

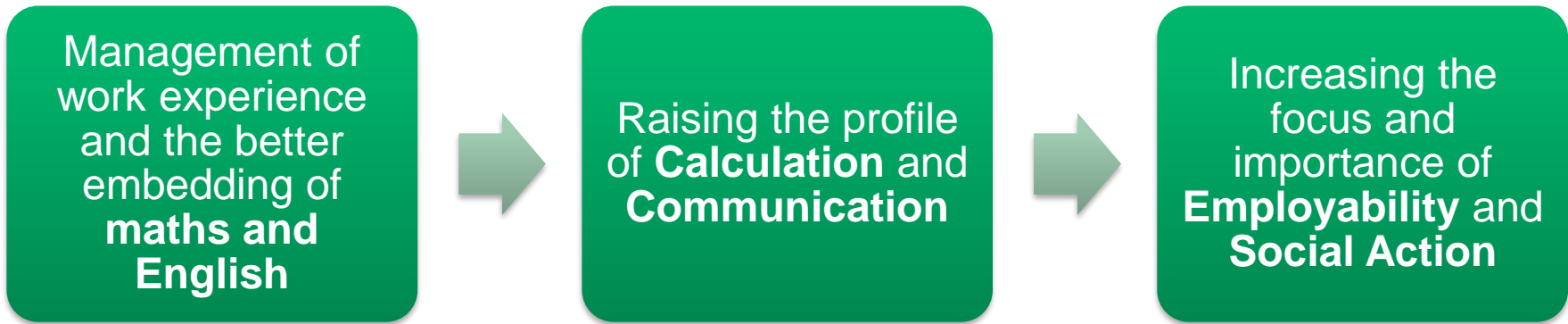
MATHS AND ENGLISH SKILLS IN T LEVELS – BEEJ KACZMARCZYK AND BARBARA GREGORY

ALIN (ADULT LEARNING IMPROVEMENT NETWORK)
CONTACT: [INFO@ALIN.ORG.UK](mailto:info@alin.org.uk)

MAXIMISING POTENTIAL THROUGH STUDY PROGRAMMES – ALIN

Now into its **4th year** supporting providers in developing and managing 16-19 Study programmes to improve the quality and delivery.

Management of
work experience
and the better
embedding of
**maths and
English**



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graph LR; A[Management of work experience and the better embedding of maths and English] --> B[Raising the profile of Calculation and Communication]; B --> C[Increasing the focus and importance of Employability and Social Action]
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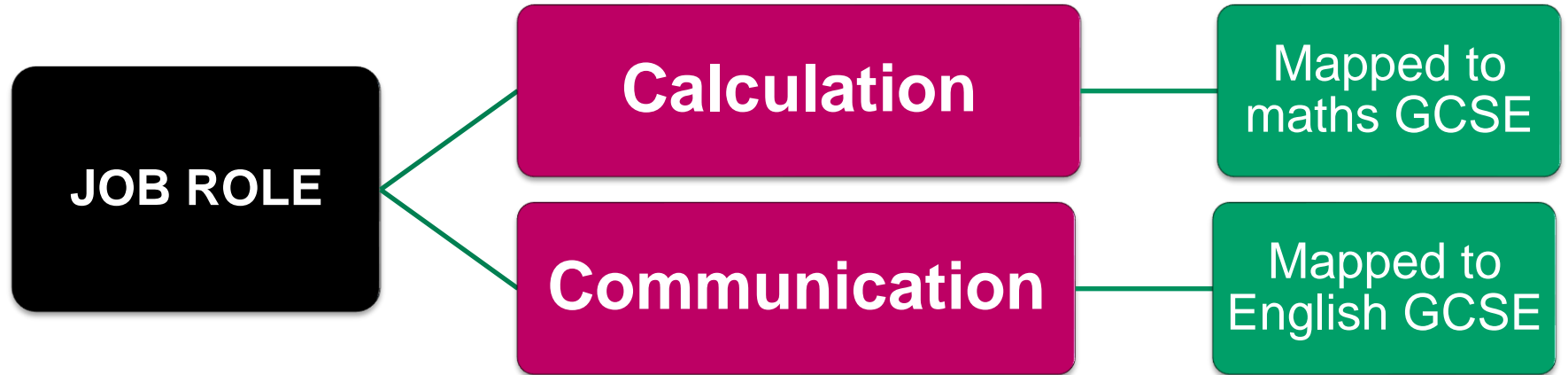
Raising the profile
of **Calculation** and
Communication

Increasing the
focus and
importance of
Employability and
Social Action

CURRENT PICTURE AND AIM OF THE WEBINAR

- The embedding of maths and English skills continues to be a challenge for some providers.
- The introduction of T Levels will present change in the sector.
- **The aim of this webinar is to:**
- Focus on the embedding of maths and English skills linked to the technical routes.
- Promote a range of resources that map maths and English skills to job roles providing contextualisation for learners and staff.

RE-ENERGISING MATHS AND ENGLISH



CALCULATION

Fractions

Geometry

Understand
and use
mathematical
formula

Probability

Where can
students
practice
these?

CALCULATION SKILLS

Take one of the calculation skills:

- What does this mean for your sector?
- How can a learner demonstrate this on work experience?
- Give some examples of what they can do.
- How important is this skill to their job?
- Why?
- How can this map to GCSE?

EDUCATION & TRAINING FOUNDATION

Exploring Careers Through Technical Routes
Travel Agent

The Industry

The travel industry is exciting! A travel agent helps customers plan and organise travel requirements to ensure they have the best trip, holiday or visit. They spend time consulting customers, suppliers and keeping updated with travel restrictions. They make bookings with travel companies including airlines, car hire companies, cruise lines, hotels, railways, travel insurance companies or package holiday operators.

Travel agents can be offered discounts on travel. Some employers also allow staff to go on educational visits so they can experience products firsthand to improve personal knowledge of the holidays they are organising and selling.

When working in a high street travel agent shop staff usually wear company uniforms to show the professionalism of their service. In a travel call centre dress is often more informal.

Association of British Travel Agents
www.abta.com
Thameson Retail
www.bjtschool.co.uk/visit-to-the-travel/thameson-retail/apprentices

Skills and Requirements

Travel agents spend much of their time communicating with customers and suppliers. They need:

- Active listening skills, taking time to fully understand customer requirements or information from suppliers
- Excellent customer service skills with individual customers and groups
- Strong verbal communication skills with a good telephone manner
- The ability to cope with pressure at busy times
- Commercial awareness and effective sales skills to persuade customers to make bookings
- Confident in the use of technology for using booking reservation systems or for producing customer itineraries
- Attention to detail for checking the accuracy of a customer's booking.

Travel knowledge is an important aspect of the job so it helps if you have a good knowledge of where places are in the world and/or have personal travel experience.

Travel and tourism is one of the UK economy's most vibrant, diverse and valuable industries, contributing a staggering £127 billion to GDP annually and sustaining over 3 million UK jobs.
Source: Association of British Travel Agents

TRAVEL AGENT

- Job role
- Tasks
- Calculation skills
- Links to GCSE
- Progression routes



EDUCATION & TRAINING
FOUNDATION

Exploring Careers Through Technical Routes Working and Learning as a Travel Agent



Job Roles & Progression

Study Programme

Levels 2 and 3
Travel and Tourism.



Further study

HND
Travel and Tourism.
FdA
Tourism Management.
BA (Hons)
Tourism Management.
Travel and Tourism.
Tourism with Business.



Calculation including problem solving

Tasks

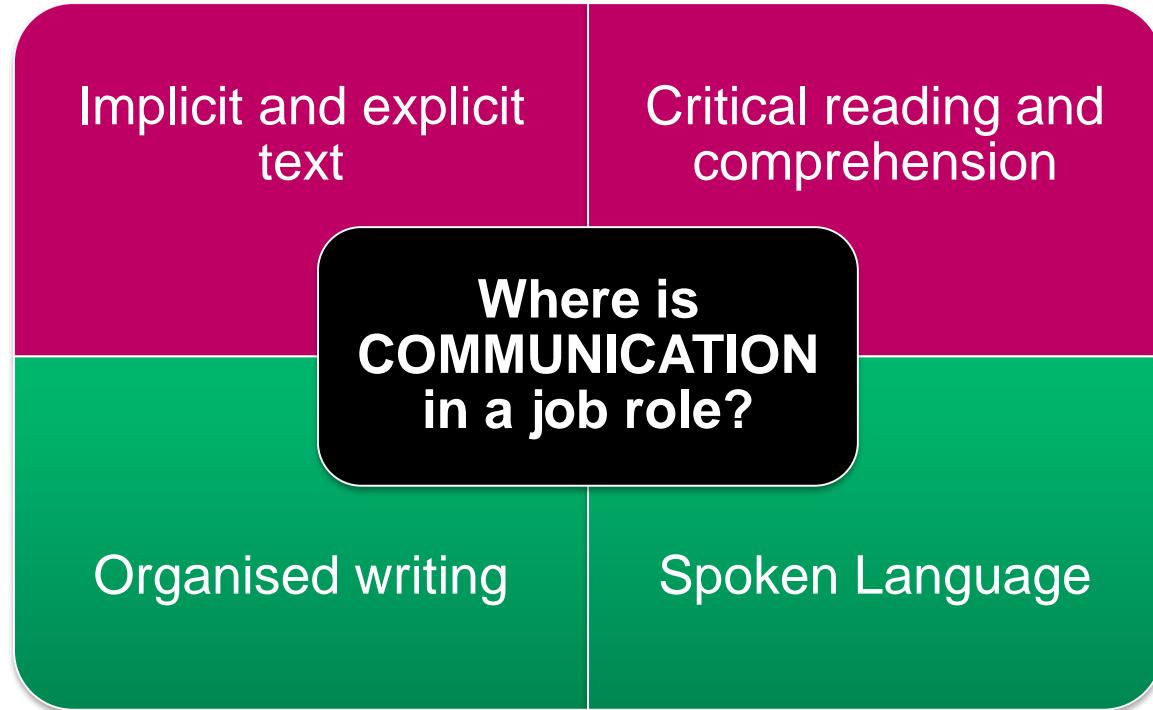
1. Use a travel guide to estimate and calculate the elapsed flying time of a long haul flight.
2. Calculate the speed an aircraft will need to travel at to ensure landing on time.
3. Calculate detailed costings for a customer's holiday using at least 2 different travel brochures.
4. Exchange currency for a customer from British Pounds to Euros.
5. Plot temperatures on a graph promoting Greece as a popular destination to show a customer the best month to travel.

Links to GCSE Maths

1. **Number** (whole numbers – addition, subtraction; approximation - estimating calculations).
2. **Geometry and measure** (units of measure – speed).
3. **Number** (whole numbers – addition, subtraction).
Geometry and measure (units of measure - unit pricing).
4. **Number** (whole numbers – multiplication; decimals- converting between decimals).
5. **Algebra** (graphs).
Statistics (collecting data - types of data).

Communication, all forms

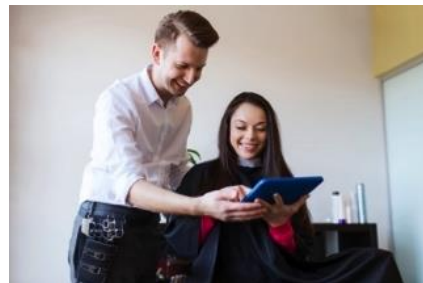
COMMUNICATION



COMMUNICATION SKILLS

Take one of the communication skills:

- What does this mean for your sector?
- How can a learner demonstrate this on work experience?
- Give some examples of what they can do.
- Why does it matter that they need to be able to do this?
- What part of the English GCSE will they practice?



Communication, all forms

Tasks

1. Help a customer choose the most appropriate flowers for their occasion.
2. Produce a leaflet to advise customers on the after care of their plants and flowers.
3. Take orders for an anniversary party by telephone and arrange delivery.
4. Discuss options for wreath flowers with a bereaved family.
5. Manage the emails, social channels and press releases to promote the business.

Links to GCSE English Language

1. **Spoken language** (speaking and listening – audience and purpose, standard English, discussion skills; personal presence – body language, eye contact).
2. **Writing** (writing non-fiction – writing a guide, planning a structure, organising information - paragraphs).
3. **Spoken language** (speaking and listening – audience and purpose).
4. **Spoken language** (speaking - audience and purpose, discussion skills; personal presence - body language, eye contact).
5. **Writing** (context, audience, purpose; writing non-fiction - social media).
Spelling, punctuation and grammar (common spelling errors, punctuation).

Floristry Level 3



Exploring Careers Through Technical Routes
Floristry

Floristry

Floristry is a highly skilled profession. You will need:

- A love and knowledge of flowers and their care
- An understanding of floral seasons to know when certain flowers are available
- A knowledge of the range and cost of materials
- Customer service skills to advise customers and ensure high customer satisfaction
- To be a team player with good interpersonal skills to effectively work with colleagues
- Creative flair to design arrangements
- Inventory management skills with an understanding of profit and loss
- Persuasive and sales skills to maximise business profit
- Good personal presentation, smart for meeting potential customers, practical for collecting stock
- An ability to work quickly and under pressure as florists generally have tight deadlines
- A desire to keep up to date with modern trends to be competitive in the market place
- A willingness to work long hours when required

Tasks could include: looking after blooms to keep them fresh, answering telephones and taking orders, helping customers to choose a flower arrangement within their budget, making up and delivering bouquets or wreaths, creating a floral theme for a wedding, designing floral displays for special events, creating displays for hotels, or working at special events such as London Fashion Week.

Depending on where you are employed you could be working shop hours, going early to market to buy flowers, working outside on a stall or preparing for an event.

British Florist Association
www.britishflorists.co.uk
Phone: 01904 610000 Email: info@britishflorists.co.uk

*Currently there are over 8,400 florist businesses employing nearly 17,000 people.
Over half of the income generated is generated by people buying flowers for themselves.
Source - Lifford

TECHNICAL ROUTE FLYERS



Over **55** produced promoting maths and English skills

All **15** technical routes with practical tasks in job roles

Links to GCSE maths and English

Links to new Functional Skills maths and English

MAKING THE FLYERS RELEVANT

Front page

- Appealing for students to read
- Recognisable for employers and industry specialists
- Relevant to the vocational sector
- Skills and attributes required
- Statistics
- Where they can get further information

Reverse side

- Tasks they may do at work - Calculation and Communication
- Mapping tasks to maths and English (GCSE or Functional Skills)
- An example progression route from their Study Programme

HOW CAN YOU USE THESE FLYERS?

With students to show them about the sector, identify potential job roles, skills required and progression opportunities

Help them plan out their own career path

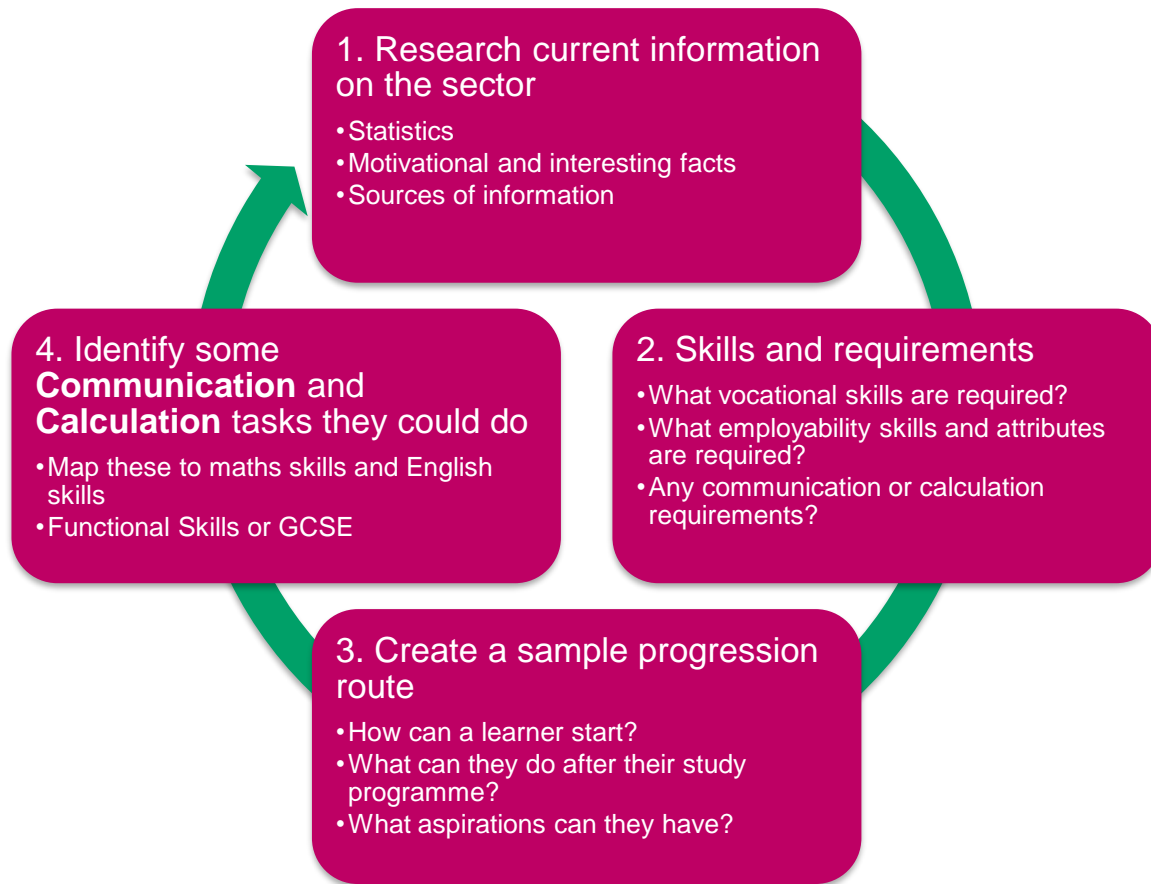
Create with students for specific job roles that they can do on work experience

Focus on the tasks they will complete and identify **CALCULATION & COMMUNICATION**

Employability skills
Log work activities and skill development

How do these skills link to their GCSE or Functional Skills
- Calculation & Communication

CREATE A TECHNICAL FLYER



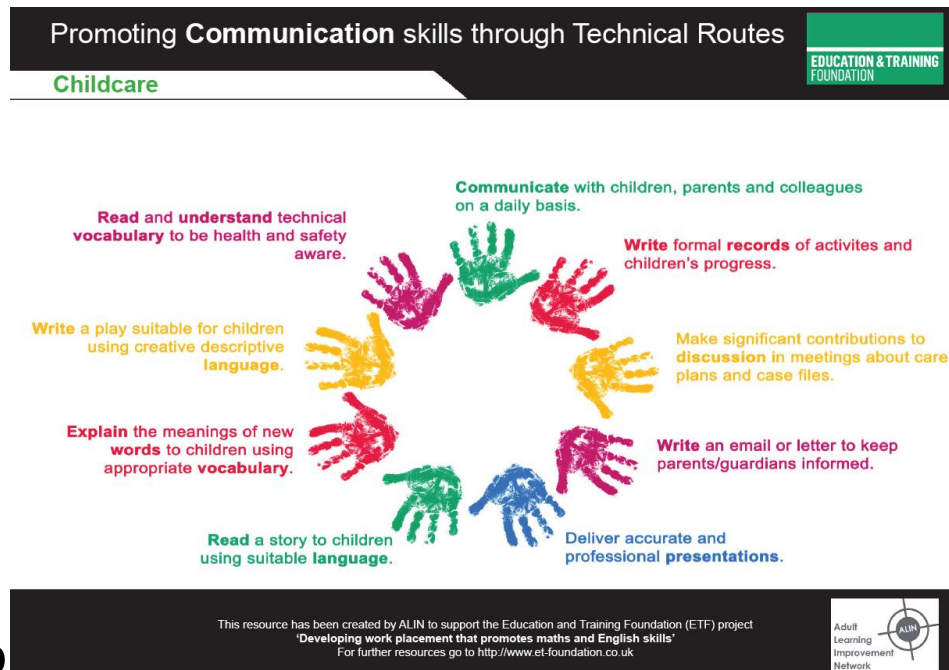
SPECIFIC IMPACT OF THE PROJECTS AROUND CALCULATION AND COMMUNICATION



- *“Maths and English will be rebranded as communication and calculation. Lessons will be called e.g. Communication in Business, Calculation in Business etc.”*
Training 2000
- *“Best practice in developing maths skills to improve the understanding of concepts and overcoming barriers to learning maths”*
Key Training
- *“Review the delivery of English and maths in work experience in each vocational area and map work activities to ensure that learners have the best opportunity to develop their relevant skills”*
Myerscough College

ANIMATIONS – TO REACH A WIDER AUDIENCE

- Promote communication and calculation in job roles.
- Limited to one and a half minutes for maximum impact.
- **15** completed.
- Click below to access the video
- [Childcare](#)



OCCUPATIONAL ROUTE FLYERS



Exploring Careers Through Occupational Routes

Barber



The Industry

A barber specialises in male hair grooming. This includes cutting, colouring, trimming and shaving of beards and moustaches. They need to be skilled in cutting men's hair and familiar with techniques such as clipper work, scissors-over-comb and hot lather shaving with a straight blade.

Turkish barbering has become increasingly popular as they also domassage, waxing of the nose and burning of fin hair.

Being a barber is a fun and creative career and the number of jobs is constantly increasing.

Where can you get more information?

British Barbers Association
<http://britishbarbers.com/about-us>

Skills and Requirements

Barbering today is about men becoming more image conscious so you need to be creative and enjoy meeting people.

You will also need to have:

- Good presentation and personal hygiene
- Good conversation skills to build customer relationships
- Knowledge of past and current hairstyles and trends
- The ability to be a good listener
- A willingness to work flexible hours
- A high degree of dexterity and coordination
- Good health with the ability to stand for long periods of time
- Commitment, as salons require high standards of attendance and time-keeping.

"Barber shop wet shaves have become increasingly popular as the male grooming industry has taken off."

Source: Telegraph.co.uk

Level 2

- Barber

Level 2

- Arable Farming

Communication, all forms

Tasks

1. Have a style consultation with a new customer.

2. Keep up to date with the latest celebrity hair trends.

3. Prepare a flyer to promote late evening working at the salon.

Links to L2 Functional skills English

1. **Speaking, listening and communicating**

SLC/L2.4 Make requests and ask detailed and pertinent questions to obtain specific information.

2. **Reading**

R/L2.5 Use a range of reference materials and appropriate resources.

3. **Writing composition**

WC/L2.3 Organise writing for different purposes using appropriate format and structure (e.g. standard templates, paragraphs, bullet points, tables).

**Barber
Level 2**

OCCUPATIONAL ROUTE FLYERS



The flyer is titled "Exploring Careers Through Occupational Routes" and "Hospitality Team Member". It features a photo of a smiling waitress in a white uniform holding a tray with a glass of orange juice and a plate of food. In the background, other staff members are visible. The flyer is part of the "Adult Learning Improvement Network" and "Education & Training Foundation".

The Industry

The hospitality industry is known as a service industry, and is all about giving people a great service and making them happy.

Opportunities exist in bars, restaurants, cafes, conference centres, banqueting venues, hotels and contract caterers.

Specialist roles or areas for you to work in include: food and beverage service; serving alcoholic beverages; as a barista; in food preparation; as a kitchen porter; in housekeeping; as a concierge or in guest services; on the reception desk; making reservations; in conference and banqueting for events.

Skills and Requirements

1. Most important is to...
Develop fantastic 'hospitality' skills and knowledge.

2. What this means

- Recognising customer needs
- Knowing how to match them to the products and services of the business
- Working as part of a team to ensure that every customer, whether they are eating in a restaurant, drinking cocktails in a bar, ordering room service in a hotel or attending a business conference feels welcomed and looked after.

3. The skills you should develop

- Motivation to work hard
- Work using your own initiative
- Reliability, flexibility and adaptability.

Find out more information
<https://www.careerconcepts-advice/16-adult-work/16-reasons-why-hospitality-jobs-are-great>

"Hospitality is a key sector for growth and employment."
Source: <http://www.shielded.co.uk/news/16-reasons-why-hospitality-jobs-are-great>

Level 1

- Hospitality team member

Level 1

- Childcare
- Woodland skills

Calculation including problem solving

Tasks

1. Approximate how many guests you will have in the hotel over a month, thinking about the difference between week day and weekend occupancy and looking at previous trends.
2. Calculate how much time you should allow for each customer at a table including the turnaround of their food order.
3. Pick a cocktail and work out the ratios of each ingredient in that cocktail.

Links to L1 Functional skills maths

1. Number

N/L1.12 Approximate by rounding to a whole number or to one or two decimal places.

2. Number

N/L1.3 Multiply and divide whole numbers and decimals.

3. Number

N/L1.5 Use simple formulae expressed in words for one or two-step operations.

Hospitality
Team Member
Level 1

IMPACT TO DATE

The development and production of the exploring (Technical and Occupational) route flyers has **exceeded** any anticipated impact that was expected.

This innovative resource developed around the 15 routes outlined in the Sainsbury report, has been **hugely welcomed by providers**.

The promotional flyers resources link directly to the occupational and technical routes offered, and are mapped to maths and English FS and GCSE. They create **clear and informative material** that can be used by Learners, Providers, Employers and Parents.

Embedding maths into Technical Routes

Algebra in Catering



What is Algebra?

You use algebra to solve a problem.

Algebra is a set of rules to follow, to make sure that things work out correctly. Imagine the chaos of running a kitchen without rules.

You need to understand that maths has rules just like the kitchen!

Using Algebra

- Calculating cooking times
- Costing meals and staffing for catering events
- Converting measurements such as weights and temperatures
- Upscaling ratios of cooking recipes
- Adding or removing percentages (service charges and discounts)
- Calculating ratios of serving staff to customers.
- Calculating statistics on customer surveys or responses to marketing.

BODMAS

One of the rules of calculation is the rule of BODMAS.

Calculations should be carried out in the following order:

- B - Brackets (complete anything in brackets first)
- O - Orders (powers, square roots)
- DM - Division or Multiplication (if you have a calculation involving division and multiplication, complete them as they appear from left to right)
- AS - Addition and subtraction. Finally calculate any addition and subtraction (if you have a calculation involving addition and subtraction, complete them as they appear from left to right).

"Why should I learn algebra - I'm never going there!"
Billy Connolly

Did you know?

The word "algebra" comes from Arabic and roughly translates as "finding the missing part." Its first use in English was as a term for fixing a broken limb in surgery!

Request from
London
College
Principal

- Specifically to look at one aspect of maths

Technical
route
Hospitality
and Catering

- Algebra

ANIMATIONS



Video promoting calculation in the construction industry.

Also completed are mini video's in job roles:

- Electrician
- Nail technician
- Plastering
- Software development
- Automotive industry
- Chainsaw

[Construction](#)

POSTERS

- Fitness
- Tractor driving
- Barista
- Childcare
- Accident repair

Promoting Calculation skills through Technical Routes

EDUCATION & TRAINING
FOUNDATION

Working in the Fitness Industry

$$\text{Body mass index (BMI)} = \frac{\text{weight in kilograms (kg)}}{\text{height in metres (m)}^2} \div \text{your height again}$$

Calories burnt

Kcal per hour

Target HR zone

60-80% of MHR

Maximum heart rate

220 - age = MHR

Heart rate

BPM

Running cadence

Steps per minute

Angle of inclination

Degrees (0-10°)

Speed

(kph or mph)

Time - length of workout

(minutes)

Set treadmill inclination

% (percentages)



This resource has been created by ALIN to support the Education and Training Foundation (ETF) project
'Developing work placement that promotes maths and English skills'
For further resources go to <http://www.et-foundation.co.uk>



BRAND NEW STUDY PROGRAMME EXHIBITION SITE LAUNCHED DECEMBER 2018!



STUDY PROGRAMMES

Maximising learners' potential

AN EXCELLENCE GATEWAY

EXHIBITION SITE

HOME

MANAGING STUDY PROGRAMMES

TECHNICAL ROUTE RESOURCES

MONITORING LEARNER PROGRESS
RESOURCES

CASE STUDIES



Welcome to the Excellence Gateway's Study Programmes exhibition site

BRAND NEW STUDY PROGRAMME EXHIBITION SITE LAUNCHED DECEMBER 2018!

- The Excellence Gateway Exhibition Site, launched by the ETF brings together all the key information and resources to help post-16 providers of study programmes in one place.
- Resources include reports, training materials, presentations, flyers, videos, posters, and case studies from study programmes.
- <https://studyprogrammes.excellencegateway.org.uk/>

DEVELOPING STUDY PROGRAMMES THAT PROMOTE SOCIAL ACTION, MATHS AND ENGLISH.

- A bespoke package developing **highly effective study programmes** including work placements.
- This programme delivers a **flexible and personalised** support service with proven positive impact.
- The 'wrap around' support package will include a **practical hands-on approach** to goal setting, planning and cascade of activities across the organisation to help drive developments forward.
- **Resources** to promote social action, maths and English skills.

SOCIAL ACTION

Colleges and schools have been "encouraged" to make social action such as volunteering a component of 16-19 study programmes for the first time by the Department for Education.

[New guidance](#) on 16-19 study programmes states that social action can be classed as a form of work experience. The document stresses that it can only be included alongside other forms of work experience.

WHAT IS SOCIAL ACTION?

The dictionary definition is:
'practical action in the service of others to create positive change'.

The guidance states:
“In a work experience context social action can take the form of young people honing their work related skills and behaviours to have a positive community impact”.

TYPES OF SOCIAL ACTION



INFO@ ALIN.ORG.UK

ETFOUNDATION.CO.UK

**THANK YOU
ANY QUESTIONS?**