## STEM – pathways and options. Ross Davies

#### Speaker -that would be me

Ross Davies

Postgraduate Environmental Biology

Part Time Events Assistant, S4 Project, Swansea University

#### What do you mean by STEM subjects?

Well, its not a leaf. STEM stands for:

Science

Technology

Engineering

Mathematics

#### What do I do?

Started off wanting to be a lawyer

Found out, I don’t like Law at all! It wasn’t for me

Found out I did like conservation though!

Now I look at these guys and how better to understand and protect them

#### STEM subjects, not all about a degree (honest!)

Don’t get me wrong, a career is the main thing

There are many different paths to take. After A levels you can do:

Foundation degree

Work in industry

Armed forces

Apprenticeship

#### What is the best option for me?

Only you know that answer. Looking at the averages:

More long term benefits from a degree with a STEM subject

More career pathways (40% of all jobs now ask for a degree)

More money (20% more over your lifetime)

#### University courses

STEM subjects include:

Physics

Chemistry

Computer science

Engineering

Competition is usually VERY high

#### That’s great but what can I expect?

The beauty of University, you make your own experience

Get a degree to get a better job but you learn a lot about yourself too

#### Getting to university

The hard part comes first, picking a course to study

Terminology is confusing! Sandwich, year in industry, year abroad, degree with foundation etc etc etc

Then an even harder choice, picking a place!

And to top it all, WHEN do you start your studies?!?

Only you can ultimately make those choices.

Remember if you make a mistake, it’s not the end of the world

#### The world of UCAS

99°/o people go through UCAS to go to

University

Deadlines differ for different things

15 October: Dentistry, Medicine, Veterinary Science, Oxford and Cambridge

15 January: Most other courses. Some Art and Design is 24 March

Five choices – keep two and discard three

#### Making an application stand out

Places can be competitive, good grades not always enough

Jobs, work experience, voluntary work

Courses – Summer university programs, pre-university courses, SPECIFIC work experience

#### Making it stand out

This is the most important aspect

This includes all of the paths to a STEM career/job/apprenticeship/armed forces etc

How do you do it?

#### Sell yourself

You need to sell yourself, don’t think it’s big headed, it’s not

If you had to read 100 applications, would you remember the average ones?

Only the really good or (or really bad) are remembered.

Truth of the matter, the rest are discarded and forgotten.

#### But Ross, I have no skills

If you think that, you are an idiot.

Everyone has learned skills all through school, activities, sports, working, projects etc

Its just a case of putting that in context

Good example – play an instrument and I learned how to time manage, dedication, going above and beyond etc

Bad example – play an instrument and am Grade 8

What does that have to do with STEM pathways? EVERYTHING!

#### I come to school, go home and sleep, nothing in between

Well OK so you live like a hermit, not a problem there is still plenty you can do about it.

It is never too late!

#### Terms

S4 Project-one option

I work for this program – spend a week doing 5 different STEM subjects

Do work experience with a scientist

The best bit, its all free and if you are unsure about what you want to do, it will massively help you

#### STEM – is it worth it?

It’s a priority for the WG and has been for the last decade!

Massive shortage of qualified professionals in the industry across the UK

There is soon to be a mass retirement of engineers in the industry which will lead to an even bigger shortage