





# SKILLS CONFIDENCE BUILD YOUR FUTURE KNOWLEDGE ENVIRONMENT

**Exploring careers within the Built Environment** 







#### **GUIDANCE**

#### INNOVATION IN CONSTRUCTION

Construction Scotland Innovation Centre Activity Pack Pathways to Construction Conversation Career Insight Industry Insight

### TRADES & MODERN APPRENTICESHIPS IN CONSTRUCTION

Apprentices in Construction Conversation Career Insight Industry Insight

#### WOMEN IN CONSTRUCTION

Women in Construction Conversation Career Insight

#### PROFESSIONALS IN CONSTRUCTION

Professionals in Construction Conversation Career Insight Industry Insight

#### COLLABORATION IN CONSTRUCTION

Scottish Futures Trust: Creating Great Places College and Construction Conversation Career Insight Industry Insight

CLASSROOM ACTIVITIES
IN-SCHOOL FRINGE EVENTS
COLLABORATION & THANKS











#### **GUIDANCE**

In collaboration with our partners within the Construction Industry, DYW have created 'Build Your Future', exploring careers within the Built Environment.

The Build Your Future programme is split into five different themes. This should make it easier to digest, allow educators to utilise the resources in relevant subjects, or for young people and parents/carers to follow at home. With the focus being on the people that underpin the industry, young people can learn about how the subjects they are studying relate to the world of work and their future skills development.

We have filmed five conversations with a variety of our industry partners, including apprentices, college students and professionals, amongst them, some very successful women, to provide a broad understanding of the sector, the opportunities within it, entry pathways and real insight of what it is like to work in this exciting industry. Discussion starters and activities to use with these films can be found in the Build Your Future Toolkit.

To further support the programme we have sourced industry and career insight from multiple partners, all of which can be linked to from within this document.

Educators and parents/carers can choose to work through all of the resources in this pack, insert them into lessons, or support their young people to learn about the industry in bite-sized chunks. Within the 'Toolkit' above and the 'Resources' page of Build Your Future, you can find guidance for using the exclusive films and Career Profiles Pack created for Build Your Future as well as further links to explore, and suggested complimentary activities and resources.

We have also included guidance for educators on how this suite of resources can be used locally within schools to support a programme of fringe activities and events to provide young people, considering a career in Construction, with a more meaningful and interactive way of using these resources and engaging with your local industry partners.

On each page click this icon to access the corresponding virtual resources on the <u>DYWScot</u> website. This one takes you to the Build Your Future landing page.

<sup>\*</sup>Build Your Future was being developed as a week long project which would be delivered across schools complemented by partner delivered fringe activities, you can find out more in the Fringe Activities section of this guide.

## WHAT IS INNOVATION? HOW DO YOU BECOME AN INNOVATOR? HOW DOES INNOVATION FIT WITHIN THE CONSTRUCTION INDUSTRY?

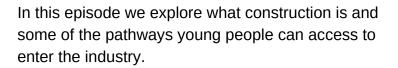
WITHIN THIS SECTION OUR PARTNERS HELP YOU EXPLORE THESE OUESTIONS.

#### CONSTRUCTION SCOTLAND INNOVATION CENTRE

CSIC believes that we can support students' futures by highlighting opportunities for them in the built environment.

The questions above are just some of the questions addressed by Construction Scotland Innovation Centre in this insightful activity pack designed exclusively for Build Your Future.

The aim of this activity pack is to provide teachers with short lesson inserts themed around the built environment and innovation. Each interactive activity will give the students the opportunity to learn more about the built environment, specifically the construction industry and hopefully offer an insight into jobs they may not have thought of or allow them to discover new skills and interests.



With an emphasis on desirable skills development, we also gain insight from individuals currently working at CITB (Construction Industry Training Board), Forth Valley College, Morrison Construction and Skills Development Scotland.



**BUILD YOUR** 

**FUTURE** 

Discussion starters and activities to use with these films can be found in Classroom Activities towards the end of this toolkit.

#### CAREER INSIGHT



A Careers Profile Pack has been provided to support young people to explore different innovative roles within the industry. Suggestions of how to use these profiles are included within the pack.

#### INDUSTRY INSIGHT

The industry insight films within this section explore examples of exciting and innovative projects from our industry partners within Scotland.



# HAVE YOU EVER CONSIDERED EXPLORING A TRADE WITHIN THE BUILT ENVIRONMENT WHEN YOU LEAVE SCHOOL, OR WONDERED WHAT MODERN APPRENTICESHIPS ARE AVAILABLE?

Hear from individuals within the industry as well as those who have, or are, currently studying towards a Modern Apprenticeship in a variety of trades.

Build Your Future supports Scottish Apprenticeship Week by providing insight from individuals who have experience of Foundation, Modern and Graduate Apprenticeships at a variety of stages of their training journey.

Modern Apprentices share experiences of their journey so far in this episode. Explore what influenced their decisions, the difference between school and employment, and why this way of training is so beneficial.

In this episode we hear from a Procurement Apprentice, Civil Engineer, Roofer and Mood Machinist. Thanks to Balfour Beatty, Forth Valley College, Robertson Group, NRFC and Procast.



Discussion starters and activities to use with these films can be found in Classroom Activities towards the end of this toolkit.

#### CAREER INSIGHT



A Careers Profile Pack has been provided to support young people to explore different roles within Trades and apprenticeships. Suggestions of how to use these profiles are included within the pack.

From Bricklaying to Plant Machinery, we have also identified some inspiring career insight from our partners for young people to explore.



#### INDUSTRY INSIGHT

The films within this section show further insight from trades and specialist skills based careers.

Historically, there is an unconscious bias of the Construction Industry amongst young people as being male-dominated. With few women choosing to apply to join the industry every year, this means there is approximately 2% of Modern Apprenticeships within Construction being started by women.

Threaded throughout Build Your Future, we have sought to provide exposure to a range of skills and roles that young women may have never considered. In order to address and increase gender diversity in the industry, in this section, we shine the spotlight!

In this conversation we are joined by five incredibly different women, working within the Built Environment, for a discussion on career pathways, skills development and what it's really like being a woman in an industry frequently perceived as being a 'man's world'.

Anyone thinking of joining the sector, or currently within it, will likely gain something from this episode.

Thanks to Forth Valley College, Historic Environment Scotland, Scottish Lime Centre Trust, SPAB, and Stirling City Heritage Trust.



Discussion starters and activities to use with these films can be found in Classroom Activities towards the end of this toolkit.

#### CAREER INSIGHT



A Careers Profile Pack has been provided to support young people to explore different roles within the Built Environment specifically highlighting successful women in the industry. Suggestions of how to use these profiles are included within the pack.

Our industry partners have highlighted some of the career insight that highly skilled women within their organisations have provided. Here, we highlight some of the great activity and interesting insight that takes place to support encouraging women into the industry.













#### THE UNSEEN PROFESSIONALS: BEHIND THE SCENES OF THE CONSTRUCTION SITE

Professional roles within the Built Environment and Construction often go unseen by the public and are understood to require academic or vocational training. This can include studying at University or via a Graduate Apprenticeship programme.

Here individuals, who have followed this type of career pathway, share insight from their journeys into a range of careers, the skills they have developed and their advice for succeeding.

Professionals from within our partner organisations who have followed a Graduate Apprenticeship or University route talk about their careers to date. From Architecture to Quantity Surveying, their career insight is a fascinating look at the different routes people choose to explore.

Thanks so CCG Scotland, Morrison Construction and Strathclyde University.



Discussion starters and activities to use with these films can be found in Classroom Activities towards the end of this toolkit.

#### CAREER INSIGHT

A Careers Profile Pack has been provided to support young people to explore different roles within the Built Environment specifically highlighting the professionals behind the scenes in the industry. Suggestions of how to use these profiles are included within each pack.

With a spotlight on Building Standards, Graduate
Apprentices at Heriot Watt and from HR to Site
Management, we have also identified some inspiring career insight from our partners for young people to explore.







#### INDUSTRY INSIGHT

This section provides further insight into the roles, skills and pathways of a professional in the Construction Industry.

#### TEAM WORK MAKES THE DREAM WORK

Throughout Build Your Future, we have shared insight focusing on innovation, trades and construction professionals, showing the variety of careers available within the Built Environment. Now we demonstrate some of the ways in which all of these roles within the industry come together, further supported by insight from our industry partners.

#### SCOTTISH FUTURES TRUST

'Building your Future, Creating Great Places' focuses on the outcomes created by the construction sector. The intention being to enable young people to see that whilst a career within the sector will, in itself, be fulfilling, they are actually contributing to something which is much greater – creating great places for the people of Scotland.



The video, which is introduced by David MacDonald, Director of the National Hub Programme, comprises six projects each of which focuses upon a different sector of the construction industry, explored by the individuals who worked on them and is supported by guidance notes for educators and parents which you can access <a href="https://example.com/here-to-sector-new



In this episode, we talk to three students from Forth Valley College currently studying on a full-time course leading them towards careers in the Built Environment.

They share their personal insight and advice on skills development that will help you to succeed at college and discuss some challenging subjects, such as coping with disappointment and homelessness.

Discussion starters and activities to use with these films can be found in Classroom Activities towards the end of this toolkit.



A Careers Profile Pack has been provided to support young people to explore different roles within the Built Environment specifically highlighting the professionals behind the scenes in the industry. Suggestions of how to use these profiles are included within the pack.



#### INDUSTRY INSIGHT

From sustainability to walking buildings, the supporting career and industry insight within this section provides a further look at the roles, skills and pathways of individuals working within construction. There is also a spotlight on the Institution of Civil Engineers alongside some more interesting concepts in the built environment.



#### **CONVERSATION FILMS ACTIVITIES**

#### **DISCUSSION STARTERS & LEARNING ACTIVITIES**

The conversations filmed for Build your Future were done so to provide interesting career and industry insight from the unique perspectives of individuals currently working with our industry partners. They can be watched in isolation but would be much better followed up with class discussion and/or activities. Below are examples of the types of questions you could use to kick off the conversation in class and some activities you could set your students.



- What is more important, qualities or qualifications?
- Why would people be put off doing an apprenticeship?
- What are some of the stereotypes associated with construction?
- Does your career pathway have to be fixed?



Choose one of the careers you have heard about and create a job profile.



Pose a question raised in one of the films, for example: Infrastructure, what is it and what impact does it have on a community?

Present your findings.



Discuss in groups:

How can we improve diversity in construction?

Feedback to the



Debate: Gender stereotypes do not exist in construction and engineering.

#### **CAREER PROFILE ACTIVITIES**

These tasks are suggestions of activities you can insert into the classroom using the Build Your Future Careers Profile Pack.



- Task students to select a profile that they are interested in and identify the skills that the individual uses within their role.
- Encourage students to choose a profile that they have not considered as a career path, ask them to identify something that surprises them about the information and feedback to the class.
- Ask students to identify some of the advice these individuals share within their profiles, encourage them to consider how they would use the advice to develop themselves in future.
- Students should imagine that they have already begun to advance in their career and they have been asked to complete their own profile. Encourage them to think creatively about what they would like to have achieved and the skills they wish to develop. Task them to write their own personal profile.
- Ask students to select the individual they identify with most from the profiles. Ask them to feedback why they feel drawn to this individual's profile. Is it because they are interested in similar subjects and pathways or is it something to do with the personality and characteristics portrayed through their profile?

Build Your Future is flexible. The programme has been developed by a core group of industry partners from within the Built Environment in Forth Valley, all invested in raising awareness of the opportunities that exist by engaging with schools in the local area.

The intention was to develop a programme that would contextualise the curriculum and enable partners providing school engagement activities, to provide a more meaningful experience, where follow-up with pupils would be easier and more streamlined.

In Forth Valley, Build Your Future was going to be delivered over a 6 week period (before level 4 lockdown), complemented by the following interactive fringe activities for various ages and stages:

- Traditional Building Skills Demonstrations
- Drones Surveys on school grounds
- Repurposing our Built Heritage (pilot surveying/repurposing) project run over 6 weeks)
- · Town Centre Heritage Trails













THE BUILD YOUR FUTURE THEMES CAN BE USED OVER CONSECUTIVE FIVE DAYS OR SPREAD OUT OVER FIVE WEEKS



When appropriate, there are a number of ways you can compliment Build Your Future with interactive partner engagements for your pupils.



Approach the industry partners already engaged with your school to see what they might be able to support. You can liaise with your school's DYW School Coordinator or DYW Lead to support you with this.



Explore E-DYW resources, including Marketplace and Founder's For Schools, to see what engagement activities may already be on offer in your area



Contact your local DYW Regional Group for more support with partner engagement for your school.



There are many ways that industry partners engage within the community, some desktop research may unearth something amazing and you can also have a look at some of the resources we have included in our 'Resources' section using the links on the next page.









#### **OK... SO WHAT NEXT?**

There are so many amazing resources and career insights out there related to the Built Environment and Construction Industry that it can be overwhelming.

On this page, we have tried to signpost to our key partners to make it as easy as possible for you to get the advice and guidance you need when considering your next steps. Whether they be school subject choices, modes of study, training, or employment, you will find the information to support you.

Click left to explore resources that support Build Your Future as well as further insight from the Built Environment and Construction Industry that is linked to routes and pathways and skills development.

#### **EVALUATION**

We are very keen to hear the thoughts of teachers, parents and young people on Build Your Future.

We would encourage Educators, School Coordinators and DYW Leads to collect feedback which can be used locally within school and your local authority and shared regionally with your DYW Regional Groups.

Click on the icons below for example of evaluation forms that you can use as a guide to adapt for your setting.



Any feedback received will be used to inform the following:

- Relevant Teacher CLPL opportunities
- Identifying areas of strength within Local Authorities
- Provide support where areas for development is identified
- Further development of Build Your Future and other programmes with industry partners

Build Your Future has been developed by a core group of industry partners from within the Built Environment in Forth Valley, all invested in raising awareness of the opportunities that exist and promoting gender diversity within the sector.

We extend our thanks to the partners below who have all contributed to bringing this resource together.

Architecture & Design Scotland
Ailtearachd is Dealbhadh na h-Alba



**Balfour Beatty** 





































Relationships that deliver











































