Season Four Episode Three: Exam Tips – 'Seeing the finish from the start'.

00:06 – Ayra: Welcome back to the Warwick Chemistry Pathways podcast, where we dive deep into the exciting world of Warwick chemistry. I'm Ira, a second year MChem student thrilled to be part of this year's team. Today, I'm pleased to be joined by Dr David Fox. Perhaps more commonly known as just folks around the department.

We're here to delve into the concept of seeing the finish from the start. So, Fox, let's get started. What exactly does it mean to see the finish from the start?

00:34 – Fox: I suppose it's just an idea that when a student comes and they start their degree, often they're very distracted or in some way. You know, perhaps even overwhelmed by all of the details of what they have to do.

And, and they get sort of involved in the sort of the mechanics, the day-to-day mechanics of all the things they have to do, but sometimes they sort of lose track of really what they're aiming at. And some of that is educational, some of it's procedural. And I think some of it really revolves around a recognition that what's important is sort of completing and sort of getting to the end because most people at the end of the day, I think, while they may enjoy doing their degree, they're really here, so that one day right on their CV that they have done one, right? You know, it's all about completing. Actually, you know, the aim is to complete, the aim is not just to stay here and exist. The aim is to complete their degree.

And I think there are ways of doing that, which is easy because, you know, I'm old, right? So, I've seen a number of this. I've done a couple of degrees myself, and, you know, I've watched lots of students do it. And I think that over the years, I've come to realise that the way I see the degree and the way that undergraduate students see the degree is obviously very different, right?

It's looking at the same thing from different sides. And I suppose it's just this idea has come from a reflection on me sort of often asking myself questions, you know, like, why do they do that? You know, what, why do undergraduates choose to do this rather than this? What, why don't they do that?

Often students don't know, necessarily what's sort of compulsory and what's not. What's well, they usually work out what's assessed and what's not. But. You know, what sort of what the pass marks are for individual bits of work or whether or not, you know, individual components are required or not, and sort of where ultimately the bulk of their marks come from, which is, to be honest, you know, for a lot of students, often exams.

Just to ask you a question. Could you think of anything that sort of inhibits students from having a longer-term view? Or do you think that it's just that there's so much to do right now?

02:58 – Ayra: I would say it depends on student to student. I've like met students who have like a whole plan ahead of their life. Like, okay, yeah, we're going to, we want to work in this company by the end of the degree.

We want to be established in this way. And we have our goals plan, but I've also spoken to students who in, in first year actually just joined chemistry because they liked it. That's the only reason. They didn't have, but I've also spoken to students who would be like, oh yeah, we want to do this in chemistry, and we are really interested in areas of research. And I have been like, wow, people, it's amazing how different minds work and how they portray life as a person next to me. A normal, like student life, you tend to get so caught up in all the work that sometimes you're like, you know what, it's fine. I can think about next week later because I'm like, I need to focus on today.

So, I guess it depends on what you're going through. But I have in personal experience, I have, there have been weeks. I'm like, I cannot think about next week right now. That's tomorrow, future-me's problem. I need to do this. I, it's fine. It's fine. It's, it's going to be okay. I just need to focus on this. We can concentrate on take every, taking every day as a new day. Learning new things. It's okay. It's okay to slow down.

04:15 - Fox:

Yeah, that's really interesting. I think you're probably very correct in talking about the breadth of students, but also how, how the changes go from sort of week to week or month to month, depending on workload and stuff that you've got to do. I'm worried of perhaps if, you know, people are listening to this, they worry that I'm trying to overcomplicate it. In fact, part of me wants to kind of simplify it. So, let's take year two, very standard year and yeah, you know, I think most of the modules there are 80 percent assessed.

Sorry, 80 percent exam, 20 percent assessed. And you end up just, just got to sit an exam for most of it, right? And the exam, past exam papers are there online. Academics generally, we're not massive risk takers, I would say. I work on the assumption that, you know, if you can do the last two, three, four years exam papers and do them well and understand what's going on, you've probably got a reasonably good chance of doing quite well.

I mean, there may be exceptions to this, but you know. It's quite easy what you actually have to do. Sometimes people get, I think, confused by what they actually have to do. You just have to go to a room and write some answers down for 80 percent of the marks. You know, so with that, you know, this idea of sort of simplifying the process, you know, okay, well, what do I need to do in order to do that?

Well, okay. Well, I need a copy of the exam papers. Yeah. Okay. That's, that's, I can get that's easy. Uh, I need to better answer them. Okay. What's the easiest way of doing that? Well, some of the reason that people don't do that, I think, is they're scared of the exam papers. Right. The exam papers seem like some sort of, I don't know...why would you just go and look at the jaws of the dragon? I mean, you know, it's there, you know, you're going to have to face it, but why would I go anywhere near it in advance? I mean, that's ridiculous. And the answer is, well, actually, it's not that bad. I mean, they don't bite. As I've often said, if you look at a past exam paper, it's not like you're, you know, I don't know, your eyeballs catch fire or something.

I mean, they're relatively harmless things. I mean, I made a joke that if you look at the last probably five, six years of my Year 3 exam paper that I do for stereoselective synthesis for C3E9. The joke is that the words are exactly the same. I just changed the molecules but actually, you know, first part is always 'Explain the stereochemical outcome of the following reactions'.

You know, that's it. You know, that's the words. I don't even have to change that bit when I reset the exam paper. That's what it's all about; it's very easy to follow along then. So, yeah, I think people are, they don't want to think about the exams because they don't want to have to deal with failure, right? They don't, nobody, you know, people don't want to have to face up the fact they can't do something. It's like, but it's October or November, of course you can't do it all. You know, why would you expect to do it all in November? That isn't the point. Don't just download them for the first time when you think you're ready. Do it early and then you'll know if you're ready.

07:25 - Ayra:

That's actually great advice because there have been moments like even, I have been scared like now I don't want to look at it's too early to look at the exam because it does exam papers because it does get pretty overwhelming just looking at it and seeing words like just reading all the questions and I'm like okay.

I do not know this and this and just like kind of demotivates you and I understand like look working with other students as well. It seems to be this common response like no, I don't want to look like you said we don't look at it. But I like the advice of doing it in like different slots like okay, I did this in the lecture.

Maybe I can attempt a question. It would be more of a more active way of learning. our material than it but yeah, it's I think I guess we'll have to overcome the feeling of like it's okay, it's overwhelming but like doing it step by step because it's very natural to just look at which is supposed to be a three-hour exam paper and you're like, oh my god.

08:22 - Fox:

There's this odd idea that somehow, if I go to these lectures and I go to these tutorials and I do these workshops or whatever it is, that somehow, I will reach some critical mass of understanding everything, the interconnectedness of all the things, and suddenly it'll crystallise and I will be a genius and then I'll do the exam papers.

Like, the real world doesn't work like that. It really doesn't. And I don't think the academics are necessarily actually expecting that, right? We'd like you to be able to do it all and understand it all. Of course, we would. But pragmatically speaking, we also know, which is one of the reasons, by the way, that we often provide a choice of questions in many modules, is that we know that some people are going to be better at some bits than others, or they're going to prefer some bits than others, even if they could do it all.

And so therefore, while I'm not at all suggesting in any way that people should be overly strategic about it, I'm saying that, you know, if you just somehow try work at the parts of the syllabus separately work, do it in chunks, just, oh, I can do this bit. I can do questions like this. I can do questions like that, you know, instead of trying to learn the whole thing, it's not like that.

And I don't think it should be, because I actually, that's a really unhelpful way of doing anything to somehow cram it all in your head and then sort of try and run to the exam paper before it leaks out of your ears or something. And actually, it's not, it's about. So, knowing what you know, if you look at the past exam papers and you analyse them and you work through them and you have been doing it for some time and you've used them as a guide to the sort of things that might appear in, you know, future exam papers, once you get the exam and turn the paper over, the worst thing that I want to happen is somebody turns over a paper, looks at one of the questions and goes, I couldn't do this yesterday and I can't do it today.

You know, there might be some bits where you just go, I just, I've never understood that bit. Despite all your best efforts and talking to people and talking to academics, that that's in some senses, it is, it's about, yeah, know your enemy. That's what it is. And if we consider that I'm trying to avoid being anyone's enemy, I'm talking about the syllabus or so, you know, somehow the amount, the sort of the thing over which you have to climb that, whatever that is, understand what it is, understand how it's made, understand how you do the bits, right? I mean, with respect to exams, that's it. And if you look at why people do well and why people do badly overall in their degrees, I think it's fair to say. That usually the spread in assessed work marks is quite narrow and the difference between people who do well and the people who do badly is really only the people who do it, don't do it, right?

You know, obviously, it's usually some relatively narrow range of assessed work marks for the people who do the work. Obviously, there's a bunch of zeros who don't get, don't do anything, but that's usually what happens. But when it comes to exams, the ranges are huge, right? Doing badly is usually a result of doing badly in exams or not doing assessed work, be it forced or not, by the way, I'm not here to criticise people who've got things outside their control. I've been senior tutor for long enough to know that sometimes people's lives are very complicated and that's why we have mitigating circumstances and that's why people need to come forward as quickly as possible if they've got problems.

But what I'm saying is, is that if people sort of engage with the course in a slightly more active fashion and sort of understand the, you know, really what it is they have to do, you know, then...

12:27 – Ayra:

I think what you said from earlier, I think the reason why most people struggle with knowing what they have to do is like there have been moments of students just pondering over how am I supposed to learn? Like we're going to lectures, we're understanding the concepts, like okay, in a lecture in that one hour, everything is making sense. You actually feel like, oh, I can do the subject now. But maybe a day later or on the weekend when you're going, you're like, I'm trying to do the questions.

You're like, hmm, I don't understand this. Or how am I supposed to learn the concept? Like. You know how in organic chemistry is mostly just like people are told like, Oh, don't memorise the mechanisms, understand the concept. But I feel like in my opinion, when coming from A levels where you have access to so many past papers and having access

to all the marking schemes, you are so used to having the answer right next to you that students for those two years stop actually applying their brains to understand the concept like, oh, yeah, I know that I can learn that it's fine. I don't need to understand. I know what they're what to answer. I feel because when the university didn't give us model answers like for every past exam, there might be if there are 10 past paper exams and model, you might have model answers for just like two or three papers. So, it's like two sides of the, uh, like there are two sides of it. One, you're like, oh, I would love to have some answers to get some validation that, okay, I'm on the correct path. But at the same time, I get why we are not given model answers because the university wants us to get out of that A levels approach that use your, try to understand what you're doing rather than just learning the information.

So, I feel that's the one thing that maybe we need to focus on is how do we study in university because our university matter is so different from what we have been doing our whole lives that we actually need to grasp on how to study for our exams or how to just study any module or any concept.

14:41 - Fox:

No, I think that's very important. I think that how, I mean, I've been asked that question, how do we study? Yeah. How, because if you've spent your time through, you know, exams at 16, exams at 18, learning content, memorising content. Then you may not even understand what understanding is; it may not even occur to you that it is possible to do it differently.

And indeed, that is a big challenge. So that's it. This is the difference. This might be the biggest difference of all. It's that people have got to this university by getting A grades or something. And that those A grades are earned by memorising things. Here's the question, right? Here's the point.

I always want to ask somebody, could you write an exam question? If you've done enough of these, surely you could write one and then could you mark it, you know, if you had so many answers in, you know, that's that sort of that test, because if you just sit there and go, I wouldn't know where to start, you know, I'd be really worried because I turn around and say, okay, you know, you've obviously not gained any sort of perhaps understanding of what the examiner's been asking in the last few years, it shouldn't be difficult. To sort of have some idea of what the exam questions might be, not specifically, I'm again, I'm talking about style, extent, the sort of things that come up, that kind of thing.

If you've looked at the past exam papers and you sort of understand them, you understand what they're asking you to do. Some of the most successful students I've met have been ones that have come to my office and gone, I've done these past exam papers. Could you just, I don't, and it's not, could you mark them all?

It's like, I think I'm okay on all of these apart from this one. There's this one here, this, this thing here, I couldn't do this, this bit, what's going on here? And it's like, wow, not only, not only have you done all this stuff, you know, when you're right, you know, when you're wrong and you know, you are almost completely there.

And usually you start explaining to me, oh, does it, is it just like this? And you go, yes oh, I get it now. And it's like, oh, wow. Okay. You, you've got that. And it's, and it's, it's effort. And it's, but it, but it's sort of focused effort. Right. It's very specific and it, yeah, maybe it is. Maybe this podcast is really about me saying, please do the past exam papers, because I think that's for both people, the biggest issue.

17:27 - Ayra:

And I feel taking something from what you said earlier, that going to academics, I feel we would be able to go to academics only when we start early, because if we expect to start past paper exams and like, Oh, just a month before exams, academics won't have time as well. And you can't expect them to answer your question quickly. Like they have their own schedule as well. So, if you start early, you are more likely to be more productive and get more out of the session with an academic rather than three weeks before the exam. Like, I don't know.

17:58 - Fox

Well, this is true because when you just get piles and piles and piles of emails saying, could you look at this? Can you explain this? And you're close to the exams. It's just like, well, you know, it's not that you won't, it's just that. If you're just one of many, many people, I mean, you don't know if you're going to get what you need at that point. Do it earlier.

18:18 – Ayra:

This has been a very good conversation. Very enlightening, honestly.

18:21 - Fox:

Well, I hope so. I mean, it was quite a general idea, general title. But I hope it's of some use. Yeah, I'm sure other students would think so as well. I'm concerned, I'm going to be, you know hated by my colleagues now for encouraging people to knock on their doors and everything, but maybe, that's what you're paying for, right?

So, I'm not sure I'm that upset about it, really. Remember, you're buying an opportunity. You're not buying a result. You're buying an opportunity. So, take advantage of it. Be a little bit more strategic, maybe. Be a little bit more focused on the individual things that you've got to do, right? You know, and that's it my, as I said, all the way through the assessed work marks, as long as you do the assessed work, most people do reasonably well.

19:14 - Ayra:

Thank you so much for joining us today, Fox. It was a very wonderful conversation. I'm sure a lot of students would find it helpful. And yeah, see you in another podcast.

19:26 - Fox:

You're welcome. Thank you for the invitation. I hope people didn't mind hearing my opinions too much, but it's been great. Thanks very much.

19:33 – Ayra:

We always like hearing what you have to say, Fox.

19:36 - Fox

That's very kind.