



Making use of icould: Learning from practice

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1. Using icould to support professional practice

Introduction

icould, is an online careers resource which provides individual's with access to the work and life experiences of hundreds of people in the form of online careers films. The films are supplemented with labour market information and other resources. This approach seeks to provide both a self-directed resource for career explorers and a resource that can be used by career and education professionals to enhance their practice. In addition, icould provides a range of information, games, interactive activities and other resources that can also be used either directly by a career explorer or as underpinning resources for professionals working in the field. icould is a technically innovative product which utilises multi-media content, interactivity and social media in new ways to provide career support.

icould has become popular with career professionals and other educators and is frequently used as part of the delivery of career support. icould has produced a very useful suite of resources for teachers to facilitate its use in practice.¹ However, up until now there has been no investigation of the ways that icould is actually being used in practice. Consequently in this project we sought to draw this practice together and to present it in a way that might stimulate, inform and inspire future practice. To do this we recruited a diverse group of practitioners to form a community of practice (COP). The practitioners who were recruited to the icould community of practice represented a variety of contexts and professional backgrounds including:

- a self-employed career education consultant;
- a career education manager based in school;
- career advisers and careers service managers based in further education;
- career advisers based in higher education;
- a National Careers Service training and development manager;
- a university provider of initial education and training for career professionals;
- a career adviser based in a STEM related professional association; and
- a local authority careers service manager.

Practitioners were asked to share their ideas, learning materials and reflections on the use of icould. This report presents career practitioners reflections on the icould resource and on some new and interesting ways which icould can be used in careers work to support career development.

COP members were given a thorough introduction to the icould website by the icould management team. Despite the fact that many members were already aware of the resource many were unaware of the full content and potential of the website. COP members were asked to reflect on their discoveries and to experiment with them in practice.

¹ See <http://icould.com/teachersresources/>.

New insights on icould

I probably went through lots of different phases as a young girl of different jobs, you know, I wanted to be an air hostess or I wanted to be an archaeologist. You know, it was so extreme. I hadn't any sort of clear career path in mind. There was nothing that sort of jumped out at me at that point.

Eva Brodie, Train Driver²

It is easiest to illustrate the icould approach to career development through watching some of the site's films. The story of a ScotRail train driver called Eva Brodie provides a good example. Eva tells her career story, noting that she never had any really strong occupational goals. She went from school to university enjoying the experiences but without finding a clear vocational direction. Her decision to work for ScotRail was, at least in part, because she had a boyfriend who worked there. However, now that she works there she enjoys it and has moved into instructing new drivers.

The fact that Eva presents her story in such an honest and straightforward way makes it easy to miss how unusual this is as a piece of career learning. The themes that emerge from it around non-stereotypical jobs, the role of family and friends in career choice and the relative lack of importance of career planning are all presented without comment or advice. Furthermore Eva's story is the story of her life and her career, it is not the story of a day in the life of a train driver.

There are lots of other forms of information that people considering a career as a train driver might be interested in. Potential train drivers might want to know about salary, about the number of people being hired by railway companies, about the qualifications needed and so on. icould now provides much of this information through its link with LMI for All.³ However, the core of icould remains the insights that it offers into real people's career stories through its films. These films show how career fits into the context of a life; and also show how unpredictable career outcomes can be. This stands in sharp contrast to a version of careers education that emphasises the meticulous gathering of information and the construction of plans.

The kinds of perspectives on careers information and career exploration that are implicit in icould are made explicit in a range of contemporary writing about career theory e.g. in Mitchell, Levin & Krumboltz' (1999) writing on planned happenstance, Pryor & Bright's (2011) chaos theory of careers or in Savikas' (2012) work on life design and narrative. These theories foreground the idea of subjectivity and view the world as complex and frequently unpredictable for the individual career explorer.

Many COP practitioners responded well to icould's use of narrative to develop career insights and incorporated this aspect in their practice. They felt that icould was distinctive and innovative in its approach and also that it was an effective tool which

² See Eva Brodie, Train driver at <http://icould.com/videos/eva-brodie/>.

³ LMI for All is an online data portal, which connects and standardises existing sources of high quality, reliable labour market information (LMI) with the aim of informing careers decisions. This data is made freely available via an Application Programming Interface (API) for use in websites and applications. See <http://www.lmiforall.org.uk/> for further information.

their students could use to develop new insights with their clients. icould narratives are very personal and go beyond the provision of simple facts and figures to provide learners with access to authentic stories from working people. This is appealing to young people who indicate that they trust the opinions of individuals working in jobs (OECD, 2010). Research by the Education and Employment Taskforce and Deloitte (2010) found that two-thirds of young people and teaching staff would value employers coming into school to give talks. icould narratives provide opportunities to gain the insights of employers and working people in an easy to access way.

I was really pleased that the icould websites main focus is on personal narratives. Often careers websites focus in on routes, vacancies, skills and role descriptors (think National Careers Service⁴ and Prospects⁵). Partly this is good because it is good to have variety in careers websites, partly because video is a very consumable and accessible format and partly because it creates a more human experience of careers. It is this point that I am most interested in, careers after all are not generic but are experienced and deeply personal. Rather than try to remove the personal it makes perfect sense to me to exalt in the personal nature of careers.

Higher education adviser

The ideas of complexity, narrative, subjectivity and a longitudinal perspective are not merely things which make the site distinctive. Rather the icould approach draws on an analysis about how individuals pursue their career which, it is possible to argue, better describes the experience of the majority than the rational matching approach that underpins many career websites. The distinctive nature of icould raises the possibility that it can be used as a resource to help shift the paradigms within which people think about their careers.

The videos allow students to have an insight into certain careers. These are useful when students are not clear about what is involved in the career they have chosen. It gives them a better view of the career rather than just reading about it. We find these have impact in groups and in 1:1's.'

Further education career services manager

The stories in icould highlight complexity and encourage users of the site to recognise that their careers are unlikely to be straightforward progressions from A to B. This is not to say that strategies such as careful decision making or planning are worthless, but rather to draw attention to the fact that they are not supposed to be predictions of the future and recognise that careers are also going to require adaptability and resilience. The icould career narratives go beyond individuals' experiences of undertaking specific jobs and include detail of their career journeys into these jobs. Career practitioners regularly stress the need to develop the skills required to make and implement life-long career decisions in a complex and dynamic labour market. These career narratives illustrate this and offer an opportunity to reflect on this with students and clients. This is another popular feature noted by COP members.

⁴ See <https://nationalcareersservice.direct.gov.uk/>.

⁵ See <http://www.prospects.ac.uk/>.

I do like the way that the videos I have watched show the narrative and complex aspects of life and career. It helps to illustrate the need for career management skills.

Higher education adviser

The addition of detailed labour market information is a relatively new feature of icould. Each film connects to detailed LMI relating to the occupational focus of the film. This feature received very positive feedback from COP members.

Regional data and LMI development is always appreciated. It is nice that there is a vacancy search option which links to the job videos.

Further education adviser

The LMI stuff is great and the fact that there's an 'indeed' feed⁶ is also ace. I could definitely use this in my one-to-ones.

Higher education adviser

The icould site also offers an option to undertake a simple career assessment called 'The Buzz'⁷. By taking a short survey, users are likened to an animal which has characteristics which match to the answers provided by the user. Each animal is also matched to a number of different jobs which link to icould films. This approach helps users to widen their horizons by considering jobs which may hitherto be unexplored. This was a feature which was highlighted by some COP members as a way to help young people focus on a wider range of factors when making career decisions.

I like the Buzz questions as the basis for young people to think about their personality rather than always focusing on their subject. It might be an idea to trial asking interviewees to do the test themselves and see what they come up with. Obviously, it's important not to make it a 'pigeon-holing exercise' but it could be another potentially useful option.

Specialist careers adviser

I will soon be using the Buzz quiz with large groups of students who will be asked to complete it before we meet. They will then undertake a team activity and we will then look at their animal type and discuss if any of the preferences were apparent in the activity. I'm hoping it will give them a good framework for thinking about their strengths and weaknesses - particularly in relationship to a group task.

Higher education adviser

Each film/ job screen provides an opportunity to explore related films using a tagging system. This feature was identified as a useful feature by some COP members.

⁶ 'Indeed' is a job search website which collates information about existing job vacancies from a variety of sources such as newspapers, company websites and job boards.

<http://www.indeed.co.uk/>

⁷ See <http://icould.com/buzz/>.

The tags are great as they cover multiple options. I like how they cover aspects such as post 14/16/adult returners etc.

Further education adviser

How can icould engage career professionals to use the resource?

Online services and resources are increasingly important aspect of how people develop their careers and access careers support (Hooley, 2012). However, in order to get the most out of the internet both individuals and the practitioners who support them have to develop their competence in using these online tools in the context of career development. While some of this development is likely to be achieved through training and formal professional development, the speed of change in internet technologies means that often a process of innovation, experimentation, reflection and peer sharing is likely to be essential. With this in mind, the COP members were asked to reflect on new approaches to engaging practitioners in using icould. COP members provided a view on the extent that icould was being used amongst their colleagues and all felt that there was room to develop the use of the site in a variety of settings. There were a number of ideas for disseminating information about the site. These included promoting icould through:

- professionals regional and school-level networking events;
- using team meetings to review how the site could be used to support career learning;
- working with institutions marketing and engagement teams to see how parent information on websites can be linked to icould and
- working with partners such as AGCAS and the CDI to run conference workshops or to write articles for professional association's magazines; promoting the site through webinars, e-learning, online resources and social media.

2. Exploring new approaches with icould: ideas from the Community of Practice (COP)

Introduction

Throughout the project COP members explored new and innovative approaches to using and embedding icould in their practice. This section provides insights into the potential for icould. Each section is illustrated with examples which are presented as small case studies and any materials which have been developed are presented as links. Where electronic links are not available materials are presented in appendix 1.

Using icould to enhance existing resources

Increasingly, career practitioners are using technology to enhance the provision of careers information and advice in their own organisations. Many organisations have developed their own websites or social media channels. icould offers an easy source of content that can enhance existing resources. For example local authorities like Merton and Barnsley link to icould as part of their careers portals.⁸ Resources from the site are also linked to or are embedded in schools websites⁹ and other resources designed to support teachers, careers advisers and educators.¹⁰

icould houses its videos on YouTube¹¹ and permit organisations to embed a limited amount of the films in their own website or social media channel. The format of icould films also allows students to create their own resources and to bookmark or save pages into their favorites so that they can be retrieved at a later date. The COP members have experimented with the video content in a number of different ways and combined it with their own resources to add a new dimension and engage learners.

⁸ See for example <http://fsd.merton.gov.uk/ActivityDetail.aspx?ID=2256> and <http://fsd.barnsley.gov.uk/kb5/barnsley/fisd/service.page?record=447SpeRgmXw>.

⁹ See for example http://www.astorcollege.org/index.php?option=com_content&view=article&id=387:icould&catid=101:careers-11-career-research&Itemid=266.

¹⁰ See for example <http://www.mirandanet.ac.uk/associates/icould.htm> and <http://www.rescompass.org/english.1/tips-for-your-career.15/personal-experiences.43/icould-how-opportunities.493.html>.

¹¹ See <https://www.youtube.com/user/icouldstories>.

Embedding icould within an FE college website

At Hartlepool College we use our website¹² as a 'support intranet'. Career guidance practitioners direct students to it where applicable and write articles/content for the site. Owing to the way icould content is integrated into YouTube, they have been able to embed films easily. These films are featured on the front page of the website as well as within the 'working in...' articles. We have also produced Prezi¹³ presentations which have embedded icould films in them and which are used with students. These examples illustrate how icould can be embedded into aspects of ICT based career provision which are relevant to individual institutions.

At Hartlepool College we have also been using icould as part of our social media campaign to get students to think about careers. In particular we ran a campaign on Twitter¹⁴ around the idea of your first job (#firstjob). We linked to a lot of icould films as part of this Twitter campaign each of them hashtagged with #icould.

Using icould's labour market information (LMI)

Understanding what the labour market needs should be an important influence on people's career decision making. A great deal of research may need to be done to allow young people to explore the realism of their career ideas, as well as to examine how these ideas can be operationalised.

Alongside the icould films which offer qualitative insights into careers, icould also offers access to a range of labour market information and links to current employment opportunities. COP members working across the age range noted the usefulness of the LMI facility and experimented with different ways of facilitating learners to use the LMI available on the website.

One COP member spoke of how the college which they worked in had undertaken a careers event with young people in schools.

Using LMI data with students in year 10

We recently used icould LMI in a Nuclear Industry Awareness Day – delivered to learners in year 10 from a range of local schools. icould enabled us to tap into strong regional LMI and when asked, learners said the statistics were easy to understand due to the pictures used. The PowerPoint presentation produced by Hartlepool College can be found in appendix 1.

¹² See www.knowyourcollege.co.uk

¹³ Prezi is an online presentation tool. For further information visit <http://prezi.com/>.

¹⁴ See <https://twitter.com/knowyourcollege>

One COP member talked about using this LMI in the context of a further education college.

Using LMI data with FE students

I work in an FE college and use icould as a resource with most clients, usually the 'by region'¹⁵ and the section for each job which indicates which skills are important for that job. Many of the students are reluctant to leave the region or even the city where they live and the 'by region' facility can help to expand individual's horizons.

We have also recently been seeing a lot of 'walk in' customers who are looking at career change. The skill information provided by icould allows us to work with these customers to develop more targeted action plans.

Another COP member reported that the LMI data was also useful in the context of work with higher education students.

Using LMI data with HE students

My HE students are seeking well paid careers and sometimes this means that they limit their career choices according to what they think will be well paid jobs. The LMI information under each film provides a bit more of a realistic context for that choice and can help them to realise that there are other choices out there for them.

Using the Buzz to develop career insights

Career assessments provide a way to help individuals to think about their strengths and weaknesses and consider how these might apply to a range of vocational contexts. Young people who profess to have no ideas whatsoever may need a starting point for their career thinking. A stimulating online tool can help to develop initial career ideas which can then be used as a springboard for career exploration and discussions. There is a danger that the 'test and tell' paradigm offered by such tools can undermine personal autonomy and reinforce the idea that careers are necessarily linear. However, in the case of icould this is balanced by a strong focus on individual narratives across the rest of the site.

icould offers a simple career assessment (The Buzz¹⁶) to help stimulate career thinking. The Buzz is loosely based on the Myers Briggs Type Indicator¹⁷, but is designed to be completed quickly based on a small number of questions. The Buzz does not offer directive advice but rather matches individuals to animal characters which summarise various personality types. These types are then related to both famous personalities and a variety of jobs, which are in turn linked to icould films. While the Buzz does not have a

¹⁵ See <http://icould.com/regions/>.

¹⁶ See <http://icould.com/buzz/>.

¹⁷ See <http://www.myersbriggs.org/my-mbti-personality-type/mbti-basics/> for further information on MBTI.

strong basis in research, the practitioners in the COP generally found it very useful and employed it in a range of contexts.

One COP member talked about how she had experimented with The Buzz with her own children as a way of thinking about its usefulness in a primary education context.

Using ‘The Buzz’ with primary aged children: a parents’ perspective.

Recently I have involved my own 7 and 9 year olds who took the Buzz quiz. I filmed them taking the quiz. They enjoyed it if only because everyone likes talking about themselves (or is that just our family?) and one-on-one time with a tablet = good in our house. It was fun talking about why they answered the way that they did and what they agreed/disagreed with in the end. The quiz isn’t intended for primary aged children so the interpretation is a bit questionable of course, but the point was to just experiment and have some fun. Objective achieved.

I plan to look at some of the career films based on the results of their ‘animal type’. I suspect that might prove less engaging but I’m interested to see what they will make of the films and if we can find some jobs they have no knowledge of.

At the workshop we did discuss the idea that it could might branch out to provide resources aimed at primary aged children. I think this could be a wonderful resource to add to the mix and help younger children learn about the huge variety of lives being lived out in the world. The Buzz quiz animal concept is very engaging to little ones – just wait until you see my son performing as a lion – but the questions need work to help them understand what they mean.

Another example used the Buzz in the context of higher education.

Using ‘The Buzz’ to facilitate undergraduates thinking about employability

I used the Buzz as part of an employability workshop programme with first year undergraduate students from the Economics department. Before this session students have had a one hour lecture introducing them to some ideas relating to career decision making and the importance of early engagement, potential career paths, CVs and skills gaps. In addition students are asked to undertake ‘The Buzz’ to help them prepare for the workshop.

The intended aims and learning outcomes for this workshop are:

- * Provide students with an opportunity to develop and evidence team building skills
- * Provide students with a framework for discussing their strengths and weakness
- * Assist students in reflecting on their strengths and weaknesses
- * Build students’ awareness of the importance of transferable skills (such as team work) as part of their personal career development
- * Build students’ awareness of the graduate job market and recruitment practices for Economics students

I asked the students to complete the Buzz before the session and then to send me the results (their animal type) via an online form. This means I am aware of to what degree students have engaged with the pre-session work. It also means I can engage them with materials before we meet and can provide them with a reminder of their 'animal type'.

The students work on a team challenge activity in small groups during the workshop. Students are then asked to discuss and reflect on their indicated role within the challenge and consider whether they agree or disagree with the description. Following the team challenge students are then asked to reconsider 'The Buzz' quiz and are prompted with the following questions:

- * What animal am I? (reminders provided as necessary)
- * To what extent is my animal description/MBTI type reflected in my contribution to today's team challenge?
- * Do I agree or disagree with my description? Why? Why not?

Teams will also complete their reflective group statements:

- * Our team was good at...
- * Our team was weaker at...
- * If we were to do this activity again we would...

The majority (85%) of students completed the quiz before the session. (And some completed it during the session). In the discussions students were engaged with the topic and came up with observations of their own behaviours and tendencies, as well as for their peers. This was a non-threatening introduction to self-reflection which had the added bonus of offering students potential career outcomes. It was interesting to listen to students agree or vehemently disagree with Buzz quiz outcomes. This sparked off discussions of which career students were interested in pursuing and why. These are the outcomes I was hoping for so I feel the activity worked very well.

I plan to ask 1st year students to repeat their Buzz quiz again before the next workshop to see if their results are different. A colleague of mine who worked with me on the first workshop has chosen to use the Buzz quiz with another year one cohort.

Another COP member was working with adult clients in the National Careers Service. She also found it to be a useful tool for use with this group.

Using The Buzz with adults

As a career service provider and training manager I have noted that our training team has recently included icould and the Buzz as part of our training sessions. These have been promoted as an alternative to the Skills Health Check tools on the National Careers Service website. As our service changes I think this is a really useful tool as it's really short and snappy and something that could be done during a session or over the phone.

Using icould films in career lessons or sessions

A great deal of career learning is delivered in groups as part of career lessons or career workshop sessions. icould offers some excellent resources for practitioners who are developing and delivering career learning in this format. icould already offers some guidance on using its resources in this context through its teaching materials. Elsewhere Hooley *et al.* (2013) have looked at using icould¹⁸ with doctoral students and McCash (2011) has looked at how icould resources might support a career studies module¹⁹. However, given the richness of the resource it is possible to use it in a very wide range of ways and contexts. The COP members embraced the use of icould in all settings and demonstrated the flexibility of icould.

Using icould as a careers research resource

I am currently trying to use icould in a project I am conducting with a group of Air Training Corps cadets that aims to give them an insight into the process for applying for the Royal Air Force. Cadets are asked to consider their trade choices by conducting personal research using icould films to formulate questions and answers that are posed at a later date to RAF Careers. This helps to ensure that they have a complete understanding of their desired role. I envisage using this approach again in the future and will gather feedback from RAF Careers staff concerning the level of interview preparedness of a number of candidates in order to evaluate the impact of this approach and to make any changes for future use.

Other COP members used the films to support career learning in further education. One of the advantages of an extensive resource like icould is that it offers opportunities to select material that is appropriate to different curriculum areas which helps to tailor career learning sessions to different cohorts of learners.

Using icould in further education career development sessions

The careers team at our college have developed career sessions based around different jobs in each curriculum area. These sessions involve challenging stereotypical job options to allow learners to understand the range of opportunities available to them. icould films assist with this process in an interactive, informal manner. We have also used the LMI available on the icould website to show learners job opportunities/growth and statistics in each specific industry.

This allows us to enhance learner awareness of the opportunities available to them. This then promotes learner awareness of the job market and opportunities available to them. We then link this to positive outcomes for learners which are defined as learners

¹⁸ In particular using the set of films focused on researchers and made available through the Vitae Career Stories on Film resource <http://www.vitae.ac.uk/researchers/136961/Career-stories-on-film.html>.

¹⁹ McCash uses the icould film of Gabby Logan, Broadcaster and Journalist, <http://icould.com/videos/gabby-logan/> as a case study to stimulate discussion in the career studies module.

progressing into further/higher education, full/part-time employment or alternative training.

Using icould allows learners to see and hear from those working in each sector. Using the accompanying LMI supports learner exploration of career pathways too. We have seen this activity work when learners have been writing their personal statements for University or CV's for employment and Apprenticeships where we have seen an increase in awareness of the required skills and personal qualities associated with their specific application.

As icould is interactive and involves professionals talking about their roles, it adds credibility to our advisers talking about specific industries. By using icould to assist with career exploration and discussion, it is better than using paper-based career tools or just text online. The film approach works extremely well and as it can be accessed any time by learners, it is good that they have access to this 'bank' of career-related information at any time.

Where we have used icould to support career discussion and exploration, learners demonstrate a greater awareness of career pathways and opportunities and how they can form. This is hard to measure yet verbal learner feedback has been positive about the resource.

Another COP member, also based in further education, highlighted the adaptability of the resource.

Using icould with a wide age and ability range of clients

Our college uses icould films in career research and transferable skills sessions to help students of all ages and stages to understand how what they are doing at college can lead into many different opportunities. Our guidance officers use these films with people in 1:1 interviews. We have found that they are particularly useful to show to adults especially access students or those who are undergoing career changes who are coming back into education and have varying backgrounds. The films help students to identify with the individuals on the films and the different areas which they have previously not considered. The films have also been used to help some students who go out on placement to focus on their own experiences and to capture their learning more effectively.

Another COP member makes use of the films within higher education.

Using icould to support career planning with undergraduates

I work in higher education as a careers adviser. My aim is to design and deliver one-to-one career guidance and workshops around career planning as well as assisting staff in designing courses which support employability across the university. Recently I developed a group session to help students to think through career decision making and

career planning. I created a PowerPoint²⁰ and embedded a variety of film material including icould films to help them analyse other peoples' experiences and relate them to their own situation. Seeing films really helps students to build their personal reflection and thinking about their careers. Students like this approach and enjoy the stories. Other people's experiences can be safer and using multi-media in sessions helps to engage students more effectively.

As the examples so far demonstrate icould films can be successfully employed with a wide range of students and clients. The next example discusses one of the COP members use of icould films with doctoral students.

Using icould films with international doctoral students

I used icould films with doctoral students during a career choice session I ran in Portland (US). I used two films, which were the most suitable I could find for the session. They served two purposes: 1) to highlight different career choices (based on Hollands typologies (Holland, 1997) and 2) to show examples of planned and unplanned careers: The first (Paul²¹) showed an entrepreneurial career as well as demonstrating a more planned career with someone making use of the resources at their disposal. The second (Nicola²²) showed an industrial career and I was able to relate it to career theories around planned happenstance.

The films were of general use in the context of the workshop with the doctoral students, and I'll see if I can find a way to integrate them more thoroughly next time, now that I've trialed them. My issue is that there aren't enough examples I can use in the icould film bank as they focus too much on decisions made at school.

Using icould within the school curriculum

The public provision of careers information, advice and guidance for both young people and adults in the UK and specifically in England has undergone major change with the responsibility for the commissioning of impartial, independent careers information, advice and guidance devolved to schools (Education Act 2011). Whilst there has been a reduction in the statutory duties for schools to provide programmes of career learning and development to learners from the age of 11 (see Hooley *et al.*, 2014), schools continue to need to prepare pupils for their post 16 and post 18 transitions to education, training and employment (DFE, 2014).

The Government (DFE, 2014) has also stressed the importance of utilising the potential of new technologies as part of a comprehensive approach to career development stating that '*online tools can offer imaginative and engaging ways to encourage young people to think about the opportunities available to them*'. In this context icould seems timely as it

²⁰ See <https://slidebean.com/p/KGe3I2hgyh/Know-Thyself-The-key-to-career-success> to access the presentation.

²¹ Paul T.,-Managing Director, <http://icould.com/videos/paul-t/?yt=0>.

²² Nicola M., Research Technical Manager, <http://icould.com/videos/nicola-m/>.

offers a unique career resource which is free to users and has huge potential as a curriculum resource. The following example illustrates how icould can be used to stimulate career thinking within the science curriculum

Using icould to start discussions

I used the AQA scheme of work and a Collins AQA textbook to map icould films to specific modules or topics within the science curriculum. The curriculum resource that I have produced helps teachers and learners to make the (at times lateral) jump from text book to job. An example of that would be the aerodynamics expert in 'waves²³'. The idea there is that students studying light waves learn to bounce and bend light – just as a car designer does with air. This really helps young people to link what they are doing in a particular subject to jobs and areas of work which they may hitherto not explored. It is a great way of expanding people's horizons and make teaching and learning activities really relevant. Although I have only completed this for Science I fully intend to do the same for history and other curriculum subjects as the initial feedback has been good. People are using the links as tops and tails of lessons, or to demonstrate the application of a principal.

This resource can be found in appendix 2: Stratford school icould videos mapped to curriculum topics

Using icould to develop career practitioner skills and knowledge

Recent changes in the provision of career development services have required changes and adaptations by those commissioned to deliver them. There has been a recent emphasis on increased professionalism and a corresponding need for some in the careers sector to upskill and seek higher level qualifications (Careers Profession Task Force, 2010). The new duties placed on schools have also meant that more teaching staff are becoming involved in the delivery of career learning and development activities and these people also require opportunities to review their knowledge and skills through continuous professional development activities (Hooley *et al.*, 2015). The COP members explored how icould could be used to support skill development amongst the careers workforce. icould offers a unique and readily available insight into individuals career progression and decision making approaches and as such offers a useful discussion tool to support training and development activities.

²³ Steve H Aerodynamicist <http://icould.com/videos/steve-h-2/>.

Using icould as a CPD tool with career guidance practitioners

As a career development trainer I used icould as part of a training session with advanced careers practitioners in an FE college. One of the icould stories was used as a training aid. It is not always easy to provide practical activities when teaching career theory.

In this case I taught the group a range of theories including both traditional theories and emerging theories. I gave the group a handout with all of the theories summarised. I then showed a clip of an individual who had a very convoluted career path which had been heavily influenced by her family. The group members were asked to think about what theory told us about this persons influences and how, if they had been the adviser they would have developed their approach based on this knowledge.

The session worked really well. We had a great discussion and it gave a real practical context for the training. I liked this as it was so much more interesting than a written case study. It made the topic seem very relevant to the trainees. It also introduced them to I could so a win-win all around! I will certainly use this again.

Another COP member discussed how icould had been used to support the training of school teachers.

Using icould as a CPD tool with school teaching staff

I undertook some training with secondary school teachers. I incorporated the 'Making choices at 14²⁴' film into the session in order to focus them on how to improve the option choosing process within their school. The approach used was that having shown the film, I asked them to brainstorm all the advice that they tend to routinely give to their students and then to categorise their motivations for giving that advice. From that it became easier to put together a school policy for having career conversations with young people.

²⁴ Choices at 14 <http://icould.com/article/choices-at-14-choosing-your-options/>

3. Future thinking for icould

Introduction

The COP members have highlighted a number of ideas which could form recommendations for the use and development of the website. These are highlighted in this section.

Lessons for practice from the COP: New uses and creative ideas for icould

Using icould to stimulate discussion. icould films provide an ideal stimulus for a discussion about careers. This might be employed in the context of a careers lesson or within another curriculum subject. For example the film of Ryan S²⁵ who is a Formulation Scientist for Pfizer demonstrates the link between learning in Chemistry to the job of creating formulations of new drugs that will be used in clinical trials.

Using icould to support subject choice. Icould films provide a useful platform to encourage thinking and discussion around subject or option choices. For example the film of Jonas E²⁶ could be used by sociology teachers as part of their pitch for year 9 or 11 options.

Using icould films to provide students with career models and inspiration. The icould films offer an opportunity to develop action planning and problem solving approaches. The lifelong perspective offered by icould films helps students to see that where they start from (e.g. their current course) does not necessarily determine where their career goes. icould highlights the range of complex paths that people's lives and careers take. Recognising this can help students to think about their strengths and their transferable skills as well as about the discipline that they are currently in. The film then provide examples of the ways in which people have developed their careers which students can use for inspiration.

Using icould films as part of online career support. Increasing numbers of careers providers are developing resources and campaigns online. icould films are ideal as a component of this kind of online delivery of career support.

As a basis for homework activities. icould films and transcripts could be used and embedded in homework activities. This could provide young people with a facilitated introduction to icould with research tasks to complete. This could go beyond careers-related research and encompass activities designed to support a range of curriculum subjects (see appendix 1 for links from science modules and topics to a range of icould films)

²⁵ Jonas S Formulation Scientist, <http://icould.com/videos/ryan-s/>

²⁶ Jonas E, Senior Management Consultant, <http://icould.com/videos/jonas-e/>.

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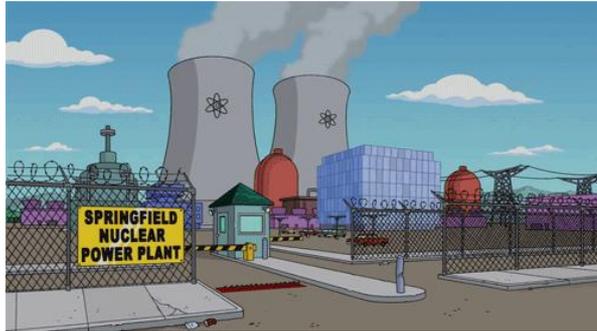
Appendices

Appendix 1: Hartlepool College- Careers in the Nuclear Industry

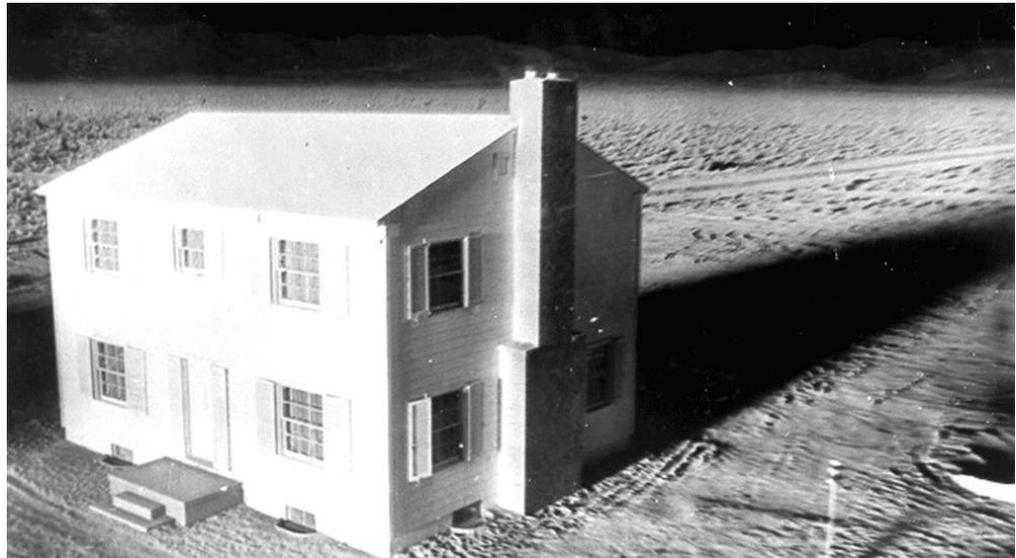
Statistical data from:



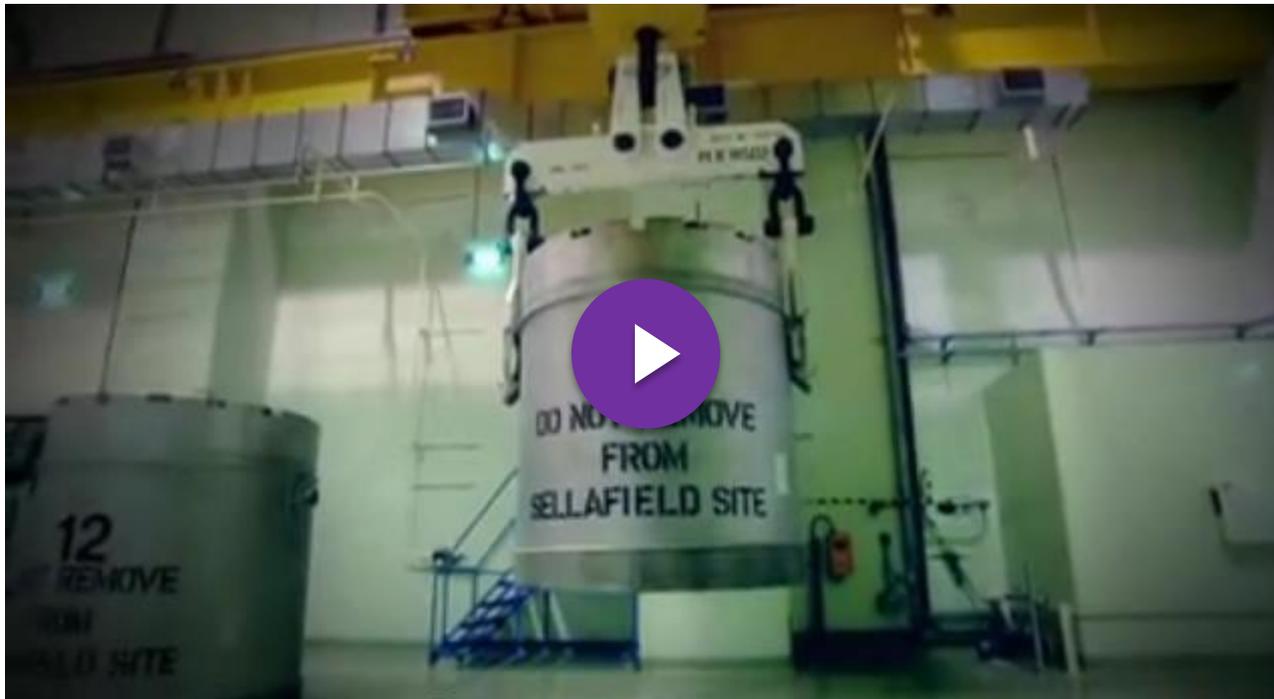
Working in the Nuclear Industry



The myths:



The Reality:



Did you know?

The UK nuclear industry directly employs over 50,000 people in the UK.

There are 16 operational nuclear reactors located at nine plants.



Sellafield
Plant

Did you know?

But most of these nuclear reactors are nearing the end of their lives and without new nuclear power station builds, by 2025 only Sizewell B would be generating electricity.

At its peak during the 1990's about 28% of all the UK's electricity was generated in nuclear reactor power stations.



Sizewell B



Hartlepool

Where are they?

- Sites currently generating
- Shut down sites
- Confirmed new sites



Statistical data from:



STEM career balance:

Male 75%
Female 25%

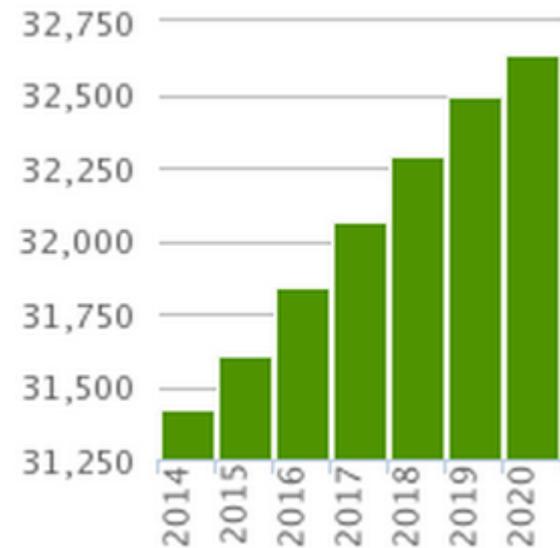


Statistical data from:



Predicted Employment:

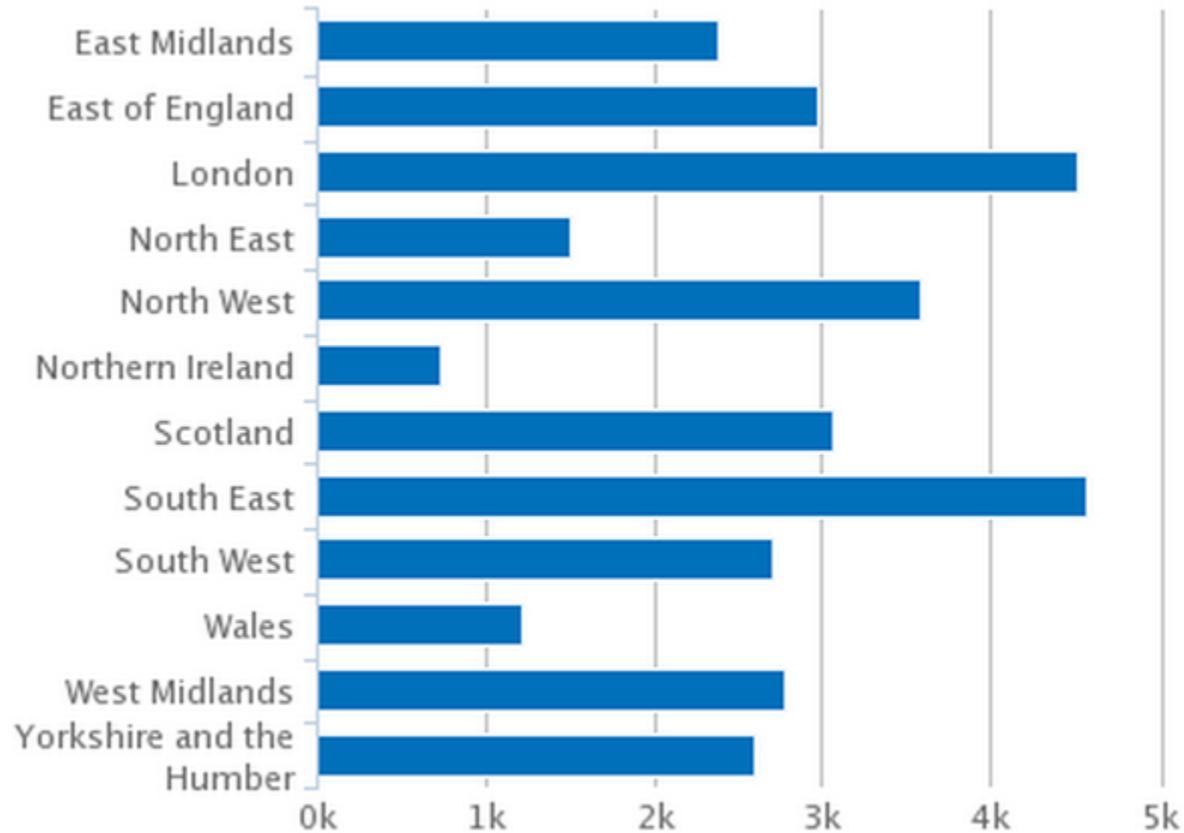
Jobs requiring STEM skills are continuing to grow leading to lots of employment and training opportunities!



Statistical data from:



STEM Employment by region:



Find more Labour Market Information at:

icould Inspiration for your career

Log in to mycould

Career Videos / Focus On / Articles / News / Resources / Regions / About

LATEST NEWS Careers Calendar

icould is the place to be for career ideas, first-hand info, and inspiration on what to do next

explore ideas
Use the career wizard to find out what jobs could suit you

could you do that?
Browse career videos by job type to get inspiration

choose your subjects
Check out links between subject choice and career

discover your potential
Get help making decisions for your future

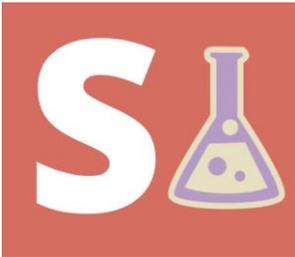
icould Find out how your favourite subjects could help you find a job you love

videos by subject

Explore your options with our real-life career videos, articles and quizzes or get help making choices.

What's new? Careers in healthcare Focus On...

The importance of STEM: Science



Decades in the making, Iter, a huge experimental nuclear fusion reactor in rural France, could be the site of breakthroughs that will provide limitless, clean energy and secure the planet's future!



Iter, France – Jan 2015

The importance of STEM: Technology



Nuclear technology is technology that involves the reactions of atomic nuclei.

Among the notable nuclear technologies are **nuclear reactors, nuclear medicine and nuclear weapons.**

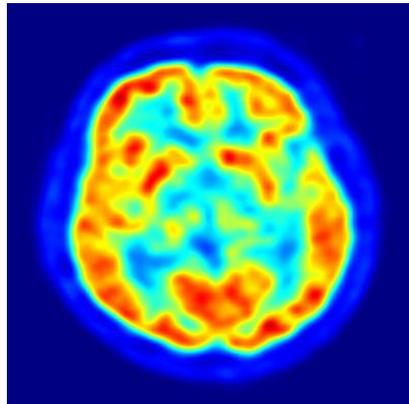
An example would be that of:
smoke detectors!



The importance of STEM: Engineering



Nuclear engineering is the type of engineering concerned with the breakdown (fission) and fusion of atomic nuclei.



MRI / CAT / X-Ray and Thermonuclear weapons have been created from STEM pioneers.

The importance of STEM: Mathematics



Maths usage varies but can be used in the following ways:

If computer coding

When working in instrumentation and control

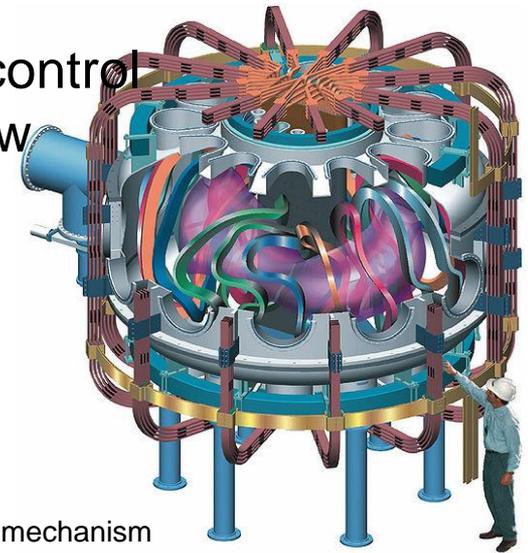
Working with heat transfer and fluid flow

Neutron transport

Shielding work

Nuclear criticality

Nuclear safety



Cooling plant mechanism

Careers:



COGNET allow you to explore different careers in the Nuclear Industry with an easy-to-use career planner.

<http://sciencecareerpathways.com/home/>

Resources:

<http://www.nuclearisland.co.uk/education-providers/>

<http://www.sciencecareerpathways.com/nuclear-careers/>

<https://www.nsan.co.uk/thinking-working-nuclear>

<https://nationalcareersservice.direct.gov.uk/advice/planning/jobprofiles/Pages/nuclearengineer.aspx>

www.icould.com

Appendix 2: Stratford School- Mapping icould films to curriculum topics

Subject	Science A
Exam Board	AQA
Specifications	B1 C1 P1
Year Group	10

BIOLOGY B1.1 Keeping Healthy

Diet and Energy

<http://icould.com/videos/nicola-e/> Nicola E is a **senior nutritionist**, she works in the community encouraging people to eat healthily. She describes getting her GCSE results as a "massive turning point" as she did much better than expected and went on to gain 3 A Levels and then a degree in nutrition. She really enjoys seeing the results of her work in her patients, "they're feeling better, they're having a healthier diet, some of their health problems are getting much better and they're smiling with confidence".

<http://icould.com/videos/julia-s/> If working with inspirational children, making a difference to individuals' lives and supporting families sounds appealing, then **Paediatric Dietician** may be a career for you. Julia S would recommend it to anybody. It allowed her to build on her achievement in Science and to combine her love of food and talking!

<http://icould.com/videos/laura-m/> When Laura left university she didn't have a career plan. She tried a number of jobs, all valuable learning experiences, and when she discovered that the Health Service would pay her to talk about food she never looked back! As a **dietician**, specialising in helping patients with liver problems, it is hard to believe she is the same Laura who lacked confidence and struggled at school.

Exercise and health

<http://icould.com/videos/caroline-r/> Caroline copes with never-ending exams and the upset of working with people who can be really ill, because she loves helping people and making a difference. She enjoyed the sciences at school, studied Human Sciences at university and took a gap year before looking at the NHS careers web site. **Cardio- Physiologist**

<http://icould.com/videos/daniel-b-2/> Daniel B is the **Operations Manager of a Virgin Active health club**. He is very sporty - he was a national standard swimmer at twenty. He did sports and exercise science at university, supporting himself with an evening job as a lifeguard.

<http://icould.com/videos/paul-c-3/> **Sports Development Manager**. Paul enjoys encouraging people to be more active through the range of venues owned by Lee Valley Park. He is looking for people who are committed to providing a great experience to everyone who comes through the door. When he was younger Paul loved sport, his first role was a life guard and then he became a leisure centre manager. He went back to university later in life and obtained a sports development degree.

<http://icould.com/videos/huw-d/> **Personal trainer** Huw is passionate about sport and gains real satisfaction from supporting others to achieve their goals. A serious rugby injury when he broke his neck led him to re-assess his life and he works hard to stay at the peak of fitness.

Pathogens, disease and infections

<http://icould.com/videos/steve-t/> Steve T is a Senior Scientist at Pfizer. His work involves adding information onto the human genome with the objective of alleviating pain and **disease**.

<http://icould.com/videos/karen-j/> Karen J is a Student Homeopathist, "We learn all about **pathology and disease**, we learn symptom pictures of diseases, and we also learn the different remedies."

<http://icould.com/videos/ryan-s/> Ryan S is a Formulation Scientist for Pfizer. He loved science at school. His job, which involves creating **formulations of new drugs** that will be used in clinical trials, is as good as he imagined it would be when he was younger. "I really enjoy putting on a white coat and pretending to be Albert Einstein."

Drugs and antibiotics

<http://icould.com/videos/andy-b/> For lovers of chemistry, biology and people, Andrew recommends pharmacy as a great way forward. Having ruled out farming (no time for summer holidays) and banking (maths A level put him off) he followed his passion and aptitude for Science, and as a **pharmacist** now enjoys the challenge and responsibility of making sure patients get the most appropriate medication and understand the drugs they are taking.

<http://icould.com/videos/kathryn-p/> Kathryn went to catering college after school and enjoyed a career in the restaurant and catering industry. When she had children she found the working hours did not suit family life. After a short period working in a supermarket, she saw an advert for a pharmacy store assistant. She got the job and has since worked her way up to a **pharmacy technician**.

<http://icould.com/bkarticle/career-profile-pharmacist/> Article on being a **Pharmacist**

<http://icould.com/videos/leanne-p/> Leanne always knew she wanted to work in Science, but wasn't sure exactly what she wanted to do. After a degree in Biochemistry and Forensic Science, she found it difficult to get a job straight away while she narrowed down her options. She then got her current position as a **Microbiologist** (food industry)

B1.2
Nerves and Hormones

Coordination

<http://icould.com/videos/lora-l/> Lora L was backed by The Prince's Trust to set up her own business **designing jewellery**. One of her proudest moments was when the Duchess of Cornwall appeared on TV wearing one of her creations

Nerves, Reflex, controlling the body

<http://icould.com/videos/andrew-j/> **Consultant Anaesthetist** Dr Andrew J grew up watching his father work as a Doctor, and chose to follow this route. On his specialism he says "The thing that really excited me was the very very unwell, very sick patients coming in who needed immediate resuscitation and the anaesthetist would race down and take control of the situation, and without a bead of sweat or anything they'd have things under control."

<http://icould.com/videos/dr-aung/> Dr Tun Aung is a consultant in **rehabilitation medicine** specialising in helping young people recover and lead full and active lives.

<http://icould.com/videos/dr-gabir/> **Rehabilitation doctor** Dr Gabir came from a family who had a history of studying organic chemistry, however her love for biology and dislike of bad smells lead to a medical career.

Hormones and fertility

<http://icould.com/videos/jeanette-c/> Jeanette loves her work caring for babies in the **special care unit**. She accepted the post there even though it terrified her and she is rightly proud of everything she has learnt and achieved.

Control in plants

<http://icould.com/videos/amy-e/> Amy E is an **ecologist**, she enjoys "getting to run around the woods finding wood crickets buried under hedges." She says "I was kind of a bit split at school between drama and science... I'm like, 'what do I want to learn today? What do I want to find out about? What's curious today?' It's pretty cool"

<http://icould.com/videos/jacek-j/> Jacek grew up on a farm with his parents in Poland. He always had an interest in science and started thinking about **food and plant science** from an early age. He moved to Krakow to study food technology at university. As part of his course he had the opportunity to travel to the UK.

<http://icould.com/videos/natasha-h/> Natasha H is a Senior Technical Manager growing herbs. "There's always a challenge in fresh produce. There isn't a day that's the same"

<http://icould.com/videos/tom-s/> Tom S works at Humber VHB as a **Plant Research Assistant**. He does experiments to find better crops.

B1.3 the use and abuse of drugs

<http://icould.com/videos/andy-b/> For lovers of chemistry, biology and people, Andrew recommends pharmacy as a great way forward. Having ruled out farming (no time for summer holidays) and banking (maths A level put him off) he followed his passion and aptitude for Science, and as a **pharmacist** now enjoys the challenge and responsibility of making sure patients get the most appropriate medication and understand the drugs they are taking.



<http://icould.com/videos/patrick-h/> Patrick H is a Senior Academic Fellow in pharmacology at the University of Edinburgh, he describes it as "a combination of designing and implementing research projects and teaching graduate, undergraduate and visiting students and also supervising post doctoral research scientists". Despite being more interested in rugby than studying for A levels, Paddy made it to university and discovered a passion for chemistry and biological sciences.

<http://icould.com/videos/ryan-s/> Ryan S is a Formulation Scientist for Pfizer. He loved science at school. His job, which involves creating **formulations of new drugs** that will be used in clinical trials, is as good as he imagined it would be when he was younger. "I really enjoy putting on a white coat and pretending to be Albert Einstein."

<http://icould.com/videos/dwain-c/> Dwain C is an Athlete who is hoping to compete in the World Championships next year. He's working to make a comeback after being **banned from athletics for taking drugs**. "At the time I never believed that I would get caught. Came to dread the day when I did and it was the worst feeling ever. Everything I'd worked for since I was 14 years old, even before that, had just totally been wiped away."

<http://icould.com/videos/matthew-b-2/> Matthew B is a student studying counselling and hypnotherapy, supported by The Prince's Trust. When he was **in prison for drug** and shoplifting offences he realised he wanted to turn his life around and the Prince's Trust is helping him to do that.

<http://icould.com/videos/alan-n/> **Drug Dog Handler** Alan N describes his dogs - "They are part of the family, they live in the garden, when they're not at work, they're just like normal dogs." He did not enjoy school - "I felt as if everybody was in front of me." Alan has since gone on to take his qualifications as an adult and find a job he loves.

B1.4 -1.8

Environmental Change

<http://icould.com/videos/joanne-f/> **Environmental Scientist**, Joanne F, was disappointed when Genetic Engineering at Leeds was oversubscribed. Studying Chemical Process Technology, and a further environmental degree (involving a one year work placement with E.ON), has led to a successful and fulfilling career with great prospects. Inspired by family, Joanne is relishing her current role at E.ON as an Environmental Specialist.



Pollution

<http://icould.com/videos/jenna-l/> Armed with a physics degree and gap year experience in Australia, Jenna L joined E.ON and is pursuing a varied and rewarding career. Variety in her work, opportunities to travel abroad e.g. Brazil, and later, when she started her family, the flexibility to go part time, have ensured Jenna's loyalty to the company. Her current projects involve looking at the **effects of electricity generation on the environment**.

<http://icould.com/videos/harry-s/> Harry S is a **Sustainability Advisor** with Halcrow. He can save a coral reef by telling the engineers to move their project half a mile down the coast. He always wanted to be a biologist. His job has taken him to Siberian forests, at temperatures of -35C°.

<http://icould.com/videos/charlotte-s/> Charlotte S is a **Pollution, Prevention and Control Officer** for the Environment Agency - "you could say I'm a policeman for the environment". She found it a challenge being a woman in Chemical Engineering but had support from her University Professor.

Recycling

<http://icould.com/videos/matt-b/> Matt B is a **Fisheries Technical Officer** for the Environment Agency. "I'm here to improve river habitat, improve fish populations and also improve access for anglers."

<http://icould.com/videos/david-f/> David F works for the Scottish Parliament as **Environmental Manager**. "I did a piece of volunteering while I was working for Preston city council a small piece of work that then actually got me my first formal job in the environmental field" He has a degree in Environmental Science.

<http://icould.com/videos/adrian-b/> Adrian completed an apprenticeship and worked as a car mechanic before obtaining his PSV licence and becoming a driver. **Waste Operations Driver**

Genetics

<http://icould.com/videos/steve-t/> Steve T is a Senior Scientist at Pfizer. His work involves adding information onto the human genome with the objective of alleviating pain.

<http://icould.com/bkarticle/my-job-explained-clinical-scientist/> ARTICLE The fight against disease takes place as much in laboratories as on the wards. Read on as Sam Holman explains how she puts her scientific knowledge to the test as a **clinical scientist in genetics**.

<http://icould.com/videos/helen-s/> Helen S is a trainee **molecular geneticist**, she did well at GCSE, but not so well at A Level. Taking a job in a bank, she studied Biology at university but found studying whilst working hard. On her job she says, "it's good working in an environment like this because there is always something new being identified or discovered."

CHEMISTRY C1

C1.1 Atoms, elements, compounds

<http://icould.com/videos/luke-s/> Luke joined the army straight after school but left after a short time. He then spent time working as an estate agent and taking an IT course at college. Influenced by his father, a process worker for National Nuclear Laboratories, at 23 he applied for an apprenticeship in **Nuclear Chemistry**. He now feels it was the best thing he could have done and has enjoyed the combination of learning and earning



<http://icould.com/article/get-technical-at-cern/> article and video on **CERN**

<http://icould.com/videos/katherine-g/> Katherine always likes sciences at school, with her favourite subject being Chemistry. She studied Chemistry at A-level and then went on to a degree in Chemistry. She feels that this may not have been the right choice of degree for her but it has now led to her current role as a **laboratory technician**, specialising in food science.

C1.2 Limestone and building materials

<http://icould.com/videos/mark-w/> Mark W is an **Architectural Technologist** and Design Director for Colliers International (formerly Colliers CRE).

<http://icould.com/videos/stuart-t/>

Stuart T is a Key Account Manager for **Aggregate Industries**. He did work experience for Aggregate while he was at University and they offered him a job. "It seemed like it was a very, very good career path for me, and lots and lots of career opportunities within the company."

<http://icould.com/videos/rob-p/> Rob Parlmer is a **Geologist** at Stancombe Quarry near Bristol. "I chose geology, really, because I had this genuine interest and passion for it which stemmed from, I think, my Dad [who] does building work and landscaping and gardening and things like that."

C1.3 Metals

<http://icould.com/videos/dan-c/> Dan C is a Market Analyst for Johnson Matthey's Precious Metal Marketing Group. He tracks the **global supply of the platinum group metals** which Johnson Matthey use to manufacture their products. This involves going to places like South Africa and Russia where the metals are dug out of the ground. Dan studied chemistry at school and university.

<http://icould.com/videos/ronnie-g/> Ronnie G is an **Engineer** at ScotRail, working on continuous team development. He's worked in engineering since he was 15, except for a spell in his thirties when he went to university, got a law degree, worked in law, then decided it wasn't for him and went back to engineering.

<http://icould.com/videos/stephen-p-3/> Stephen P is a **Naval Architect** at Carnival Shipbuilding. He was inspired by a Blue Peter story about the QEII when he was seven years old.

<http://icould.com/videos/bogi-h/> Bogi analyses future trends in the **oil and coal markets** and works for E.ON in Coventry. He looks at how energy demand is going to develop in the world and finds his job 'fantastically interesting'.

C1.4/1.5 Oil

<http://icould.com/videos/nicola-m/> Nicola M manages teams of research scientists at Johnson Matthey. "And those teams are developing new products for the oil and gas industry. The gas that comes into your house - when it comes on-shore from the oil fields, it's contaminated with impurities such as sulphur and mercury, so we develop products that actually **purify the gas and the oil**". Her work has taken her to the USA and to India, where they were not used to having women scientists in the workplace.

<http://icould.com/videos/paul-w/> Paul W is a Sales Manager for Johnson Matthey in their **oil refineries sector**. He is very happy in this job and he puts this down to his philosophy of not trying to plan out his career in advance and taking opportunities as they came. "If I'd closed off everything at the age of 18, there'd have been a whole lot that would not have been possible for me."

<http://icould.com/videos/renny-t/> Renny T is a prosthetic technician in a hospital. "My job involves making orthodontic appliances, and facial and body prostheses for patients in the hospital.....I make fingers, eyes, ears, noses and ordinary dentures." **Plastics**

<http://icould.com/videos/carl-t/> Carl works as a Shift Team Leader at PPG **Paint production** and as a reserve firefighter for Suffolk. At the paint producing plant he supervises the safety, production and quality control and he sees that targets are met

<http://icould.com/videos/sharon-h/> Sharon H is Manager of the **Engineering Group at Lola Composites**. She says "I wanted to work in the sports industry but as I needed money as a student I did a job in Lola. I found I was actually quite good at organising things and Lola they offered the position of being a project engineer which I took up with open arms... New management recognised my skills and promoted me to manager of the engineering group."

C1.6 Plant Oils

Bio Fuels

Plant oils/food

1.7 Changes in the Earth and atmosphere

<http://icould.com/videos/dan-m-2/> Dan is responsible for ensuring that E.ON keeps abreast of **government policy on energy matters**. He initially wanted to do physics but changed to biology after his A levels and completed a masters degree in environmental science. He has a strong interest in philosophy.

<http://icould.com/videos/tom-s/> Tom S works at Humber VHB as a **Plant Research Assistant**. He does experiments to find better crops

<http://icould.com/videos/peter-s-2/> Peter S is a **food technologist** for CAFRE. He says, "it involves quite a variety of jobs... at the moment I'm predominantly involved in education, but I'm also involved in working with the local food industry on numerous projects from developing new products ,to helping them design factories, to helping them with legislation.

<http://icould.com/videos/rob-p/> Rob Parlmer is a **Geologist** at Stancombe Quarry near Bristol. "I chose geology, really, because I had this genuine interest and passion for it which stemmed from, I think, my Dad [who] does building work and landscaping and gardening and things like that."

<http://icould.com/videos/owain-s/> Owain S is a **Hydrologist** with the Environment Agency - he monitors the quality of the water in our environment. He did a Geography degree and Science A levels. He started work with the Environment Agency as a temp and from there was able to apply for internal jobs.

<http://icould.com/videos/james-h/> James enjoyed geography and sciences at school and went on to choose Geography for his degree subject. He volunteered for the citizens advice bureau whilst at university and this helped him gain a job there when he finished his degree. He now works at the Environment Agency and an **Environmental Officer** and relishes the variety within the role.

<http://icould.com/videos/andrew-m/> **Flood and coastal risk advisor** On completing his A-levels, Andrew knew that he didn't want to go to university. He thought about joining the police and spent some time as a volunteer constable but his love of geography and the outdoors led him to the Environment Agency. He joined the Environment Agency on their Foundation Degree training scheme and is now gradually developing both his career and academic qualifications. He feels he has found a job that he loves doing and enjoys the variety of time in the office and out wading in rivers!

<http://icould.com/videos/matt-h-3/> Matt H is **Principal Consultant on climate change** at the Met Office. He says, "We provide weather not just to the UK weather forecasts and insight into climate but for the whole globe... we support our military all over the world, we provide half the world's airline forecasts above 10,000 feet and of course the BBC and media contracts like that".

<http://icould.com/videos/manna-w/> Manna W is an **Environmental Officer** for the Environment Agency. She was diagnosed with Leukaemia at 17 so she wanted to make sure she had a full life. She says, "I had a ten year plan and I wanted to go to university. I wanted to travel... I had a big list of all the things I wanted to do. I've done most of them."

<http://icould.com/videos/david-f/> David F works for the Scottish Parliament as **Environmental Manager**. "I did a piece of volunteering while I was working for Preston city council a small piece of work that then actually got me my first formal job in the environmental field" He has a degree in Environmental Science.

<http://icould.com/videos/linda-k/> Linda K is a natural **environmental Research Fellow** at the University of Edinburgh, "Basically I do research in geological sciences focussing on research in Taiwan, looking like how a mountain was built and what the sediments that are preserved in the geological formations can tell us about that process". She has carried out research in many different places around the world, following her passion for geology.

<http://icould.com/videos/simon-d/> Simon D is a **Cartographer** with the Forestry Commission. He studied Geophysics "I enjoyed creating sort of models from the data we'd collected, so creating sort of 2D or 3D models. We went out and did geological mapping surveys which I quite enjoyed... I would like to develop my job pushing the boundaries of the use of cartography and GIS".

PHYSICS P1

1.1 Energy forms

<http://icould.com/videos/matt-h-2/> Getting a first in his **Energy Management** in Business degree was a huge turning point in Matt's life. Frustrated at school by his learning disability Matt left to work in marketing and PR and quickly set up his own business. He travelled and worked in New Zealand and then, building on the success of his degree, Matt joined the Eden Project as Energy Manager, a role he loves.



<http://icould.com/videos/daniel-b/> Daniel has a systems engineering degree and works in **energy conservation**. Following his earlier career in the defence industry, he had to make a big decision between following a path which was secure versus taking a risk and following a passion. He is glad he took the risk: "anyone who is unhappy or they have something else they want to do, should listen to their instincts and make that jump because it will pay off."

<http://icould.com/videos/daniel-g/> Brave enough to move from a job that didn't interest or challenge him, Daniel is now fulfilling a dream by completing a 4 year degree in **nuclear medicine technology**. Completing a short course with the open university proved to his employers, the NHS, that he could combine work and study. He appreciates the chance to solve problems and make a difference to peoples' lives.

<http://icould.com/videos/alex-l/> Third generation engineer Alex L has followed his passion for taking things apart and fixing them. Now with **electricity generation** firm E.ON he is building on his degree and work placement knowledge. Alex maintains machinery, supervises outside contractors and hopes to fulfil his ambition of becoming a chartered engineer.

<http://icould.com/videos/kelly-f/> Kelly F became a **radiographer** after having her daughter. She spent time as a nursery nurse and did an access course in order to study for her chosen career. She says "My daughter has really inspired me to do well, knowing that I can give her a better life is what got me through"

<http://icould.com/videos/luke-s/> Luke joined the army straight after school but left after a short time. He then spent time working as an estate agent and taking an IT course at college. Influenced by his father, a **process worker for National Nuclear Laboratories**, at 23 he applied for an apprenticeship in Nuclear Chemistry. He now feels it was the best thing he could have done and has enjoyed the combination of learning and earning.

Conduction/insulation

1.2 Energy transfer

<http://icould.com/videos/anthony-b/> Antony Burse is a **Director for Sustainability** at Halcrow. One of the buildings he worked on won an award for sustainability - working towards zero carbon is important to him. He found the maths in engineering hard, but persevered. He started research in biomedical engineering, but later found working with architects more interesting.

<http://icould.com/videos/allan-h/> **Electrical engineer** Allan has just completed his apprenticeship with Jaguar Landrover. He enjoyed the challenge of learning and earning through his apprenticeship. He loves the work he is now doing within the research team and describes his apprenticeship as the best thing he has ever done. He feels that more people should go through the apprenticeship route, as university is not the only option.

1.3 Electrical Appliances

<http://icould.com/videos/chris-j/> **Telephone engineer** Chris started an apprenticeship at sixteen, he loves being able to work outside and have a varied role. He is the guy you see inside telephone exchanges wrestling with all of those wires. He still doesn't know what he'd like to do in his career but probably wants to get into management.

<http://icould.com/videos/ben-y/> Ben Y is an **Electrician** at Wolverhampton Primary Care Trust. Travel, suggested by a teacher, provided the opportunity to reflect on his future career and lead to him undertaking an apprenticeship.

<http://icould.com/videos/louise-s/> Louise S is a **Deputy Department Manager in the TV and audio department** at John Lewis in Oxford Street. She was doing a boring job in a clothing factory in Scotland when she was nineteen. So she packed up and went down to London with a friend and got a job in a hotel. She's stayed in London and carved out a retail career.

Power costs

<http://icould.com/videos/bogi-h/> Bogi **analyses future trends in the oil and coal markets** and works for E.ON in Coventry. He looks at how energy demand is going to develop in the world and finds his job 'fantastically interesting'. Originally from the Faroe Islands, he studied in Scotland and initially worked in banking before moving into his present post. He lists one of his personal objectives as wanting to go into space.

<http://icould.com/videos/neil-j/> Neil J is a Director of a campaign called The **Student Switch Off**. He says "I came up with the idea of having a competition between halls of residence at the University of East Anglia to encourage the students to adopt small energy saving actions... we've just got funding to take it to 33 Universities for the academic year starting in September 2009".

1.4 Electricity Generation

<http://icould.com/videos/alex-l/> Third generation engineer Alex L has followed his passion for taking things apart and fixing them. Now with **electricity generation** firm E.ON he is building on his degree and work placement knowledge. Alex maintains machinery, supervises outside contractors and hopes to fulfil his ambition of becoming a chartered engineer.



<http://icould.com/videos/steven-h-2/> Steven H is the **Regulatory Reporting Engineer** for E.ON - "I left school with absolutely no idea of what I wanted to do." He took the apprenticeship route but that didn't take him where he wanted to go. He changed from logistics to energy and got his first good job covering for someone on short term leave. "I've never looked back from that."

<http://icould.com/videos/dan-m-2/> Dan is responsible for ensuring that E.ON keeps abreast of government **policy on energy matters**. He initially wanted to do physics but changed to biology after his A levels and completed a masters degree in environmental science. He has a strong interest in philosophy.

<http://icould.com/videos/luke-s/> Luke joined the army straight after school but left after a short time. He then spent time working as an estate agent and taking an IT course at college. Influenced by his father, a process worker for **National Nuclear Laboratories**, at 23 he applied for an apprenticeship in Nuclear Chemistry. He now feels it was the best thing he could have done and has enjoyed the combination of learning and earning.

1.5 Waves

<http://icould.com/videos/maggie-aderin-pocock-mbe/> Dr Aderin Pocock is a **Space Scientist** and a Science Communicator, "I actually build satellites that go up in space". She has overcome dyslexia, and an 'interesting' education involving 13 different schools to achieve her dream job!

<http://icould.com/videos/dean-w-2/> **Sound engineer** Dean really enjoyed sport at school and says that it was sport that got him through school. After school he went to college to study media production. It was here that he went on a trip to the Countdown set, which sparked his decision to work in television. He enjoys the job security of working on a long running series and feels that the regular hours give him the perfect work life balance.

<http://icould.com/videos/dave-g/> **Sound and lighting engineer** David has found a career he is passionate about, a career that allows him to combine his love of people, practical tasks, climbing and theatre. He came into his own at university and now, as a qualified high access technician at Leeds Grand theatre, he is building on all he learnt in his studies and his part time work.

<http://icould.com/videos/ian-s-2/> Ian Snowden is an **audio archivist** with the BBC Northern Ireland. He has a hereditary condition which made him lose his sight at an early age, he says "It definitely made me more independent because you can't sit back and just do nothing you've got to go out there contribute and feel part of the community and part of the population".

<http://icould.com/videos/ross-n/> Ross N is an **Audio Engineer** at Realtime Worlds games. "I do everything you hear in the game". A network of contacts was important for Ross "at the end of the day I didn't really think I needed a piece of paper... Getting the first job that gave me the break was just from working in the music shop, I always sort of saw it as just a stepping stone but it gave me the opportunity to meet that guy and get to know him and then ask him about if there was any jobs".

<http://icould.com/videos/sam-j/> Sam J works at Jagex Games Studio as an **Audio Developer**, dreaming up new sounds for the imaginary creatures or writing music for areas within the games. Since getting his first guitar at the age of 6 Sam has loved music, but kept it as a hobby until the second year of A levels. He went on to do a specialist course at university and got a placement working on films such as Casino Royale and The Bourne Supremacy. Sam left films to go into games and joined Jagex, he describes himself as "incredibly lucky" to do something he loves as a job.

<http://icould.com/videos/neil-c/> Neil C is **Senior Lighting Technician** at the Sage in Gateshead. "Work-life balance is always a problem in this job because you're working, by the nature of the job, your work is at night and your work is in the evenings when other people are going out to enjoy themselves."

<http://icould.com/videos/seamus-m/> Seamus M is a **lighting camera supervisor** for BBC Northern Ireland and says "I don't have to be a boffin to do my job and to do it well... I love the process of filming, I just love taking pictures". When an uncle bought him a camera for his 14th birthday, Seamus discovered his passion for photography and after leaving university he found a trainee placement at the BBC as a camera operator.

1.5 (continued)

<http://icould.com/job-title/3216/> ARTICLE **Dispensing optician**

<http://icould.com/job-title/2214/> ARTICLE **Ophthalmic optician**



<http://icould.com/videos/helen-m/> "I'm a **diagnostic radiographer** so I use x rays to take images of inside of people to diagnose their illnesses. My A levels were Maths, Physics and Biology. I decided I wanted to be a radiographer at 15." Helen says of her job, "every day is a highlight, there's always some little thing during the day that makes you feel good."

<http://icould.com/videos/emma-j-2/> Emma J used to "work in a lab, on my own, with bacteria", realising that this was not the environment to which she was best suited, she tried a number of options before becoming a **radiographer**. "The variety of radiography definitely attracted me, because the variety was what was lacking in the job that I did before."

<http://icould.com/videos/kelly-f/> Kelly F became a **radiographer** after having her daughter. She spent time as a nursery nurse and did an access course in order to study for her chosen career. She says "My daughter has really inspired me to do well, knowing that I can give her a better life is what got me through"

<http://icould.com/videos/tim-m/> Tim M is Senior **Air Traffic Control Officer** at Lydd Airport. "My job primarily is to stop aircraft colliding with each other." But it wasn't what he had planned as a career. He was running an organic vegetable business and vineyard when he met a man walking his dog round his property. This turned out to be the Air Traffic Control Manager, who spotted his talent suggested he came and worked at the local airport for him.

<http://icould.com/videos/eddie-c/> Eddie C is the **Head of Device and Sim Technology at Vodafone UK**. His job is to make sure your handset works with Vodafone's network. He says "I was the first from our immediate family to go to university... I think there has always been a belief within me to try and achieve as much as I could".

<http://icould.com/videos/fran-w/> Fran W is a **Core Network Planner for Vodafone**. "I wasn't sure what was going to suit me, so I decided I wanted to do a general engineering degree... I really enjoyed the whole university experience... I did seize the opportunity to be a typical student." Now, as well as designing and developing techniques that allow Vodafone to quality assess the core network, she thinks she has "struck a good work/social life balance"

<http://icould.com/videos/alison-s/> After her A levels Alison went on to university, she was the first in her family to go. After a few months she made the bold decision to leave university. She then started an **apprenticeship at BT Openreach**.

<http://icould.com/videos/steve-h-2/> Steven Halsall is an **Aerodynamicist** for Lola Cars. "Being a race car designer is a kid's dream job really. I was just always around cars from pretty young age and my dad owns and runs a garage... I wrote off to loads of different companies all with just with this letter saying, 'Have you got any jobs, or is there anything that I could do?'"