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**Knowledge Rich Curriculum Plan**

Construction

Unit 2: Developing Construction Projects (Controlled Assessment)



| **Year** **Construction**  | **Unit 2: Developing Construction Projects (Controlled Assessment)** |  |  |  |
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| **Lesson/Learning Sequence**  | **Intended Knowledge:***Students will know that…* | **Tiered Vocabulary**  | **Prior Knowledge:***In order to know this students, need to already know that…* | **Assessment**  |
| **Lesson:** **Interpreting Technical Information** | * Students will know how to Interpret technical sources of information including: symbols, conventions, terminology
* Students will know the different sources of information in a construction context: specifications, building regulations, drawings, design briefs
 | Conventions – a way in which something is done | * ***Students will need to know what is meant by the term 'interpret' (translate or explain the meaning of)***
* ***Students need to already know what a design brief and specification is***
 | Coursework Moderation |
| **Lesson:** **Planning a Sequence of Work** | * Students will be able to plan sequence of work to meet requirements of sources of information including: specifications, drawings, design briefs, building regulations and oral communication
* Students will know how to plan a sequence of work considering timescales, sequence and associated health and safety
 | Sequence – a structured order of events | * ***Students need to already know what is meant by the term 'sequence' (a particular order in which related things follow each other)***
* ***Students need to already have a basic understanding of completing a construction task in order (plan, prepare, complete task and close down procedure)***
 | Coursework Moderation |
| **Lesson:** **Preparing Resources for a Construction Task** | * Students will be able to identify resources to complete a construction task including tools, equipment, PPE and materials based on:

o characteristicso qualitieso sustainabilityo limitations | Limitations – a property of a material that could be deemed a characteristic flaw | * ***Students will already have a basic knowledge of construction material properties***
* ***Students will already be able to identify appropriate tools and PPE associated to a given construction task***
 | Coursework Moderation |
| **Lesson:** **Calculating Materials Required** | * Students will be able to calculate materials required to complete a construction task including:

o volumeo areao perimetero timeo ratio * Students will be able to calculate the cost of a construction task using full quotation processes and estimations
 | Estimate – an educated guessQuote – an accurate price apportioned to a job | * ***Students need to already know simple principles behind the mathematical equations stated***
* ***Students will know what is meant by the term 'estimate' (An approximated/educated guess for a numerical value)***
 | Coursework Moderation |
| **Lesson:** **Project Success Criteria** | * Students will know how to set success criteria for completion of construction tasks including the level of tolerance, timescales and quality of a project.
* Students will know what is meant by the term 'tolerance' in a construction context (an allowable amount of variation of a specified quantity)
 | Tolerance - an allowable amount of variation of a specified quantity | * ***Students will already know the basic expectations of quality assurance when working in a practical setting***
* ***Students will already have a basic understanding of setting success criteria to a given project***
 | Coursework Moderation |
| **Preparing for Construction Tasks** | * Students will know how to prepare to carry out an activity in the following disciplines: Carpentry, decorating and electrical installation
* Students will know the appropriate preparation methods in carpentry including: checking materials for defects, organising materials, measuring materials, marking out materials, cutting materials and setting out materials
* Students will know the appropriate preparation methods for decorating including: checking materials for defects, organising materials, measuring materials, marking out materials, mixing paste and setting out materials
* Students will know the appropriate preparation methods for electrical installation including: checking materials for defects, organising materials, measuring materials, and testing circuitry
 | Defects - a shortcoming, imperfection, or lack | * ***Students will have a basic understanding of workshop procedures***
* ***Students will have a good understanding of workshop health and safety***
 | Coursework Moderation |
| **Practical Construction Projects** | * Students will be able to use construction processes in completion of construction tasks
* Students will know how to apply techniques in completion
* of construction tasks including: Carpentry e.g. hang a door, make a frame, attach a skirting-board,
* create a timber stud wall. Decorating e.g. emulsion a surface, gloss a panel door, paper an
* internal corner or around a switch. Electrical e.g. lighting, add a new socket
* Students will know how to apply health and safety practices in completion of construction tasks
 |  | * ***Students need to already know who is responsible for providing equipment***
* ***Students need to already know basic examples of PPE (goggles, gloves, masks)***
 | Coursework Moderation |
| **Lesson:** **Evaluating a Construction Project** | * Students will know how to evaluate quality of construction tasks including: self-evaluation, against specified tolerances and against success criteria
* Students will learn how the evaluation process can lead to remedial works often referred to in the trade as a 'snagging list'.
 | Remedial works – remedy or modify damaged works | * ***Students will need to have a good understanding of self-evaluation and its purpose (to highlight strengths and develop weaknesses with a given project)***
* ***Students need to already know how to identify defects within a given construction task***
 | Coursework Moderation |