

## Skills Sorter Matrix

Central to the Ladders pilot scheme has been the identification of the skills and qualities required for successful progression into and through higher education in broad vocational areas. A Construction group, with representatives invited from FE, HE and schools met to discuss the issue of skills and pathways in Construction. The outcome of this group discussion is this skills matrix.

This list is not definitive. It is designed to help you prompt and support students in the activities. As a summary of the whole, broad vocational area of Construction it will provide a useful starting point but students should be expected to refine their list according to their own more specific, career area. For example they will then be able to include more specific qualifications, skills and experiences.

There are literally hundreds of courses directly relating to Construction available at university. In addition, a large proportion of students will enter Construction careers with an academic degree.

The range of careers open to students who wish to work in Construction is vast. Unit C1 provides a framework for students to show their understanding of the skills they will need and helps them set some targets for their own progression.

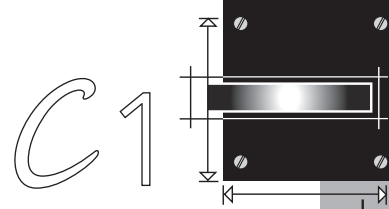
As a general rule students under estimate the value of the personal, the interpersonal and the transferable. Yet these are the building blocks on which the specific vocational skills are developed. Students need to be reminded of the importance of their whole 'portfolio of progression skills' and to be encouraged to continue to consolidate these skills in order that they make a robust progression into and through higher education.

### Interpersonal skills

- Can take a variety of roles in a team
- Can work as a team leader
- Can evaluate the role of peers
- Can give feedback
- Can motivate others
- Can speak to a variety of audiences
- Can make a presentation to a small group
- Is socially confident
- Can argue the other point of view

### Personal skills

- Is able to make independent judgements
- Can work in a variety of situations or environments
- Can make and follow through on decisions
- Thinks of a range of solutions
- Is highly organised
- Is flexible and able to adapt
- Has developed time management strategies
- Is an active listener
- Has good negotiating skills
- Has an excellent attendance record
- Has an excellent punctuality record
- Is enterprising and persuasive
- Is able to ask for guidance on specific issues
- Is assertive
- Can self-evaluate
- Is a Creative thinker



## Specific technical and vocational skills, qualifications and experiences

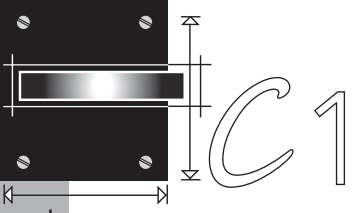
- Is commercially aware e.g. of factors influencing the property business at global, national and local Levels
- Is mechanically minded and enjoys Physics and Maths
- Can demonstrate model-making skills
- Has diagrammatic skills of drawing and interpreting
- Can demonstrate 3D conceptual skills
- Is competent in freehand drawing
- Has achieved GCSE Art or Design grade C or GNVQ or BTEC first in Art
- Has visited a building site
- Has developed a portfolio showing interest in the built environment
- Has sought specific work experience
- Has a clear career objective
- Knows what specific jobs and professions involve and understands the progression pathways including work-based where appropriate.
- Demonstrates an understanding of the role of professional qualifications in this field.
- Can talk about and show portfolio evidence of site visits or work experience in a relevant field
- Can show awareness of some construction projects in their local area and the issues involved in them.
- Shows enthusiasm and awareness of the range of issues and breadth of construction such as health and safety, aesthetics, historical influences and market demand.
- Is agile and safety-conscious and has a head for heights!

## Transferable skills, qualifications and experiences

- Has achieved GCSE Maths C
- Has achieved GCSE English C
- In written and oral work has moved beyond the descriptive to the analytical
- Can break down a question into smaller questions
- Has completed a period of generic work experience
- Has achieved two or three A Levels or a BTEC National Diploma
- Can use Internet selectively to carry out research
- Is familiar with referencing skills
- Is able to use a library for research
- Has researched and evaluated a range of career and course options
- Can apply theory to the real world
- Is ICT literate – able to use spreadsheets and WP packages

For the purposes of unit C1 and C2 students are encouraged to think more specifically than just 'Construction' They should be encouraged to focus on one of the following broad career areas

- |                      |                       |                    |
|----------------------|-----------------------|--------------------|
| Property development | Facilities Management | Engineering        |
| Surveying            | Architecture          | Project Management |
| Specialist Trades    |                       |                    |



### Introduction

Central to the Ladders pilot scheme has been the identification of the skills and qualities required for successful progression into and through higher education in broad vocational areas. A Construction group, with representatives invited from FE, HE and schools met to discuss the issue of skills and pathways in Construction. The outcome of this group discussion is the skills matrix at the beginning of this booklet. The matrix forms essential background to this unit.

### Who is this unit for?

In the pilot, the 'skills sorter' activity was used successfully across the 13 – 19 age range.

- For younger pupils it was used in conjunction with unit 3, the Career Interests Game, from the original ladders pack to get pupils looking at the breadth of career opportunities within the broad vocational area of Construction.
- We ran a session combining Unit C1 with Unit C2 as part of a three-day workshop called 'Create a house'. This gave the year 12 students an opportunity for personal target setting, career and HE awareness.
- In the post-16 pilot, 'skills sorter' was used in conjunction with unit 6 from the original Ladders pack as part of an initial UCAS preparation programme in the summer term of Year 12.

**NB With the post-16 groups the emphasis was firmly on getting students to identify skills for entry to higher education in their vocational area. With younger pupils the aim was more generally to identify skills for entry to that vocational area.**

### Materials and organisation needed

- The teacher will need a copy of the skills matrix for Construction (Pages 2 and 3)

#### PER INDIVIDUAL

- Copies of the three activity sheets, which make up Unit C1 (Pages 6, 7 and 8)
- Green, red and orange or yellow coloured pencils.

#### PER GROUP

- For feedback each group needs either OHP acetates or four strips of paper – each a different colour.
- A separate table at which to discuss and write
- It is essential for pre-16 groups and desirable for post-16 groups that they are supported by a student ambassador, employer or teacher.

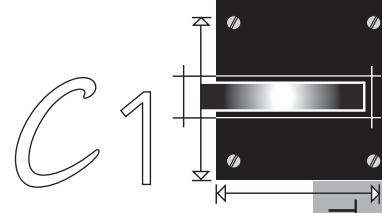
### Activity one: Speech Bubbles (10 minutes +)

The aim of this first activity is to get students familiar with the broad range of careers within the world of Construction. These broad career titles are used for both 'Skills Sorter' (Unit C1) and 'Pathway planner' (Unit C2).

Activity one can be used as an icebreaker with teams racing to match the career titles with their descriptions or it can be completed in less than 10 minutes as a simple paper-based exercise, working in pairs.

It is important to link ahead to the next activity by discussing the similarities and differences between the career areas in terms of

- The main skills required
- The type of working environment
- Does it mainly require individual or team work?
- Is it about people or products or systems?
- Which other career areas overlap?



## Answers

Property Development	I work as a consultant advising people and companies on the best...
Facilities Management	I manage the estate of buildings, infrastructure and services for my...
Engineering	There are many different branches of this job including civil ...
Surveying	I am a cost consultant. I keep a close eye on the cost of the project...
Architecture	I design houses, shops, offices and hotels. I prepare the drawings...
Project Management	I take overall responsibility for the planning, management ...
Specialist trades	These include plumber, heating engineer, electrician, joiner...

## Activity two: Identifying skills (45 minutes)

In the pilots we ran this activity successfully with groups from 10 to 80 pupils. We divided them up into the career areas shown at the top of the sheets. A student ambassador, a member of staff or a visiting employer supported each group.

- a) Students tick the box for the appropriate Level of their progression ladder.
- b) Students choose one box at the top of the page 'Skills Sorter activity' to show which specific career area they are most interested in. They should then work in a group with others who share the same interest. It may be necessary to generate more than one group for popular career areas. Each group needs to be supported and this is where visiting student ambassadors are ideal, especially if they are drawn from HE courses in the field of construction or have an interest in progressing into construction from a non-construction related course.

The teacher needs to give a brief presentation or facilitate a group discussion to explain and give examples of the four categories of skills that constitute the skills sorter activity.

- c) Students discuss and write down the most important skills needed for progression into a higher education course in their career area. It is useful if they record this on the sheet provided so that they have a personal record to keep.

Ask students to discuss and agree on the top skill or quality in each of the four categories.

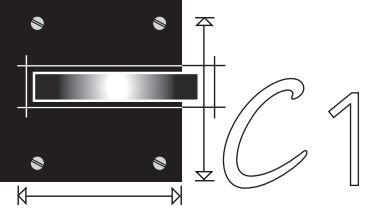
Allow up to 30 minutes for this activity; older students will take longer.

### FOR FEEDBACK EITHER

- Each group presents back on an acetate copy of the Skills Sorter activity sheet.
- Each group adds to a large grid on a central display using coloured strips of paper. E.g. Personal Skills on yellow paper, Interpersonal Skills on blue paper etc. This creates a useful visual display and reinforces the idea that more than half if not all of the skills required are common to all areas of Construction.

## Activity three: Traffic light colour coding my skills (15 minutes)

Pupils compare the list of ideal skills against their own portfolio of skills and achievements. They colour code each of the listed skills in terms of how 'progression ready' they are. These sheets should be kept and reviewed on a regular basis and form a useful basis for some specific target setting. (See reference card number 14 for SMART Targets)



## Skills Sorter Activity one:

Match the people in the speech bubbles to their career areas shown below

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Property Development | <input type="checkbox"/> Facilities Management | <input type="checkbox"/> Engineering        |
| <input type="checkbox"/> Surveying            | <input type="checkbox"/> Architecture          | <input type="checkbox"/> Project Management |
| <input type="checkbox"/> Specialist Trades    |  |   |

I design houses, shops, offices and hotels. I prepare the drawings and liaise with the clients, the engineers, surveyors and planners. Then I usually hand over to a separate person to manage the project through to completion when I get to see my design as a real structure against the skyline.

I am a cost consultant. I keep a close eye on the cost of the project. My professional qualifications is RICS. Other friends from my university course went into building control, building conservation and valuation work.

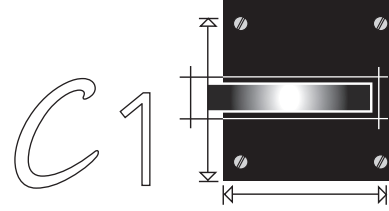
There are many different branches of this job including civil, geospatial, building services and structural. We all design solutions for construction projects. Our recent commission is for a heating and air conditioning system for the Olympic stadia for 2012.

I take overall responsibility for the planning, management and control of the construction project. I work to ensure that our team and all the sub contractors on site meet the demands of the client. Good communication, negotiating skills and the ability to think of your feet are essential

This includes plumber, heating engineer, electrician, joiner, carpenter, plasterer and roofer to name just a few of the trades that are needed in the construction business.

I manage the estate of buildings, infrastructure and services for my company. My aim is to provide a safe and efficient working environment and procure goods and services at the best value for my employer. I usually take over a building as it is nearing completion to make sure that all the services and guarantees are in place.

I work as a consultant advising people and companies on the best investments in property for their area and within their budget. This includes everything from doing up a small house to large scale, multi-million pound development schemes. Depending on the nature and size of the project, I need to deal with planners, financiers, architects, surveyors, pressure groups, community organisations, the media and local governments.



## Activity two: Identifying skills

a) Which Level of your progression ladder are you going to focus on for this activity?

Tick one box below

To get into and succeed at university/ Level 4

To get into and succeed at sixth form, FE college or apprenticeship schemes at Level 3

To get into and succeed at sixth form, FE college or apprenticeship schemes at Level 2

b) On the skills sorter activity sheet tick one box at the top of the page to show which specific career area you are most interested in. Working in a team with other students in your class who share the same interest complete the remaining activities on this sheet.

c) Discuss and write down the most important skills needed for progression into your career area. Use the information below to help you

Personal qualities and skills

are the qualities and skills that you have developed in yourself. You demonstrate these attributes on a day to day basis. An example of a personal skill is being well organised.

Interpersonal skills

are how you behave or work with other people. An example is being able to lead and motivate a team of people

Transferable skills

includes qualifications and experiences that are useful whatever career area you go into. Driving a car or speaking a foreign language are good examples.

Specific skills

includes the qualifications and experiences needed for the actual career area you are interested in. Which particular GCSEs will you need? Do you need to do work experience in this area?



## Activity three: Traffic light colour coding my skills

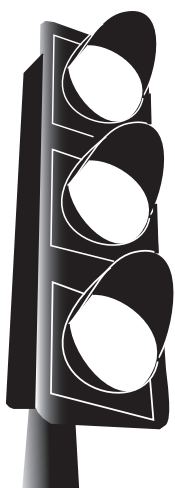
How do you compare with the list you have drawn up on the activity sheet?

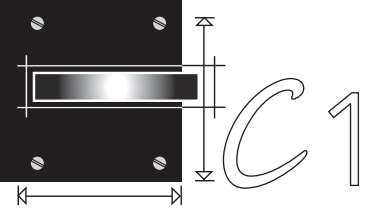
In the circles next to each of the skills on your lists use green, orange or red shading to show how much progress you have made in terms of developing your skills.

**RED = I NEED GUIDANCE TO HELP ME SET TARGETS SO THAT I CAN ACHIEVE THIS SKILL, QUALIFICATION OR EXPERIENCE.**

**ORANGE = I AM WORKING ON DEVELOPING THIS SKILL OR QUALIFICATION OR EXPERIENCE. I HAVE SET TARGETS TO HELP ME MAKE FURTHER PROGRESS.**

**GREEN = I AM ALREADY GOOD AT THIS. I AM PROUD TO BE ABLE TO DO IT. I CAN GIVE EVIDENCE OF WHERE AND HOW I HAVE USED THIS SKILL, QUALIFICATION OR EXPERIENCE.**





# Construction : Skills Sorter

- Property Development
- Surveying
- Specialist Trades
- Facilities Management
- Architecture
- Engineering
- Project Management

**Personal Qualities and Skills**

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**Interpersonal Skills**

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**Transferable skills, qualifications and experiences**

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**Specific Technical and Vocational Skills, qualifications and experiences**

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