

Business  
Inspired  
Growth

York & North Yorkshire  
**LOCAL ENTERPRISE  
PARTNERSHIP**

THE **CAREERS &  
ENTERPRISE**  
COMPANY

Shape Your Future York and North Yorkshire

# Toolkit Handbook



North Yorkshire  
County Council



**nybep**



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## Introduction

Welcome to the Shape your future York & North Yorkshire Toolkit Handbook.

This Handbook will guide you on how to use the resources provided in the Toolkit.

### **Purpose:**

The Labour market has changed drastically over the past decade and mainly in recent times. This change will continue to take place with certain careers being more sought-after than others. Most of these careers are simply not known to students. Therefore, the toolkit has been designed for teachers, to deliver lessons on relevant Labour Market Information in the York & North Yorkshire region.

### **Toolkit:**

The materials within the toolkit will aid teachers in helping students, learn more about the local labour market. The toolkit contains lesson plans and materials for the following sectors:

1. Advanced manufacturing and engineering
2. Agriculture and Agritech
3. Business, Finance and Professional Services
4. Construction
5. Creative & Digital
6. Education
7. Energy. Bio renewable and the Circular Economy
8. Food Manufacturing
9. Health & Social Care
10. Hospitality and Tourism
11. IT & Telecoms
12. Retail
13. Scientific Research & Development
14. Transport and Distribution

These are the fourteen sectors which are growing in the York & North Yorkshire region. Individualised PowerPoint presentations, lesson plans, activities and lesson materials are provided for each sector.

Additional materials and plans have been created on the following:

15. Combined sector for KS3
16. Combined sector for KS4
17. Small Businesses and Self Employment
18. Pathways and choices
19. Employability
20. Transferrable skills

The 'Combined sector' is a lesson plan which encompasses all fourteen sectors. This gives an overview of all the thriving sectors in the region.

'Pathways and choices' give an outline of the different choices students have post-16 and post-18.

The 'Employability' lesson material discusses what employers are looking for and how to make a successful application.

'Transferrable skills' highlights the eight skills which are most important to employers.

The 'Small Businesses and Self-employment' lesson material explores the idea of students running their own business.

### Choosing the correct lesson:

All fourteen of the main sectors and the additional learning topics, can be categorised into subjects. An example of this is the Food Manufacturing sector, which will relate best to Food Technology. For simplicity, pages 3 & 4 of this handbook contain various subjects and the appropriate sectors which correspond to them.

Once a sector has been chosen, pages 5 - 13 contain all the different sector information.

The sector information includes the essential skills involved with the sector and the preparations that will be needed by teachers, prior to the lesson starting.

Essential skills in this context, refer to skills which will be needed by students to complete the lesson tasks. As mentioned previously, there are eight skills which are most valuable to employers. Therefore, each sector task incorporates a different set of skills.

This can be used by teachers who want to promote certain skills in the lesson. For example, if my objective is to get students to 'communicate', a lesson on Advanced manufacturing and Engineering or Energy would accomplish this. They are both lessons which incorporate group tasks.

## Subject to Sector relations

Below are the different subjects and the sectors best associated with them.

### **Art:**

- Creative and Digital

### **Business:**

- Advanced Manufacturing and Engineering
- Agriculture and Agritech
- Business, Finance, and Professional Services
- Hospitality and Tourism
- Retail
- Scientific Research and Development
- Transport and Distribution
- Employability (Additional topic)
- Small Businesses and Self Employment (Additional topic)

### **Design and Technology:**

- Advanced Manufacturing and Engineering
- Construction
- Creative and Digital
- Energy, Bio Renewables, and the circular economy

### **Engineering:**

- Energy, Bio Renewables, and the circular economy

### **English:**

- Advanced Manufacturing and Engineering
- Agriculture and Agritech
- Business, Finance, and Professional Services
- Creative and Digital
- Education
- Health & Social Care
- Hospitality and Tourism
- IT & Telecoms
- Retail
- Scientific Research and Development
- Transport and Distribution
- Employability (Additional topic)
- Small Businesses and Self Employment (Additional topic)

### **Food Technology:**

- Food Manufacturing

### **ICT:**

- Advanced Manufacturing and Engineering
- Agriculture and Agritech
- Business, Finance, and Professional Services
- Creative and Digital
- Hospitality and Tourism
- IT & Telecoms
- Retail
- Transport and Distribution

- Employability (Additional topic)
- Small Businesses and Self Employment (Additional topic)

**Languages:**

- Hospitality and Tourism
- Retail
- Transport and Distribution

**Maths:**

- Advanced Manufacturing and Engineering
- Agriculture and Agritech
- Business, Finance, and Professional Services
- Construction
- Creative and Digital
- Education
- Energy, Bio Renewables, and the circular economy
- Food Manufacturing
- Health & Social Care
- Hospitality and Tourism
- IT & Telecoms
- Retail
- Scientific Research and Development
- Transport and Distribution
- Employability (Additional topic)
- Small Businesses and Self Employment (Additional topic)

**Media:**

- Creative and Digital

**Sciences:**

- Advanced Manufacturing and Engineering
- Agriculture and Agritech
- Construction
- Education
- Energy, Bio Renewables, and the circular economy
- Food Manufacturing
- Health & Social Care
- Hospitality and Tourism
- IT & Telecoms
- Retail
- Transport and Distribution

**Social care:**

- Health & Social Care

**Additional Topics:**

The remainder four additional topics can be taught in any lesson.

- Combined Sector KS3/KS4
- Transferrable skills
- Pathways and Choices

## Sector information

### **Advanced Manufacturing and Engineering –**

Essential skills involved in this lesson:

COMMUNICATION

PROBLEM SOLVING

TEAMWORK

RESILIENCE

Preparations prior to lesson (Equipment/setup/knowledge):

- Device to access lesson plans and materials.
- Projector to display power point presentation and quiz.
- Devices for students to access the internet. \*Alternative available for no internet/laptop access. \*
- Basic knowledge about thermodynamics. Topics include: Heat transfer, 4 laws of thermodynamics, specific heat capacity, formulas with heat energy, exothermic and endothermic reactions, graphs of potential energy associated with them.
- Print out of specific sector feedback sheet.
- Print out of skills list (If required).
- Print out of quiz (If required).

### **Agriculture & Agritech –**

Essential skills involved in this lesson:

COMMUNICATION

ORGANISATION

TEAMWORK

Preparations prior to lesson (Equipment/setup/knowledge):

- Device to access lesson plans and materials.
- Projector to display power point presentation.
- Devices for students to access the internet. \*Alternative available for no internet/laptop access. \*
- Some knowledge into the three topics of discussion (vertical farming, farm automation and modern greenhouse farming).
- Print out of specific sector feedback sheet.
- Print out of skills list (If required).

**Business, finance and professional –**

Essential skills involved in this lesson:



Preparations prior to lesson (Equipment/setup/knowledge):

- Device to access lesson plans and materials.
- Projector to display power point presentation.
- Devices for students to access the internet and create power point presentations. \*Alternative available for no internet/laptop access. \*
- Print out of specific sector feedback sheet.
- Print out of skills list (If required).

**Construction –**

Essential skills involved in this lesson:



Preparations prior to lesson (Equipment/setup/knowledge):

- Device to access lesson plans, materials, and YouTube.
- Projector to display power point presentation.
- Devices for students to access the internet. \*Requires internet and laptop access. \*
- Some knowledge on resonance and structure change in solids due to heat.
- Print out of specific sector feedback sheet.
- Print out of skills list (If required).

**Creative and digital –**

Essential skills involved in this lesson:

ORGANISATION

CREATIVITY

SELF AWARENESS

Preparations prior to lesson (Equipment/setup/knowledge):

- Device to access lesson plans and materials.
- Projector to display power point presentation.
- Devices for students to access the internet. \*Requires internet and laptop access. \*
- Devices for students to use the design software.
- Knowledge into the design software students will be using.
- Print out of specific sector feedback sheet.
- Print out of skills list (If required).

**Education –**

Essential skills involved in this lesson:

COMMUNICATION

ORGANISATION

CREATIVITY

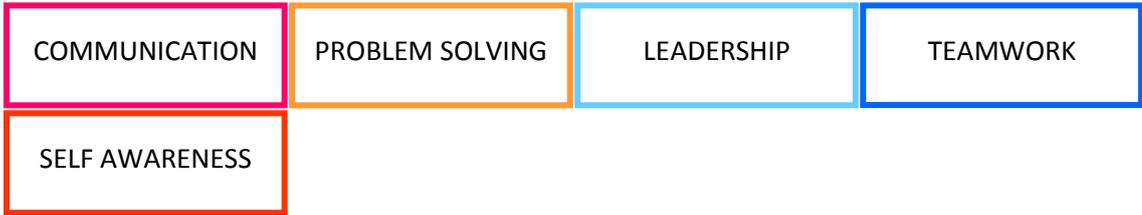
TEAMWORK

Preparations prior to lesson (Equipment/setup/knowledge):

- Device to access lesson plans and materials.
- Projector to display power point presentation.
- Devices for students to access the internet. \*Alternative available for no internet/laptop access. \*
- Devices for students to use 'word'.
- Print out of specific sector feedback sheet.
- Print out of skills list (If required).

**Energy, Bio renewables and The Circular economy –**

Essential skills involved in this lesson:

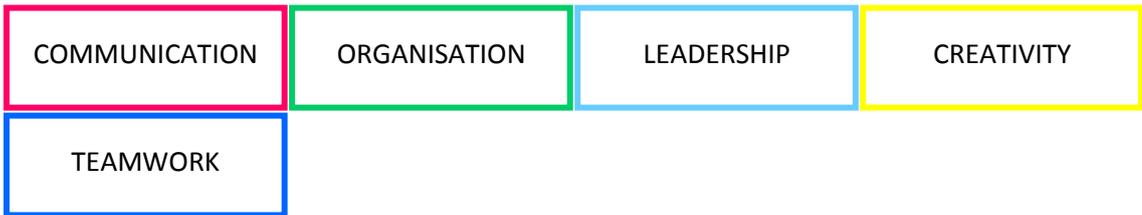


Preparations prior to lesson (Equipment/setup/knowledge):

- Device to access lesson plans and materials.
- Projector to display power point presentation.
- Devices for students to access the internet. \*Alternative available for no internet/laptop access. \*
- Knowledge of the different renewable and non- renewable energy sources.
- Print out of specific sector feedback sheet.
- Print out of skills list (If required).

**Food Manufacturing –**

Essential skills involved in this lesson:



Preparations prior to lesson (Equipment/setup/knowledge):

- Device to access lesson plans, materials, and YouTube.
- Projector to display power point presentation.
- Devices for students to access the internet. \*Requires internet and laptop access. \*
- Resources for students to create diagrams as groups.
- Print out of specific sector feedback sheet.
- Print out of skills list (If required).

**Health and Social Care –**

Essential skills involved in this lesson:

CREATIVITY

SELF AWARENESS

Preparations prior to lesson (Equipment/setup/knowledge):

- Device to access lesson plans and materials.
- Projector to display power point presentation.
- Devices for students to access the internet. \*Alternative available for no internet/laptop access. \*
- Print out of specific sector feedback sheet.
- Print out of skills list (If required).

**Hospitality and Tourism –**

Essential skills involved in this lesson:

CREATIVITY

SELF AWARENESS

Preparations prior to lesson (Equipment/setup/knowledge):

- Device to access lesson plans and materials.
- Projector to display power point presentation.
- Devices for students to access the internet. \*Alternative available for no internet/laptop access. \*
- Print out of specific sector feedback sheet.
- Print out of skills list (If required).

**IT and Telecoms –**

Essential skills involved in this lesson:

COMMUNICATION

CREATIVITY

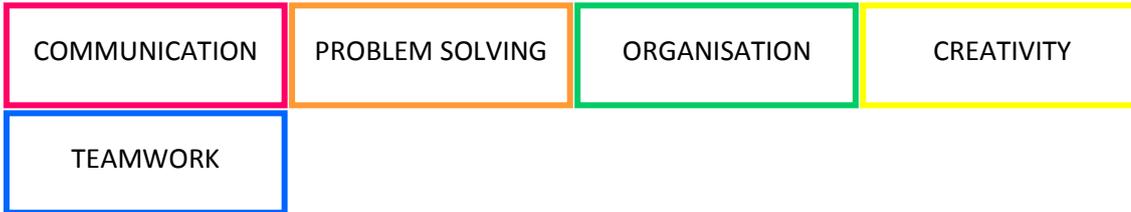
TEAMWORK

Preparations prior to lesson (Equipment/setup/knowledge):

- Device to access lesson plans and materials.
- Projector to display power point presentation.
- Devices for students to access the internet. \*Alternative available for no internet/laptop access. \*
- Knowledge of the IT Lifecycle.
- Print out of specific sector feedback sheet.
- Print out of skills list (If required).

**Retail –**

Essential skills involved in this lesson:



Preparations prior to lesson (Equipment/setup/knowledge):

- Device to access lesson plans and materials.
- Devices for students to access the internet and SYF Retail power point presentation. \*Alternative available for no internet/laptop access. \*
- Print out of specific sector feedback sheet.
- Print out of skills list (If required).

**Scientific Research and Development –**

Essential skills involved in this lesson:



Preparations prior to lesson (Equipment/setup/knowledge):

- Construction of lava lamp. Instructions are given in the lesson plan.
- Device to access lesson plans and materials.
- Projector to display power point presentation.
- Devices for students to access the internet. \*Requires internet and laptop access. \*
- Knowledge of some scientific principles related to liquids not mixing, emulsifiers, density, surface area effects on reaction.
- Print out of specific sector feedback sheet.
- Print out of skills list (If required).

**Transport and Distributions –**

Essential skills involved in this lesson:

COMMUNICATION

CREATIVITY

TEAMWORK

Preparations prior to lesson (Equipment/setup/knowledge):

- Construction of lava lamp. Instructions are given in the lesson plan.
- Device to access lesson plans and materials.
- Projector to display power point presentation.
- Devices for students to access the internet. \*Requires internet and laptop access. \*
- Knowledge of some scientific principles related to liquids not mixing, emulsifiers, density, surface area effects on reaction.
- Print out of specific sector feedback sheet.
- Print out of skills list (If required).

**Combined Sector KS3 –**

Essential skills involved in this lesson:

COMMUNICATION

TEAMWORK

SELF AWARENESS

Preparations prior to lesson (Equipment/setup/knowledge):

- Does NOT require students to have internet access/devices.
- Device to access lesson plans and materials.
- Projector to display power point presentation.
- Print out of Sector questions (If required).

**Combined Sector KS4 –**

Essential skills involved in this lesson:

COMMUNICATION

SELF AWARENESS

Preparations prior to lesson (Equipment/setup/knowledge):

- Device to access lesson plans and materials.
- Projector to display power point presentation.
- Devices for students to access the internet. \*Alternative available for no internet/laptop access. \*
- Print out of Skills list.
- Print out of review sheet.

**Employability –**

Essential skills involved in this lesson:



Preparations prior to lesson (Equipment/setup/knowledge):

- Does NOT require students to have internet access/devices.
- Device to access lesson plans and materials.
- Projector to display power point presentation.

**Pathways and Choices –**

Essential skills involved in this lesson:



Preparations prior to lesson (Equipment/setup/knowledge):

- Device to access lesson plans and materials.
- Projector to display power point presentation.
- Devices for students to access the internet and access the SYF Pathways and choices PowerPoint. \*Requires internet and laptop access. \*

**Small Businesses and Self Employment –**

Essential skills involved in this lesson:



Preparations prior to lesson (Equipment/setup/knowledge):

- Device to access lesson plans and materials.
- Projector to display power point presentation.
- Devices for students to access the internet. \*Alternative available for no internet/laptop access. \*
- Print out of Mini business plan template.
- Print out of specific sector feedback sheet.

**Transferrable skills –**

Essential skills involved in this lesson:

COMMUNICATION

CREATIVITY

TEAMWORK

SELF AWARENESS

Preparations prior to lesson (Equipment/setup/knowledge):

- Does NOT require students to have internet access/devices.
- Device to access lesson plans and materials.
- Projector to display power point presentation.
- Print out of jobs list.
- Print out of Skill self-assessment.