

English for Construction

2

Vocational English
Teacher's Book



Lizzie Wright



ALWAYS LEARNING

PEARSON

Pearson Education Limited

Edinburgh Gate
Harlow
Essex CM20 2JE
England
and Associated Companies throughout
the world.

www.pearsonlongman.com

© Pearson Education Limited 2012

The right of Evan Frendo to be identified as author of this Work has been asserted by him in accordance with the Copyright, Designs and Patents Act 1988.

All rights reserved; no part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without the prior written permission of the Publishers.

Photocopying: The Publisher grants permission for the photocopying of those pages marked 'photocopiable' according to the following conditions. Individual purchasers may make copies for their own use or for use by the classes they teach. Institutional purchasers may make copies for use by their staff and students, but this permission does not extend to additional institutions or branches. Under no circumstances may any part of this book be photocopied for resale.

First published 2012

ISBN: 978-1-4082-5209-3

Set in Palatino

The publisher would like to thank the following for their kind permission to reproduce their photographs:

Cover images: **Alamy Images**: Paul Bradbury c, Peter Alvey r; **Corbis**: Alan Schein Photography; background; **Superstock**: age footstock l

Contents

Unit 1 Teamwork page 3

Unit 2 Design page 11

Unit 3 Equipment page 19

Unit 4 Materials page 27

Unit 5 Processes page 35

Unit 6 Projects page 43

Unit 7 Documentation page 51

Unit 8 Health and safety page 59

Briefing

This unit introduces jobs and roles within an organisation. It covers the roles and responsibilities of different departments, explains how an organisation works and presents how to interpret and write a CV. In the last section, the various roles of people involved in an international construction project are discussed.

Roles and responsibilities

Workers in the construction industry can be self-employed, or work in small, medium-sized or large organisations. The larger the organisation, the more specialised the roles and responsibilities will be.

This section introduces different jobs within the industry. Students practise talking about their own responsibilities. The difference between the present simple and present continuous is explained, as well as the use of adverbs of frequency with the present simple. The section also introduces key vocabulary: **concrete** (a hard, strong construction material consisting of sand, conglomerate gravel, pebbles, broken stone, etc.), **master electrician** (a highly qualified skilled electrician who usually works as a supervisor or owns their own contracting business), **labourer** (a person whose job involves heavy physical work), **cement** (a grey powder made from lime and clay, used in building concrete), **cement mixer** (a machine into which you put cement, sand and water to make concrete), **site manager** or **construction manager** (the person in charge of the day-to-day running of a construction site), **generator** (a machine that produces electricity), **general contractor** (the main contractor on a construction project, responsible for fulfilling the conditions of a contract and usually employing **subcontractors** (people or companies paid to do part of the work of another person or company) to do some or most of the work), **consortium** (several companies working together on a particular project), **construction schedule** (vital for any project as it helps companies to **co-ordinate** and to **stay within budget**).

Structure of an organisation

This section focuses on understanding an organisation chart. Vocabulary includes **departments** such as **Operations**, **Business Development**, **Engineering**, which includes

Structural Engineering (the planning and building of large structures such as bridges), **Mechanical Engineering** (the design and building of machines and tools) and **Electrical Engineering** (the design and building of electrical equipment), **Materials and Plant**, **Accounting**, **Administration** and **Legal**. Vocabulary connected with describing structures is also covered: **divided**, **external**, **report to**, **section**. The listening section introduces common collocations such as **deal with**, **divide into**, **liaise with**, **look after**, **make sure**, **be responsible for**.

Jobs and experience

This section introduces more jobs within the industry: **accountant**, **carpenter**, **civil engineer**, **land surveyor** and **plumber**. *Yes/No* questions and *wh-* questions are covered. The section also focuses on reading and preparing a CV using the Europass CV structure. Europass provide five different types of document with a standard structure, which can be understood and used throughout Europe and which make it possible to fully present skills and qualifications in a clear, transparent and comprehensive way.

Focus on a project: International Finance Centre (IFC) Seoul, Korea

This section focuses on the IFC Seoul, Korea, currently under construction in the Yeouido Island district of Seoul, Korea. Various facts about the organisations involved in the project are presented. Vocabulary includes **architect**, **excavation**, **elevator manufacturer** (a company that makes **elevators** (AmE) or **lifts** (BrE)).

Preparing for this unit

Do the Entry test. For the Listening part of the test, use track 7, up to *There are a lot of options: stone, poured concrete, precast concrete, tiles, ...*

Further reading

Use the following keywords to search the internet for websites which give more in-depth information about the topics covered in this unit: types of job in construction; Europass CV; IFC Seoul, Korea; construction companies; Balfour Beatty; Vinci; Amey UK; Costain.

Teacher's notes

Warm-up

Before you look at 1, introduce yourself (*Good morning/afternoon/evening. My name's .../I'm ... and I'm a teacher/trainer/etc.*). Then ask students to introduce themselves. If they have problems, ask questions to help them: *What's your name? What's your job?* Check they understand the jobs mentioned by all students.

Roles and responsibilities

Speaking

- 1 Ask students to look at the illustration. Say: *Look at E. What's his job?* and elicit *He's a ...*. Then ask: *What's he doing?* and help with vocabulary if necessary. You can practise short answers by asking *Is E a driver?* to elicit *No, he isn't. He's a painter.* Ask the same question pointing to G and elicit *Yes, he is.* You can then ask a student to do the same and choose someone in the class to respond. Repeat with the rest of the class until everyone has asked a question.

- A reporters/journalists; they're asking questions about the site.
- B site manager; he's in charge of the site.
- C apprentice electrician; he works for the master electrician.
- D master electrician; he's in charge of the electrical systems.
- E painter; he paints things.
- F security guard; he controls access to the site.
- G driver; he drives the concrete mixer.

Vocabulary

- 2 Draw students' attention to the sentences and read the first one aloud. Ask them to say which person it is. Then go through the sentences and check that they understand all the words. Get them to identify things like *staircase* and *ladder* in the illustration. Then they can do the exercise individually. Check answers with the class.


1 G 2 D, C 3 E 4 F 5 B 6 A

- 3 Ask students to write down as many other items as they can from the illustration (for example, *gate, lorry/truck, bucket, toolbox, hard hat, scaffolding, bricks, ladder, paint pot*) and to then compare answers in pairs.

Speaking

- 4 Put students in pairs and ask them to explain what their jobs are, or to imagine they work on the construction site in 1 and explain one of those jobs. Demonstrate by asking a confident student to talk about their job. If they have problems, ask the following questions to elicit examples: *Who do you work for? What is your company responsible for? What are you responsible for?* If time allows, ask students to repeat the activity once or twice, with a different partner each time.

Listening

- 5  02 Tell students that they are going to hear a conversation between two reporters and Martin Karp from Karp Construction. Ask them what they think the reporters might want. Play the recording, then check answers with the class.

The reporters want to find out more information about the people working on the site.

- 6 Ask students to look at the questions and check they are familiar with words like *own* and *represent*. Tell them not to worry about any words they do not understand in the listening, and that you will explain any unknown words after they have done the exercise. Ask them to listen again and to complete the sentences. Play the recording. Get students to compare answers in pairs first, then ask individual students to read out a sentence each.

Check that students understand the roles, especially *contractor, project manager, client* and *supplier*. Other vocabulary which you may wish to go through includes: *background information, press release, complex, subcontractor, cement*. You could go through these words in class or ask students to look them up in their dictionaries.

1 general contractor 2 site manager
3 project manager 4 Karp Construction/the company
5 client 6 cement supplier
7 Martin's assistant

Language

Go through the Language box with the class. Draw students' attention to the use of the present simple and continuous. Remind them of the forms. Ask: *What do I do?* and elicit *You're a teacher./You teach./You work for X.* Then write something on the board and ask as you are writing: *What am I doing?* Elicit *You are writing on*

the board. Ask a confident student what they do and what they are doing now, then get that student to ask another student the same questions, then that student to ask a third student and so on round the class. Draw students' attention to the adverbs of frequency. Ask a confident student what they usually do in the evenings/at the weekend, what time they usually start work, etc. Ask that student to ask another student, then the student answering to ask a third student and so on round the class.

- 7 Before doing the exercise, make sure students understand all the verbs (they may not know *supervise, handle* or *repair*). Ask them to read through the text and underline any words they do not understand. Tell them that these will be dealt with after they have done the exercise. Then ask them to choose the correct verb forms. When they have finished, get them to compare answers in pairs before checking with the class.

1 have 2 are working 3 are supervising
4 handle 5 bring 6 are painting 7 are repairing

Speaking

- 8 Put students in small groups. Tell them that they are going to discuss four questions. If the vocabulary was covered in the Listening section, then this is a chance to see who can remember the words. Explain that if no one in a group knows an answer, they should try to guess. Discourage them from using dictionaries during this exercise. Set a time limit of about five minutes, then discuss answers as a class.

Suggested answers

- 1 A general contractor usually has overall control of a project and works for the owner or client. A subcontractor usually has a more specialised role, for example, just plumbing or electricity, and works for the general contractor.
- 2 A consortium is a group of people or companies that agree to work together on a project. Consortia are common in large construction projects.
- 3 Possible answers include suppliers of building materials, equipment, etc.
- 4 co-ordinate all the subcontractors: communicate with different people in the project and be responsible for organising the right people for the work; stay on schedule: keep to deadlines and deliver on time; stay within budget: not overspend

Extra activity

Put students in groups of four. Ask the members of each group to write the names of as many trades/jobs as they can on separate strips of paper and fold them. They then take turns choosing one strip of paper and saying what they normally do and what they are doing today. For example, if a student chooses *painter*: *I work on small sites and I paint the metalwork or the woodwork. Today I'm painting some doors and windows.*

Structure of an organisation

If you have a chance before this lesson, you could ask in-work students to bring in an organisation chart of their company, if they have one. Pre-work students could find one online. You could also bring in a selection of charts, in case some of the students do not bring one in.

Vocabulary

- 1 Ask students to look at the organisation chart. Make sure they understand all the vocabulary on it. For example, *Human Resources* (the department that recruits and looks after people working for the company), *Estimating* (the department that works out how much a construction project will probably cost), *materials* (the things you need to make or do something), *plant* (a factory and all its equipment), *Accounting, Payroll* (the department that pays salaries) and *Legal* (the department that ensures the company follows all the laws of the country it is working in). You do not need to go into great detail about the specific areas.

Ask different questions to check students' understanding of the vocabulary on the chart (for example, *How many departments are there? Which department is responsible for health and safety? Who are site managers responsible to?*).

Before students do the exercise, check that they understand the meaning of the words in the box and go through any unknown vocabulary in the sentences (for example, *consist* and *consultant*). Ask them to complete the sentences individually, then get them to compare answers in pairs before checking with the class.

1 top 2 departments 3 section 4 report
5 divided 6 has 7 look 8 external, part