments; and SEC grades which include results from the state-certified examinations and the Assessment Tasks. The JCPA will have a nationally determined format. It will be compiled by the school and received by students in the autumn following third year, when all assessment results from the SEC and the school are available and confirmed.

## **Learning Intentions and Learning Outcomes:**

**Learning Intention:** A learning intention for a lesson or series of lessons is a statement, created by the teacher, which describes clearly what the teacher wants the students to know, understand and be able to do as a result of the learning and teaching activities.

**Learning Outcomes:** Learning outcomes are statements in curriculum specifications to describe the knowledge, understanding, skills and values students should be able to demonstrate after a period of learning.

**Subject Learning and Assessment Review (SLAR) Meetings** (Framework p. 39-40): In Subject Learning and Assessment Review meetings, teachers will share and discuss samples of their assessments of student work and build a common understanding about the quality of student learning. Each Subject Learning and Assessment Review meeting will be subject-specific and will focus on the Classroom-Based Assessment undertaken by the particular year group.

**Success Criteria**: Success criteria are linked to learning intentions. They are developed by the teacher and/or the student and describe what success looks like. They help the teacher and student to make judgements about the quality of student learning.

**Summative Assessment:** Assessment is summative when it is used to evaluate student learning at the end of the instructional process or of a period of learning. The purpose is to summarise the students' achievements and to determine whether and to what degree the students have demonstrated understanding of that learning by comparing it against agreed success criteria or features of quality.

**Unit of Learning:** A unit of learning links learning outcomes which clearly set out what the students should know, understand, and be able to do as a result of the learning and teaching activities within that unit.

## An tSraith Shóisearach do Mhúinteoirí



## **Contact Details**

Administrative Office: Director's Office:

Monaghan Ed. Centre, LMETB,

Armagh Road, Chapel Street,

Monaghan. Dundalk

www.metc.ie

For all queries please contact:

info@jct.ie

Follow us on Twitter:

@JCforTeachers

@jct4ed



## **Key websites:**

www.jct.ie

www.curriculumonline.ie

www.ncca.ie



QR code - Feedback form

