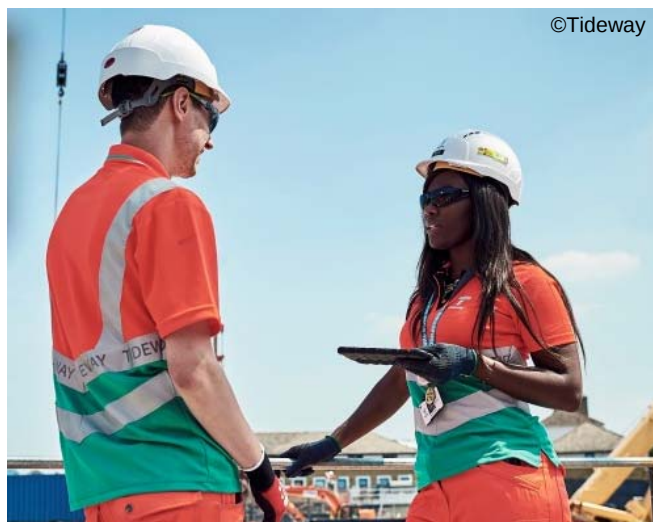


OSH COMMUNICATION: tutorial and assessment

What are the issues?

Research shows the importance of effective communication in improving occupational safety and health (OSH). Workers whose first language is not English, along with traditionally low literacy levels in construction, increases the challenges for effective communication. Accident causality is complex, but there are many claims of links between poor communication or lack of understanding and accidents or incidents.ⁱ



To date, other projects have tried to address the communication challenge, for example through pictures, buddying or interpreters.

What was done?ⁱⁱ

Tideway decided that a basic level of English was required to work on the project. Working with them and Glasgow Caledonian University we developed what is thought to be a world first: an OSH tutorial and assessment of English, in the Tideway context.

Industry benefits and opportunities

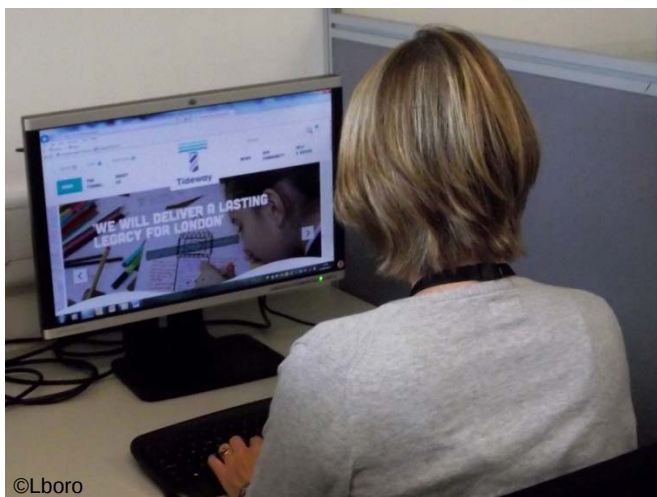
- The OSH communications assessment concept is being demonstrated
- The generic framework can be adapted for use on other projects and in other sectors
- It challenges native English speakers as well as checking English language skills

CEFRⁱⁱⁱ language standards were chosen with a basic level for all employees and enhanced for supervisors, managers and technical staff.

CEFR Discipline	Type	Basic	Enhanced
Reception	Listening	B1	B2-C2
	Reading	A2	B2
Interaction	Spoken	B1	B2-C1
	Written	A1-A2	B2
Production	Spoken	A2	B2
	Written	A1	B2

The original tutorial focused on 'reception', was customised to suit different job roles and was only to be taken by people involved on site, because the approach used site-based scenarios that the individuals could relate to. The style was restricted to fairly straight-forward, multiple choice, IT-based approach to suit the available platform.

All the questions had responses explaining why that particular aspect of communication was important, both for English and non-English native speakers. Supervisors with strong regional accents were found to pose a significant communication challenge in previous research on migrant workers.^{iv}



Certain questions required an understanding of some technical terms, acronyms or typical site vocabulary, based on the argument that people need to understand key terms to be able to work safely.

Having run the assessment for several months, Tideway decided to simplify the tutorial, focussing more on assessment and having one set of 30 generic multi-choice questions suitable for everyone on the project.

The questions requiring more technical vocabulary, acronyms and colloquial expressions were also removed. Non-English language questions were replaced by non-English speakers' accents to complement the regional accents questions. The recordings of the accent questions were made more understandable and responses were included in the overall score.

This resulted in the following sections:

- Watch, listen and understand – *based on an introductory film*
- Read and understand – *based on text on the Tideway HSW^{vi} mission statement*
- Observe and understand – *'don't walk by'*
- See and understand – *sign recognition*
- Listen and understand – *regional and non-English accents*

Tideway also trialled a graded response approach with those having between six and nine incorrect answers having a follow-up face-to-face interview to determine the appropriate response and also to evaluate interaction and

production of language. This would provide a more effective management of the communications challenges faced.

What have we learnt?

With such interventions, it is important to decide:

- Is it a tutorial to challenge and improve communication skills with an attached assessment, or is it a language competence test?
- Are employers and stakeholders comfortable with the potential equal opportunities challenge regarding language competence?
- Does everyone have to take the test, e.g. English / non-English, site-based / office-based / short-term / visitors?
- How can it be made relevant to such a large range of competence levels and roles?
- Is there is a required vocabulary of key terms?
- Whether to have one set of questions generic enough to be understood by all, or to customise questions to suit different job roles?
- What is the pass rate and what will happen to those who do not pass?
- How to make sure the exercise does not feel just like a repeat of the safety passport test (e.g. CSCS).

'Reception' (i.e. comprehension) can be assessed with a computer-based test, but interaction and production require more of a face-to-face engagement.

As with any innovation, there have been teething problems, but the intervention has certainly raised the profile of communication across Tideway and the problems are now being addressed.^{vi}

ⁱ e.g. www.dailymail.co.uk/news/article-2965586/Experienced-construction-worker-crushed-death.html#ixzz3T89swUmr; www.builderandengineer.co.uk/feature/safe-any-language.

ⁱⁱ Summary authors: Gibb AGF & Bust PD (August 2017) Loughborough University.

ⁱⁱⁱ CEFR: Common European Framework of Reference for Languages: Learning, Teaching, Assessment.

^{iv} Health, safety and welfare of migrant construction workers in the south east of England (2007) ICE.

^v HSW: Health, Safety and Wellbeing [Tideway term].

^{vi} The Institution of Occupational Safety and Health (IOSH) is supporting further Loughborough longitudinal research to trace the effectiveness of HSW interventions throughout the Tideway project.