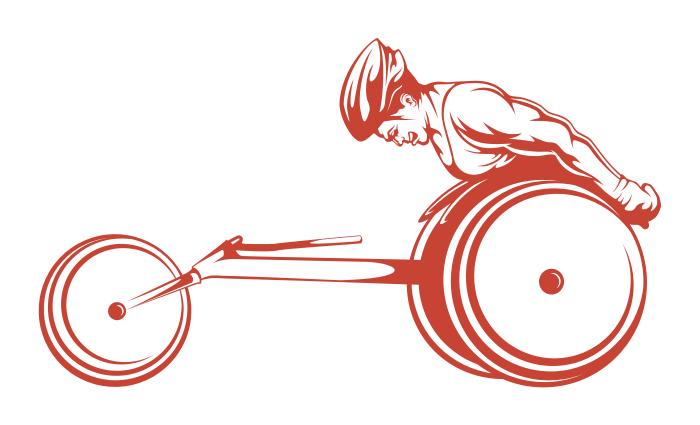
# SPORTS FACILITIES FOR DISABLED PEOPLE



#### **Interactive PDF instructions:**

The 'home' icon will take you back to the contents page The content titles will take you to the relevant page The 'print' icon will open your print dialogue window





There is a lot of material in this pack. Teachers might find it useful to first read the <u>Teacher notes introduction</u>, and the student <u>Challenge brief</u>.

#### GETTING STARTED

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Note: for statistics about the population, active people and the Life Opportunities Survey, see:

http://www.statistics.gov.uk/





## YOUR CHALLENGE

At present, 16.5% of adults take part in active sports, but only 6.5% of disabled people participate.

Unfortunately, disabled people wanting to take part in sport face extra problems: transport, money, lack of suitable clubs and lack of information.

Your Challenge is to help disabled people, in your school and local area, learn more about the opportunities available to them to partake in disability sports.

To achieve this, you must produce:

(a) information about what is available now and (b) recommendations to increase the disability sports that are available, in your school and local area.

For (a), this information will show disabled people, in your local area, where they can take part in as many disability sports as possible. For (b), the recommendations will be in a report that you would send to a venue, to show the possible disability sports that it could offer. This should be for at least one organisation such as your school governors or the management of a local sports venue.

You must create a presentation summarising what disability sports are available in your local area and where they are held. You must also include a report for your school and/or local venues, recommending disability sports that they could offer.

#### THINGS TO CONSIDER

You will need to work in teams of four to six people.

Think carefully about the Challenge brief and manage your time and workload effectively.

Try allocating different tasks to team members. Tasks could be, for example:

- Researching disability sports and finding out how they are played;
- Finding out what is available locally;
- Researching the popularity of different sports and how many people play;
- Finding out how a venue might be adapted so that a disability sport could be played there;
- Surveys of schools/venues;
- Surveys of school students;
- Finding out about travel and accessibility for disabled people;
- # Finding out about the local population;
- Finding ways to present the information and report.

Think about how wide an area you will cover. Your report could cover the following:

- Your school and its facilities for disabled students;
- Your school and its facilities for disabled people in the wider community;
- A number of local schools and their facilities for disabled students;
- A number of local schools and their facilities for disabled people in the wider community;
- One or more other local venues and their facilities for disabled students;
- One or more other local venues and their facilities for disabled people in the wider community.





How will you deal with the data? Part of your Challenge is to take facts and figures (your data) and convert it into information so that other people will understand it.

It is really important to reference any data and information that you use. Try to support any figures that you use with your own calculations. You will need to show that you understand how to use maps, too.

The Factsheets provide information that could help you with the Challenge but you should carry out further research yourself.

#### PRESENTATION ADVICE

Teams must show clearly how they arrived at their final results. All recommendations must be justified – these justifications should be made apparent throughout the presentation. Think about how to communicate the information plainly.

#### PART (A)

You are presenting information to show disabled people, in your local area, where they can take part in as many disability sports as possible.

- This can be a leaflet, poster or website;
- You may include a map or similar;
- People will also want to know about the accessibility of each venue;
- \* Ensure that you find a way to present information about cost, coaching, transport links and anything else that might be relevant for a disabled person to know.

Remember that lots of different people will need to be able to understand the information.

#### PART (B)

You are presenting a report that you would send to a venue, to show the possible disability sports that it could offer. This type of report should be 'professional' – you are reporting to an organisation such as your school governors.

The report can be in any format that you choose. Written reports often include photographs, diagrams, graphs and other ways of presenting data clearly. You could use these headings:

- Executive summary a brief description of your conclusions and recommendations;
- Demographics of local area numbers of school students, disabled students, the local population, the number of disabled people, how this compares with numbers for the whole country;
- Analysis of current services on offer what is available and where; how easy would it be to adapt existing facilities;
- Needs analysis the sports that are not available; how many 'customers' there could there be, if facilities were provided;
- Recommendations giving reasoned arguments;
- Sources including how you carried out your research.





#### SOME HINTS AND TIPS

- Be able to talk knowledgeably about every aspect of the Challenge;
- \* Keep a record of the processes that your team goes through, during the research. The process is just as important as the final report;
- Use a mixture of verbal, written and visual communication;
- Present survey and researched data rather than emotive arguments;
- Use technical and mathematical language and terms correctly.

#### Consider

- Posters, leaflets, handouts;
- <sup>☆</sup> Maps;
- Charts and graphs;
- ☆ ICT
- Diagrams and sketches originals as well as 'worked up' final copies;
- Photographs;
- Live demonstrations.





Organising data into useful information is a key part of writing a report. All sorts of people, with different levels of knowledge, may have to read the report.

It helps if a report includes some background information, to 'set the scene'.

When you make recommendations to change something, such as introducing a new sport or making a venue accessible, you have to show that:

- There is a need (for the sport);
- It will not cost too much;
- There are no other limits (for example, people will be able to get to the venue);
- <sup>®</sup> Physical changes (such as a larger changing room) are possible to make.

#### PART (A) INFORMATION ABOUT LOCAL OPPORTUNITIES

It is important to identify what disability sport is available. As well as plotting the venue locations on a map, you could consider producing a supporting spreadsheet to indicate sport type etc.

What categories will you use...

- ♣ Sport?
- Level, such as beginner or elite?
- ☆ Cost?
- Open to anyone or club members only?
- Location by postcode?
- More?

This will give you the basis of a leaflet or website to inform local disabled people of the opportunities that are open to them.

## PART (B) IMPROVING LOCAL OPPORTUNITIES

#### **VENUE DATA**

You can also create maps and spreadsheets that will show (i) what is provided for all sports and (ii) which venues are accessible (can be used by disabled people) and the different impairments that they cater for.

This will be the starting point for Part (b) of the Challenge.

Other data to put together:

- # It would be possible to show which disability sports are not provided for in your area;
- Which venues provide for disability sports but present problems such as cost or location?

#### MATCHING SPORTS TO VENUES

Each sport has different requirements, so each individual sport has to be individually matched to possible venues. For example, wheelchair tennis does need a tennis court whereas boccia can be played in almost any sports hall.

What about equipment? In some sports, the equipment is quite specialised but for others, it is only the cost of employing an instructor.





## {FACTSHEET} DEALING WITH THE DATA

#### COSTS AND TRANSPORT

Think about:

- What the venue may have to spend, to provide a disability sport;
- The costs to the athlete (as well as fees, is, for example, a sports wheelchair needed?);
- Ease of travel to the venue.

In addition, are there any grants available? Try *grants disability sports* and *grants sports wheelchairs* in a search engine.

#### NUMBERS LIKELY TO PARTICIPATE

The manager of a venue would want to know that, if they spend money on introducing a new sport that enough people would take up the opportunity to take part.

Look at the Factsheet *Participation data*. Find the data for your area and use it to justify your case.

#### THE REPORT

Are there any other issues, as well as the topics listed above?

Your report will need to make a clear case for the introduction of disability sport.





Athletes compete in sports according to their type of impairment and their degree of impairment. Having these different classes means that athletes can compete fairly.

#### SOME DISABILITY SPORTS

Archery Football 7-a-side Swimming
Athletics Goalball Table Tennis

Boccia Judo Volleyball – Sitting
Cycling – Road Powerlifting Wheelchair Basketball
Cycling – Track Rowing Wheelchair Fencing
Equestrian Sailing Wheelchair Rugby
Football 5-a-side Shooting Wheelchair Tennis

For details about these sports, see:

\* www.parasport.org.uk (click the Disability Sports tag)

#### IMPAIRMENT GROUPS

The International Paralympic committee (IPC) recognises six different impairment groups. These are:

- Amputees;
- Athletes with cerebral palsy;
- Blind or visually impaired athletes;
- Spinal cord injured athletes;
- Athletes with an intellectual/learning disability;
- \* Other athletes (les autres) with a physical impairment, who do not fit into any of the above groups.





#### TO FIND SPORTS VENUES

Your school administrator should be able to help you with a list of all the nearby schools.

Search the internet using *sports clubs* and the name of your local council or county council. For example, *sports clubs staffordshire* gives the *Sport across Staffordshire website*. Clicking *clubs* takes you to a database of the main clubs in that area.

Yellow Pages often lists private health clubs that have a wide range of facilities.

#### SPORT FOR DISABLED PEOPLE

Often, the sports club databases include a list of clubs specifically for disabled people, or have links to websites with that data.

You could also try disability sports clubs (name of area) in a search engine.

#### VENUES THAT OFFER DISABILITY SPORTS

See the website: www.parasport.org.uk

Click *Club Search* and enter your postcode. This allows you to find high quality clubs/facilities in your area. You can also filter the search by distance and sport.

#### WHAT TO FIND OUT ABOUT THE VENUE

You will need to devise a set of questions, to make sure that you obtain all the information that you need. To start with:

- What sport is offered?
- Are any of these disability sports?
- Are the sports facilities suitable for people with disabilities?
- Are there any instructors or coaches trained to work with disabled people?
- How easy is it to get to those locations?
- What is the cost?

What more detail might you require? For some ideas, see the Clubmark information sheet at: www.efds.co.uk





For part (a) of the Challenge, you will need to gather data from a fairly wide area. However, will you look at resources for young people only, or for all age groups? Perhaps the facilities are the same for all groups.

For part (b), you could restrict the scope:

- Your school and its facilities for disabled students;
- Your school and its facilities for disabled people in the wider community;
- A number of local schools and their facilities for disabled students;
- A number of local schools and their facilities for disabled people in the wider community;
- One or more other local venues and their facilities for disabled students;
- One or more other local venues and their facilities for disabled people in the wider community.

#### GEOGRAPHY

If your school is in a large city, such as Bristol, that could be large enough. In Manchester, you might restrict your survey to a part of the city. However, if your school is in a smaller city, such as Peterborough, you may need to look at the surrounding county, as well. In any case, there are some sports, such as equestrian or sailing, or team sports, where you may have to look farther away for venues.

#### **VENUES**

If you want to recommend that your school, or another venue, introduces a disability sport, you will need evidence that the sport is not available nearby. Therefore, you will need to look at as many alternatives as possible.

By law, all venues should try to adapt their premises to remove physical barriers to access. This does not include schools and transport vehicles. So, you may need to check that disabled people can access the venue, as well as take part in relevant sports.

#### PEOPLE

If you look at resources for young people only, will this be 11–16 year olds or 5–11 year olds as well? There are other impairments, such as deafness, that are not classified. If time allows, you could extend your research to include for that group of people.

#### COST

Cost affects peoples' ability to participate in activities. Costs such as entrance fees (or membership fees) and travel. There are also possible costs if, for example, a disabled person needs personal help when travelling, changing clothes or carrying out the activity.

This data could handily be gathered together on a spreadsheet. You may wish to incorporate the data into both parts of the Challenge.

#### COACHING

Most sports require an instructor or coach. Are there people with the right training who could encourage and train the athlete? Often, all that a sports coach needs is a short 6-hour course to give them the extra, specialist knowledge to support disabled people. See the *Sports coach UK* website: <a href="www.sportscoachuk.org">www.sportscoachuk.org</a> or the *English Federation of Disability Sport* website: <a href="www.efds.co.uk">www.efds.co.uk</a> and select *Training*.





When you carry out research on the internet, focus on what you **need** to know. Often, published data has a lot of tables that are not relevant for your research. Be selective and do not try to read everything!

#### YOUR OWN RESEARCH

If you limit your research to young people, you might consider doing your own participation survey. You could carry this out at your own and some other local schools.

- How many people will you survey?
- # How will you ask about disability? Some people may not like to give personal information.
- # How will you explain what active sport is?
- Will you look at school sport only, or outside the school as well?

Be clear about what exactly you want to know, before devising your questions. Do not ask too many otherwise the survey will take too long and it will put off people from answering.

Often, the local community also uses the facilities at a school. The school administrator should be able to help with data about how many people use the school and the sports that they do.

#### PARTICIPATION IN SPORT

This report has information about how much 5-16 year-olds take part in school sport and sport outside the school: <a href="https://www.education.gov.uk/publications/eOrderingDownload/DCSF-RR168.pdf">https://www.education.gov.uk/publications/eOrderingDownload/DCSF-RR168.pdf</a>

Sport England describes participation in sport as: people who exercise for 30 minutes once a week and those who exercise for 30 minutes, three times a week.

The *Datasheet: Active people* gives (as a percentage) the number of people participating in sport, in each local authority area.

If you want to find out about participation in individual sports you will need to go to the national sports organisations websites:

- There are reports on the *Sport England* website: <u>www.sportengland.org</u>. Type *Active People Survey* in the search box.
- \* On the Sport Wales website: <a href="www.sportwales.org.uk">www.sportwales.org.uk</a> under the Research & data tab, there is data specific to Wales.
- In the search box of the Sport Scotland website, www.sportscotland.org.uk type Participation research.
- \* www.sportni.net is the main website for sport in Northern Ireland. Typing participation sport northern ireland research in a search engine comes up with the data in a Sport NI report.





## PARTICIPATION BY DISABLED PEOPLE

Again, the *Sport England* website: <u>www.sportengland.org</u> gives some statistics. Type *adult disability* in the search box. This will give you a set of files. Each one is for a different region.

Typing Participation of Disabled People in Sport in a search engine will take you to a factsheet that has some overall statistics. The English Federation of Disability Sport has a great deal of other information. See: <a href="https://www.efds.co.uk">www.efds.co.uk</a>

For Wales, there are useful data in Section 7 of the report:

www.sportwales.org.uk/media/359174/scw%20equality%20scheme%202009-2012.pdf

#### POPULATION

In general, the population of the UK is over 60 million and about 20% of people have a reported impairment. However, this varies from place to place.

Statistics from the 2001 census might be useful. See the *Datasheet: General population statistics*. This has general statistics for each local council area.

Your local council will have key statistics on their website as will the local NHS trust. Using a search engine will give other sources of statistics.

#### DISABILITY

Some key statistics about disability are given in this document from the Papworth Trust: <a href="https://www.papworth.org.uk/downloads/disabilityfactsandfigures2010">www.papworth.org.uk/downloads/disabilityfactsandfigures2010</a> 100202152740.pdf
Also see the *Datasheet: Life opportunities survey*.





## **{TEACHER NOTES} INTRODUCTION**

realistically completed in the time available. Careful planning is required.

The Challenge is for 11-14 year olds to help disabled people find more disability sports in your school and local area. The Challenge is in two parts.

**Part (a):** to produce information about what is available in the local area now – students should create a map or other means of information to show disabled people where they can take part in as many disability sports as possible.

**Part (b):** to make recommendations to increase the disability sports that are available, in your school and nearby – the recommendations should be in a report that could be sent to a venue, to show the possible disability sports that it could offer. This should be for at least one organisation such as your school governors, the governors of a group of local schools or perhaps for the management of a local sports venue.

Both parts of the Challenge involve research which includes both internet research and surveys to yield their own data.

For Part (b), the students' recommendations must be supported by evidence and justification. Students should demonstrate that there is a need. They will have to select data to show this. Students should decide what statistical evidence they will look for, before starting work.

Students need to find out about facilities that are available beyond the school gate. To this end, access to a telephone or email would be helpful. There is no limit to the scope of what students might survey.

To find data about participation in individual sports, students will have to access reports on the national bodies' websites. Directions are given on the Factsheet *Participation data*. Students will need to be able to read spreadsheets, to obtain the data that they seek.

Eliciting just the information that students require from a report is a skill that may need some support. Students should work in teams of four to six people. Teams will need to manage their time effectively, sharing out different tasks. They must make sure they meet the Challenge Brief, but not take on more than can be

#### STARTER ACTIVITY

The *Starter activity* could be used to introduce the students to the Challenge. It is designed to get students thinking about disability sports and begin to consider the opportunities and difficulties for disabled people. The separate Starter Activity document provides more information.

## THE FACTSHEETS

The Factsheets provide information that the students may find helpful when planning what to do and developing their survey and report. The information may help the students to decide what the most important features are to include in both parts of the Challenge. Students should be encouraged to explore their own thoughts, decide on further research to carry out, and design their own survey.

Factsheets and Datasheets do not necessarily need to be printed out. They are there as a reference for students. Where possible, encourage students to look at the resources online.





## **{TEACHER NOTES} INTRODUCTION**

The Challenge Brief explains what the students need to do and provides some guidance on how to present their work. There is no set way of presenting outcomes. However, for Part (a), students should create something that is easy to understand and could be made available to a wide range of people. For Part (b), the report should be more formal, with identifiable sections. That said, it does not need to be a 'written' report, if students can create a telling way to put forward reasoned and justified recommendations.

It is important to present data and calculations clearly, and to find various ways to display findings. This includes the use of tables, charts and graphs.

Students may need help with:

- Using maps and inserting data on maps;
- Finding the relevant data from tables;
- Using graphs, bar charts and scales;
- Using charts to display qualitative data.

When developing presentations, the students should be reminded about features of good communication:

- Using a mixture of verbal, written and visual communication;
- Presenting technological information rather than emotive arguments;
- Using technological language and terminology correctly;
- \* Being able to talk knowledgeably about every aspect of the Challenge.





# {TEACHER NOTES} CURRICULUM LINKS (ENGLAND)

#### PROGRAMME OF STUDY FOR KEY STAGE 3

#### MATHEMATICS

#### KEY CONCEPTS

#### **Competence**

c. Selecting appropriate mathematical tools and methods, including ICT.

#### KEY PROCESSES

#### Representing

b. Choose between representations

#### **Analysing**

k. Make accurate mathematical diagrams, graphs and constructions on paper and on screen

#### Interpreting and evaluating

d. Look at data to find patterns and exceptions

#### **Communicating and reflecting**

a. Communicate findings effectively

#### RANGE AND CONTENT

#### **Statistics**

a. The handling data cycle





## {TEACHER NOTES} CURRICULUM LINKS (NORTHERN IRELAND)

#### PROGRAMME OF STUDY AT KEY STAGE 3

#### MATHEMATICS AND NUMERACY

- \* Research and manage information effectively to investigate and solve mathematical problems, using ICT where appropriate.
- \* Communicate effectively in oral, visual, written, mathematical and ICT formats, showing clear awareness of audience and purpose.
- Explore ideas, make and test predictions and think creatively.
- Identify and collect information.
- Read, interpret, organise and present information in mathematical formats.
- Use ICT to solve problems and/or present their work.





## {TEACHER NOTES} CURRICULUM LINKS (SCOTLAND)

## CURRICULUM FOR EXCELLENCE

#### NUMERACY AND MATHEMATICS

#### INFORMATION HANDLING - DATA AND ANALYSIS

I have carried out investigations and surveys, devising and using a variety of methods to gather information and have worked with others to collate, organise and communicate the results in an appropriate way. MNU 2-20b When analysing information or collecting data of my own, I can use my understanding of how bias may arise and how sample size can affect precision, to ensure that the data allows for fair conclusions to be drawn. MTH 3-20b

I can display data in a clear way using a suitable scale, by choosing appropriately from an extended range of tables, charts, diagrams and graphs, making effective use of technology. MTH 2-21a / MTH 3-21a





## {TEACHER NOTES} CURRICULUM LINKS (WALES)

## KEY STAGE 3 PROGRAMME OF STUDY

#### MATHEMATICS

- dentify what further information or data may be required in order to pursue a particular line of enquiry; formulate questions and identify sources of information.
- \* Read mathematical forms of communication, including tables, diagrams, graphs, mathematical texts and ICT.
- Present work clearly, using diagrams, labelled graphs and symbols.
- \* Evaluate different forms of recording and presenting information, taking account of the context and audience.
- Interpret mathematical information presented in a variety of forms; draw inferences from graphs, diagrams and statistics; recognise that some conclusions and graphical representations of data can be misleading; examine critically, improve and justify their choice of mathematical presentation.
- Use a variety of means to collect data in order to follow lines of enquiry or to test hypotheses, e.g. the internet, questionnaires, data collection sheets, experiment.
- \* Construct appropriate diagrams and graphs to represent discrete and continuous data, including bar charts, line graphs, pie charts, frequency polygons and scatter diagrams.
- ♣ Interpret information given in a wide range of graphs, diagrams and statistics, especially real-life data.
- © Compare sets of data and their distributions, including methods that involve correlation and lines of best fit.





## **{TEACHER NOTES} STARTER ACTIVITY**

This short activity could be used to introduce the Challenge.

Access to the internet and a media projector are required to deliver the session as a whole class activity.

- 1 Ask the students what is required to play a game of football: A football, goals, appropriate footwear, shin pads, kit and a suitable space (preferably a pitch with line markings)
- 2 Now ask the students to imagine that they have a visual impairment. If this were the case, what would be needed to play a game of football?
  - Same as above but with an adapted ball that enables players to hear it.
- 3 Next, ask the students what is required for the Triathlon (swimming, cycling, running):
  A wetsuit and other kit, a swimming pool and/or open water, a bicycle, an athletics track (if not training on the open road) and running shoes.
- 4 This time, ask the students what someone paralysed from the chest down would need if they wished to participate in the Triathlon:
  - A handcycle, a racing wheelchair, a swimming pool with wheelchair access and appropriate facilities for changing and entering/exiting the pool.
- 5. If disabled people want to participate in sport, there is a lot for them to consider arguably it is not as easy and straightforward to enter into sport as it is for people without a disability. In addition to the equipment and facilities required, disabled people may not be aware of the opportunities that are open to them.

  Show the students the Parasport website (<a href="www.parasport.org.uk">www.parasport.org.uk</a>). Click on CLUB FINDER, enter your school's postcode and search for nearby clubs that offer athletics (choose from the drop down menu). Repeat for other sports. This could be done as a whole class activity or the students could be asked to search themselves and then report back to the rest of the class.
- 6. This leads nicely into the Challenge Brief.





## **{ROLE MODELS}** DEAN SWANN



NAME: DEAN SWANN

ORGANISATION: WYG ENGINEERING LTD

JOB TITLE: ASSOCIATE DIRECTOR

#### 1 WHAT DO YOU DO?

I'm a general civil engineer managing one of our main offices.

#### 2 DESCRIBE YOUR TYPICAL WORK DAY:

I'm in the office most of the time monitoring current projects to check they're on track, deciding on teams to deliver new projects and mentoring junior staff. The rest of the time is spent out on site, or meeting potential new customers to bring in more work for the company.

#### 3. WHAT HOURS DO YOU WORK?

I usually work about 10 hours a day, although it can vary. Sometimes I might work from home or I can be travelling round the country or abroad meeting customers or visiting sites.

#### 4 WHICH SUBJECTS DID YOU ENJOY MOST AT SCHOOL?

Maths and Science definitely. I always wanted to be an engineer although I wasn't sure what kind and I was always fascinated by people like Brunel and the engineering advances made during the Victorian age. I wanted to be someone like them, putting things together and making things.

#### 5. WHAT QUALIFICATIONS DO YOU HAVE?

I did GCSE's and was going to study A-levels but was then offered an apprenticeship with a local steel company. I was able to study part-time whilst doing the apprenticeship and obtained a HND in Civil Engineering from Nottingham Trent University.

#### 6 TO WHAT DEGREE WERE STEM SUBJECTS IMPORTANT IN GETTING YOUR JOB?

A good grounding in any of the sciences and maths are important for civil engineering. A good level of written and spoken English is also very important as being able to communicate effectively is a key part of my role.

# 7. WHAT WERE THE MAIN FACTORS THAT ATTRACTED YOU TO YOUR CURRENT JOB ROLE?

I like the fact that what I do and the buildings I've designed are likely to be around long after I'm gone. Every day is a new challenge and every solution you think of is unique which makes it interesting.





## **{ROLE MODELS}** DEAN SWANN

# 8. HOW DID YOU GO ABOUT ENTERING INTO THIS CAREER/GETTING EXPERIENCE AND DO YOU HAVE ANY ADVICE FOR SOMEBODY LOOKING INTO THE SAME CAREER?

If you want there to be no limits on a career in engineering then getting a good degree is important so definitely go to university and complete a Civil Engineering degree. Be proactive and if you can, try and get a placement at an engineering office just to see what's out there. Even if you get some experience working in a non-engineering office environment, this will give you a feel for what it's like to be in the workplace. I would highly recommend learning another language especially as the international market is increasing. I'm trying to learn Russian at the moment and it is very challenging!

# 9. WHAT ARE THE BEST/WORST THINGS ABOUT YOUR JOB? WHAT DO YOU FIND MOST REWARDING ABOUT IT?

The worst is the non-engineering aspects of my job like accounting. If you want to work in engineering it's important to consider how much engineering you would like your job role to involve as it is very easy to move away from engineering completely. The best things are having the opportunity to travel and work in lots of different countries, it makes it interesting and you get to meet lots of different people. Also getting to see a building such as a school or hospital, that you have designed, fully constructed with people using it, is very rewarding.

#### 10. WHAT ARE THE CHALLENGES OF YOUR JOB?

The recession has been challenging as there is more competition now and you need to be able to provide the same level of service for less money so you have to learn to think and plan more efficiently. From an engineering perspective it is knowing when to say 'I don't know' and understanding when you need to call on someone else' expertise or when you can't do something that a client has requested.

# 11. WHAT HAS BEEN THE HIGHLIGHT OF YOUR CAREER SO FAR? WHAT HAS BEEN THE MOST EXCITING/INTERESTING PROJECT YOU HAVE WORKED ON?

My current project is probably my most interesting to date. I'm working with the organisers of the winter Olympics in Russia to provide them with advice on how they can improve disabled access to the games. One of the main issues they have is there is currently only one rail link to the host city which works fine but is not very disabled access friendly. They are keen that all venues have disabled access so wanted access to British expertise on how to approach this, particularly as they see us as the mother country for rail.

#### 12. HOW DO YOU HOPE TO PROGRESS IN YOUR FIELD OVER THE COMING YEARS?

I actually feel I've achieved my main ambition career wise and I'm very happy with my job role. My job allows me to have the authority to make decisions and to continue to use my engineering expertise. If I were to move up higher within my company then it is likely I'd have to do less engineering than I do now which I don't want to happen.

#### 13 WHAT PASSIONS AND INTERESTS DO YOU PURSUE IN YOUR PERSONAL TIME?

I have a pilot's license and I'm a member of a flying club. I really enjoy flying and try to go at least once a week. I also really enjoy being a STEM Ambassador. I did once want to be a Maths teacher so it's great to have the opportunity to go into schools as a volunteer.





## **{ROLE MODELS} ROXANNE GLAUD**



NAME: ROXANNE GLAUD

ORGANISATION: HERTFORDSHIRE COUNTY COUNCIL (HCC) - HIGHWAYS DEPARTMENT

JOB TITLE: ASSISTANT PROJECT MANAGER

#### 1 WHAT DO YOU DO?

I am part of the Major Projects team for Hertfordshire County Council. I manage the legal agreements and finances for the Croxley Rail Link project. In September, I will be taking on the role of project manager for the Hatfield Rail Station Interchange.

#### 2 DESCRIBE YOUR TYPICAL WORK DAY:

My day at work involves dealing with emails and telephone calls on any of the legal agreements, checking progress on current projects, managing project finances, managing and completing reports for the Department of Transport (DfT) and any other ad hoc issues that may arise.

#### 3. WHAT HOURS DO YOU WORK?

My hours are flexible. I normally work between 9.30 and 5.30pm depending on meetings. On days I attend the gym I work 9.00am - 5.30/6.00pm or 8.00am - 4.30/5.00pm.

#### 4. WHICH SUBJECTS DID YOU ENJOY MOST AT SCHOOL?

I found accounting was easy for me to understand. I also enjoyed technical drawing and needlework.

#### 5. WHAT QUALIFICATIONS DO YOU HAVE?

I hold a Bachelor of Science degree in Accounting and a Master of Science in Transport Planning and Management. I also hold a PRINCE2 project management qualification.

#### 6 TO WHAT DEGREE WERE STEM SUBJECTS IMPORTANT IN GETTING YOUR JOB?

I came into engineering after completing a Masters degree in transport planning and working as an intern in an engineering consultancy. This provided me with good preparation for the next stage in my career, managing projects and consultants. My background knowledge and experience meant I had a better understanding of road layout and design, helping me make the right decisions for my projects. My finance background also helped with managing project finances.

# 7. WHAT WERE THE MAIN FACTORS THAT ATTRACTED YOU TO YOUR CURRENT JOB ROLE?

Having worked in banking for 5 years I wanted a new challenge. I knew I wanted to do a job where I got to meet and work with more people and where I could work on something that would benefit the general public. When I first came to the UK I worked with London Underground for a year and that experience prompted my career change.





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#### 8. HOW DID YOU GO ABOUT ENTERING INTO THIS CAREER/GETTING EXPERIENCE

Whilst I was working at London Underground I wanted to learn more about transport management and so decided to pursue my Masters at the University of Westminster. As a postgraduate student, I enquired about an internship at an engineering company during my summer holidays which gave me 'a foot in the industry door'. This experience was useful as it was a project I was working on for my dissertation. When summer and my studies were over, the company asked if I wanted to work fulltime.

#### 9. DO YOU HAVE ANY ADVICE FOR SOMEBODY LOOKING INTO THE SAME CAREER?

I would suggest contacting consultants and local authorities regarding internship opportunities or graduate training programs. You must be proactive as companies may not advertise their graduate programs.

# 10. WHAT ARE THE BEST AND MOST REWARDING ASPECTS OF YOUR JOB? WHAT DO YOU FIND THE MOST CHALLENGING?

The best thing is seeing a project delivered and brought into public use. The most challenging is trying to convince the general public about the benefits of a new scheme or project and having to accept that some people are never going to be convinced it is a good idea! I guess I am an optimist in thinking that most people will ultimately want what's best for their town as a whole rather than only what will benefit them as individuals. Another challenge is trying to deliver projects within tight budgets and having to disappoint some people when this is not possible..

# 11. WHAT HAS BEEN THE HIGHLIGHT OF YOUR CAREER SO FAR? WHAT HAS BEEN THE MOST EXCITING/INTERESTING PROJECT YOU HAVE WORKED ON?

I have acted as an expert witness on two public inquiries where the Secretary of State gave approval for the projects to proceed. The first project, Royston Railway Crossing, was completed in 2011 and the second, Croxley Rail Link, will commence construction in 2014. I also successfully worked in partnership with the North Hertfordshire District Council to improve Baldock Town Centre and this work went on to win an award.

#### 12 HOW DO YOU HOPE TO PROGRESS IN YOUR FIELD OVER THE COMING YEARS?

I would like the opportunity to manage a big project from start to finish. At the moment, I may start a project but I'm not necessarily the person who delivers the final product. Many of the larger projects can go on for 20-30 years from inception to delivery, so hopefully I will have an opportunity to do this in my lifetime.

#### 13. WHAT PASSIONS AND INTERESTS DO YOU PURSUE IN YOUR PERSONAL TIME?

I am a personal trainer in my spare time and love working with people to help them lead a healthier lifestyle. I'm also a school governor at a London primary school and a STEM Ambassador volunteer, both of which I really enjoy. It's fantastic to have the opportunity to meet with young people and raise awareness of my career path.