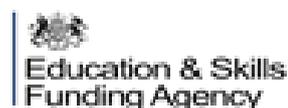




LINKING MATHS AND ENGLISH SKILLS TO CAREERS, THROUGH 'REAL LIFE' EXAMPLES OF SKILLS USED WITHIN GLOUCESTERSHIRE-BASED ORGANISATIONS

TEACHER GUIDE



Teacher Guide: Linking Maths and English skills to Careers, through 'real life' examples of skills used within Gloucestershire-based organisations

Concept

A common complaint from students is that they do not see the relevance of concepts they are expected to grasp in the classroom, to the 'real world' or the future that they see for themselves. All too often students bemoan working on academic tasks that they see no value in, other than to pass an exam. This can lead to disillusionment and sometimes disengagement.

This set of resources links 17 key English and Maths concepts from within the GCSE/Functional Skills curriculum, to 17 different Gloucestershire-based workplaces. For each concept there is an employer case study that highlights the specific use of the skill in their business and its importance to their key product or service. This is followed by information about the employer, key staff roles and salaries, any skills shortages, plus useful websites for further research.

Intended Outcome

By hearing from local industry, students understand the relevance of developing English and Maths capabilities. Through bringing these skills to life and understanding the impact on Gloucestershire businesses, students may feel inspired to achieve the best they can in these curriculum areas and can see a potential impact on their own future.

Intended Audience

These resources are suitable for use in the classroom with students learning Maths and English at Key Stage 4. They are also suitable for those doing post-16 Maths and English re-sits at schools and colleges, as well as those on Functional Skills and Apprenticeship programmes.

Rationale for List of Maths and English Skills

Through consultation with Maths and English curriculum staff, we defined a list of 9 English skills and 8 Maths skills that students need to grasp at Key Stage 4. Whilst the GCSE curriculum contains many more areas of learning, some of these will develop academic skills for those intending to study the subject at a higher level. Naturally, therefore, these skills lean more towards functional skills elements, as these are most applicable to employability.

Rationale for Selection of Employers

We targeted small and medium-sized enterprises (SMEs) to ask if they would be willing to highlight use of a particular skill in the workplace, since these form the majority of businesses in Gloucestershire. These are firms that employ fewer than 250 employees. We aimed to use employers from a wide geographical spread across the county and to include as broad a range of industry sectors as possible.

How to use this Resource

- Identify the skill that you would like to help your students to grasp.
- Click on the Employer Case Study next to this skill: download or print the 1-2 page document.
- Click on the video link (those that have one) to see a 1-2 minute video of the employer in the workplace explaining how they use this skill.

Use the case studies (downloadable resource and videos) as a tool to help:

- 1) explain the tangible use of this skill and its importance to a particular industry,

2) your students to understand that many different types of employers might use this skill, and that this is just one example,

3) understand the need for these skills in employment in Gloucestershire and UK-wide.

Table of English and Maths skills with Employer case study used

English Skill	Employer Case Study	Video Resource Yes/No
1. Speak clearly to be understood	Bar Bar Nursery	Yes
2. Listen and respond appropriately	Berkeley Castle	Yes
3. Identify fact and opinion	Gazette Series	No
4. Promote and explain your own ideas	Communication Troubleshooter	Yes
5. Evaluate, analyse and respond to other people's ideas	New Brewery Arts Centre	Yes
6. Write clearly, using a range of different writing styles to match audience and purpose	Gloucestershire Echo	No
7. Combine and evaluate explicit and implicit information from a range of sources	WSP Solicitors	No
8. Use appropriate vocabulary to meet customers' expectations	Cheltenham Science Group	Yes
9. Use accurate spelling, punctuation and grammar	Elgar Publishing	No

Maths Skill	Employer Case Study	Video Resource Yes/No
1. Use of positive and negative numbers	Clutterbucks Funeral Directors	Yes
2. Use of ratios and proportions	Pulse Leisure Centre	No
3. Use of compound measures such as speed, distance travelled, time taken, mass, volume, density, pressure or force	ARC Energy Resources	Yes
4. Able to add, subtract, multiply and divide whole numbers, decimals, fractions and percentages	The Bigger Printing Company	No
5. Calculation of areas, perimeters, volumes and angles.	Control Solutions & Pipework Services	Yes
6. Collect, represent, use and interpret data using statistical measures, tables, diagrams and graphs	Impcross	No

7. Solve problems using equations, formulae or statistical methods to investigate situations and their probability	Norville Opticians	Yes
8. Use of simple or compound interest	Baker Hudson	Yes

Extension ideas: short tasks to encourage further understanding of skills usage and development of employability knowledge and skills:

- 1) Choose 3 of the case studies. Read the employer quote and, for each one, list 3 reasons why it's important to use this skill within their workplace. TIP: at the end of the resource where there is video to accompany the resource, 3 reasons are highlighted. You may wish to 'hide' this information and use it to check answers.
- 2) Pick a single case study that inspires or interests you. Go onto the company website (see 'Useful Links' at the bottom of the resource. Find 3 facts or areas of interest about the organisation that *do not* appear on the case study (ideas include any current vacancies, a news or event that is highlighted, something about their customers or a product or service the company provides).
- 3) Using a case study that inspires you, do some further research about this job sector or job title. Research tools include the 'Useful Links' section at the end of the resource, and/or www.careerpilot.org.uk/job-sectors. You could find out if this industry is forecasting an increase or decline in opportunities, what sort of apprenticeship opportunities there are in this sector, if there are any jobs in this sector that interest you, how many people work in this sector in Gloucestershire? Go onto the 'Job Profiles' link from within your sector. Can you find the job profile for the person listed in the case study (their job title)? Find out more about this job, the skills that are needed and routes into this career.
- 4) Choose an English or Maths skill from the list. Think of another business in Gloucestershire that may need to use this skill. Explain *how* you think they use it and *why* it is important for their business. Note: try to think of a business from a different sector than the case study example used here. This activity helps students to see that skills are often transferable from one industry to another.