

Head start to university – Part 1: Starting the journey to expertise

Hello and welcome to the first in our series of Head start to university video presentations and activities.

In this session, we're going to think very broadly about what being at university means in terms of knowledge and thinking. We'll cover two main areas: first, starting to become an expert in your subject, and second, learning a particular way of thinking. We could think of these as encompassing the main aims of university study. Now universities do more than just pass on knowledge - they want to equip you to push the boundaries of knowledge. This isn't knowledge for its own sake, however. Many of you will go into careers which require expertise in a particular area, but even if you go into a field that's not directly related to your subject, you will have gained a perspective of knowledge and research that will be applicable to many other areas of work

As a way into this, let's start with a question. Why are universities called universities?

The word 'university' comes from the Latin 'universitas magistrorum et scholarium', which means 'community of teachers and scholars'.

'Community' is important here. Essentially, what makes university different from school or College is its academic autonomy. There is no National Curriculum for the universities. Each university is its own community, responsible for designing its own curriculum and awarding its own degrees. This is important. What it means is that your courses are put together by leading academic experts. These are people who are actively pushing the boundaries of human knowledge. Their research feeds directly into the content of their courses.

Many if not most of your lecturers will have written books and articles in their academic field. And you will soon be a part of this 'community of teachers and scholars'. You might not feel that you know enough to be a part of this community, but you do. You have been offered a place here. And you will soon start to contribute to this community – a little at first, but with increasing confidence as you progress through your degree.

It's important to think of yourself as a valued member of this community. Don't believe me? Look inside any book written by an academic, and chances are you will see the academic thanking their students for their input, in the preface or acknowledgements section. This isn't just a box-ticking nicety, but a genuine message to students who have contributed ideas and insights.

So: how *can* you start to become an expert in your subject?

Well, one answer is through the dedication, hard work and passion for your subject over the three or four years of your degree. BUT there is also a lot you can do before you start, to prime yourself for this journey.

One thing you can do to start the journey to expertise is to get a handle on the context of your academic subject. Understanding the bigger picture of your subject will give you a framework which will help you understand how everything fits together when you are

studying particular modules. To this end, in this part of the presentation we will focus on a series of questions, which are:

- How has your subject developed over time?
- Who/what has influenced your subject?
- What are the big issues in your subject currently being debated?
- What are the 'politics' of your discipline?
- What are the limits/boundaries of current research/thinking in your field?
- What are the main academic 'fault-lines' in your discipline?
- What theories underpin your subject?

Thinking about these questions now and doing the activities that follow this presentation will help you, ground them in your own context. So let's get started.

- How has your academic subject developed over time?

Some subjects, such as philosophy, law, mathematics, have a very long history indeed, having been taught for hundreds, if not thousands, of years. Others, such as history, English, modern languages, are more recent, nineteenth-century creations. Still others, such as media studies and computer science are of course much more recent beasts. But the point is, getting a handle on how your subject has evolved over time will help you understand the specifics of that subject more clearly.

- Who/what has influenced your subject?

This question follows the previous one. In fact, answering the previous question in a sense involved answering this one. But knowing the key 'influencers' in your discipline – both in the past and now, will help place your subject in a useful context. So who are/were the key scholars in your subject? Are there any particularly ground-breaking papers or books that you can identify? How have they shaped the evolution of your subject? How have they influenced the approaches and techniques used in your discipline today?

You may notice in thinking through these questions a lot of 'western-centric' thinking. It is true that many academic disciplines have developed with a western bias. This you should be aware of, as it is something which is only beginning to be addressed. You'll be aware of the growing momentum surrounding decolonisation: but how is this affecting your academic subject?

And this brings us to the next question, which involves thinking about your subject in the here-and-now. So what are the big issues out there currently being debated and talked about?

For bio-scientists, this could be the current threats to bee populations, for historians or students of cultural studies, it could be controversies over how the past is commemorated, for computer scientists how close AI and machine learning are to human cognition. And so on.

This is really important. It used to be the case that academics could happily beaver away closeted in their ivory towers without much thought for what was happening in the real world. Not anymore. With universities increasingly accountable for what they do, it is vital that you understand the relationship between your subject and the world we live in.

If relevant to your particular subject (and I am aware this may not necessarily apply to the pure sciences), what are the 'politics' of your discipline? Many disciplines have a political right-left spectrum, for example, and it's important to understand how this manifests itself in the academic work that goes on in your discipline. Very often, these politics are thrown into sharp relief during periods of academic controversy, or during periods of shifting paradigms.

Let's move on now to the second big theme of this presentation: ways of thinking at university. In a sense, what underpins university activity in most academic disciplines, is a recognition that knowledge is not fixed. What you learn will inevitably become outdated – that is the nature of knowledge! So another important question is

- What are the limits/boundaries of current research/thinking in your field?

For many disciplines, the limits are set by the available technology. When that improves, the boundaries of knowledge get pushed back. In psychology, we might think of the development of brain-scanning technology, in engineering, the development of AI, in physics the Large Hadron Collider and so on.

Although we most associate technological innovation with the furthering of scientific knowledge, it's also true that digital innovation has revolutionised subjects within the arts and social sciences. For the many subjects that use text analysis as a method (history, English etc), researchers can now search through huge quantities of text at a speed and accuracy that would have been unimaginable to scholars working in a pre-digital era. In English, for instance, researchers can make use of Open Source Shakespeare, which allows users to search for particular words and phrases across the entire Shakespeare canon, thus opening up new possibilities for exploring textual patterns in works of literature. Other examples abound.

Related to this (and this does link back to what we were talking about earlier about how your subject has developed) is the importance of knowing where the main academic 'fault-lines' are in your discipline. So, for a subject like history, it could be debates surrounding the question of what is deemed appropriate for historical study, for English it could be debates around the 'canon', for psychology the relationship between applied, social psychology and more scientific forms. These fault-lines might take the form of disagreements over appropriate methodology (e.g. the merits of otherwise of using fiction as a historical source, or the 'replication crisis' in psychology, or the ethics of AI in computer science or engineering etc).

If you start to think about these sorts of questions, you're starting to think about 'theory'. Perhaps a lot of us shy away from theory, associating it with pages of dense, impenetrable prose. But really, theory is the cornerstone of university activity, and cannot meaningfully

be disconnected with knowledge. So starting to get a handle on what theories underpin your subject, even at a rudimentary level, will stand you in good stead for what's to come.

So. To sum up this presentation.

- Think of the university as a community of learning. You are being invited to join this community and contribute to it.
- Start to become an expert in your subject. This will happen over your degree programme, but you can prepare for this now by thinking through these questions:
 - o How has your subject developed over time?
 - o Who/what has influenced your subject?
 - o What are the 'politics' of your subject?
 - o How does your subject relate to the world we live in now?
- Start to learn a way of thinking. Ask yourself these questions:
 - o What are the limits of research in your field and what sets these limits?
 - o What are the main academic 'fault-lines' in your subject?
 - o What theories underpin your subject?

So that's the end of the presentation. I hope you found it useful. Do have a go at the accompanying activities as they will help consolidate and expand the points I've been raising here. I look forward to talking to you again soon.