VICTVS

Episode 10 – Contract Cheating: Inside the Business of Academic Fraud

Carly Culver:
Hi and welcome to this episode of The VICTVS Podcast. My name is Carly Culver, I'm joined today by Ben Clayson, VICTVS CEO, and we are ever so pleased to welcome our special guest for today, Thomas Lancaster. Hi Thomas.

Thomas Lancaster:
Hi everyone, hi Carly, hi Ben, great to be here.

Carly Culver:
Thank you. Now, Thomas is the principal teaching fellow in computing at Imperial College London and most famously maybe in our industry, the person that created the term contract cheating, so Thomas maybe you can start by telling us a little bit about you and how you managed to come to working in academic integrity.

Thomas Lancaster:
Yeah well thanks, it's a great question and you'll probably get a slightly different answer to this every time I answer it, but I've been in this field now loosely for 25 years since I started my PhD back in 2000 looking at plagiarism detection, so I've worked at various universities across the UK and had a lot of connections outside the UK as well, currently (as you mentioned) at Imperial College London, where I teach topics in computer science, particularly surrounding computer ethics and very much about supporting students and helping them to succeed.

But in terms of academic integrity, that's been going alongside everything I did. So, I started off with this very technical viewpoint about plagiarism detection. Now, my students look at this as a computer scientist now and think "that's incredibly easy there," because most of the problems we worked on a quarter of a century ago were hard at the time, but now they're quite easy, and that just shows how fast this field is continuing to develop and evolve but -

Carly Culver:
What kind of thing was it then back in your early days of your research? When you're saying plagiarism detection, what does that mean?

Thomas Lancaster:
So back in these early days, this was before universities were all subscribed to TurnItIn or similar services, so these solutions weren't there available off the shelf. But plagiarism detection had been around for some time from a computer science point of view, designed to detect two students copying source code from one another.

Carly Culver:
Okay

Thomas Lancaster:
So, at that time, because computers weren't as powerful, that was considered an easier problem, because the language of computer programming is much more limited than English language. So, I was looking much more at how do you find similar words across multiple documents, and also how to make this an easy process for humans - because we never rely on a computer system to make any of these decisions for us because they can all be quite controversial. Computers can be wrong, we see that nowadays with AI and trying to get correct decisions there, so at the time it's a bit of a novel, interesting problem. I think I did a pretty good job in the PhD. I'm not saying this would all hold water now because the ways in which people plagiarize and copy from one another, copy from the internet, have changed

a lot, and also the ways in which this is disguised has changed a lot, so it's rare that people will copy things word for word anymore because it's so easy just to run these words through software and generate an alternatively worded version - GenAI will do that. So, believe it or not, even 25 years in, although it's not my focus for research, it is a massive research field in computer science to improve the accuracy and the efficiency of these type of systems.

Carly Culver:
One of your specialisms over the years has been something called contract cheating, so there might be people out there listening that aren't familiar with that term, can you give us a basic overview of what that means?

Yeah of course, brilliant question. So around 2006, then my former colleague Robert Clark - who is no longer with us - and I published a paper on contract cheating. It's been work we'd been doing for a couple of years before that collecting data, and we looked at contract cheating as being a student paying someone else to do their work for them. So, this was something I knew about in my PhD days, this was also something that we had come across in the classroom as well, there was evidence this was happening, there were sites advertising to students they would do this, and there were other ways students could use a third party.

Now, students were doing this precisely because plagiarism detection was getting better, so if you just hand in work copied from another student, even with their permission, or copied from the internet, it was likely to be detected, because that was a text matching problem that computers were quite good at. But by getting somebody else entirely to do the work, then the student was submitting completely original work which is what universities want, but just not work completed by that student. So that really is a bit of a background.

So, you may also think about terms like ghost writing as being acceptable in some situations, politicians use ghost writers, people use ghost writers for their weddings, celebrities use ghost writers for their autobiographies in many cases, so this was really though a less ethical version of hiring a ghostwriter, because hiring a ghostwriter to misrepresent the work. And another term that's sometimes used is essay mills.

Carly Culver:
Yes

Thomas Lancaster:
There, these advertise quite blatantly in some cases on the web. I don't tend to use that term so much, not least because there's another term I'm associated with, but also because that rather suggests all the work students are doing are essays and actually, academic assessment is much broader than that.

Carly Culver:
Well, that's what I was going to ask you, is contract cheating limited to what's known as like an essay mill or that style of assessment, or you know does contract cheating go beyond that into paying for help with other types of assessments?

Ben Clayson:
Proxy candidates, that type of thing.

Carly Culver:
Yeah, proxy candidates is a great idea. I don't know, in your experience?

Well, I mean this is one of the interesting things in that if I was to look back again at the research from 20 or so years ago now and the definitions, I think this is quite outdated. At the time, we didn't write the paper on contract cheating

thinking it would become this definitive title and source for this area moving forward. Of course, from a personal point of view, I'm glad it has - it took quite a long time to get other people interested in this believe it or not there so this was continuing in the background - but even in our first paper, most of the examples we found were computer science related and they were programming type tasks.

Now, this is slightly biased by the discipline that we were in and the type of work that was going on, but also because there was a site at the time called rentacoder.com - it still exists with a different name and after various mergers is now called freelancer.com - but essentially, you send out your request in a reverse auction to various people who say "okay, I need a database developing," and various people bid to complete the work for you and they may charge different amounts, they may have different credentials, they may have different previous reviews, so almost like a reverse eBay, and you choose somebody. But being that that was a coding related site we're focusing in on, unsurprisingly we saw lots of computer science related examples. Of course, we saw many perfectly legitimate business requests on there as well, and this is always a challenge that universities like to set real world tests now.

Carly Culver:
Yes

Thomas Lancaster:
Real world courseworks, and if you were to see them on see these sites, how do you tell is this an assignment request? is this a real business request? Now, if there's an assignment brief uploaded and it says 'University of X' then that is a bit of a giveaway, but in some cases it's nowhere near that obvious. But yes, so we would see all kinds of technical work, computer programming, computer databases, data analysis type work going on there, as well as large scale work, like whole dissertations and project reports as well going along with that there. And of course, we would see essays and written work as well, they did exist and they're much more prominent now, but there are different places you may go if you were particularly interested in an essay as opposed to a computing assignment

Ben Clayson:
So, you say they're more prominent now, and I was wondering whether your early research gave you a sense of what sort of percentage of students might be using these types of services and whether you have a sense of what kind of percentage may be using them now?

Thomas Lancaster:
So, in terms of prominence, they're certainly more prominent than they were 20 or so years ago. At the same time, I think there's been a rise in prominence, perhaps a slight drop more recently with the age of AI and alternative ways of accessing again original work but not written by the human we intended to write it, i.e the student. In fact, not written by a human at all, probably written by a machine. So, it's very hard to ever get an accurate measure of these kind of things there because...

I mean, this is a wider question about how do you research within the academic integrity field? But so much research is based around surveying students, asking them, "do you cheat?" "How do you cheat?" or asking them "do you know other people who cheat and how do they cheat?" And there are various reasons people don't tell the truths in surveys in general, but particularly in this type of field. What is the risk if you say "yes, I have cheated," and that gets back to the people who are teaching you? Even though surveys should not be designed in that way, but sometimes it is possible to identify people even with various safeguards in place. But also, if you say everybody cheats, then universities will put more measures in place to prevent cheating and that will just make life less easy for you in the future, it will make life less easy for other people, so I think there's a lot of underestimates.

So, one thing we found in our early research was we kept seeing the same user accounts coming up again and again and again, and so it was people were not just contract cheating once for a single assignment, they were doing it habitually. So, they were outsourcing, they were probably not being detected, they were getting away with it, and they were making requests again after that point. And also, we saw some quite bizarre accounts who had outsourced sometimes tens of hundreds of assignments to different subjects, so we also observe very early on almost a middle person approach.

Carly Culver:
Like brokers

Thomas Lancaster:
Yeah, like brokers, exactly.

Carly Culver:
Interesting.

Thomas Lancaster:
What I presume is happening is people think they're outsourcing their work to person A or company A, but it's actually then being further outsourced through a site like this, presumably at a far lower cost than the student paid, and so some I would say quite clever arbitrageurs are pocketing the difference between these two values and just having to manage the process, rather than doing what I imagine could be not the most exciting job in the world just writing student essays and assignment after student essay and assignment, but...

So the kind of figures we think of people who are contract cheating, it varies so much depending what country you're looking at, depending how the study was made, depending when it was done there, but we see sometimes figures anywhere between 5% and 20% of people who have contract cheated at least once.

Carly Culver:
Wow

Ben Clayson:
Have you found over the years any resistance from academic establishments and so on to invest in this type of research into academic integrity and these types of issues, or are you aware of any resistance from establishment?

Thomas Lancaster:
Yeah, that is a fascinating question. So I would say, after we published that original study and we did a few more in between, there was very little interest in this research line at all for about 10 years, after which point there were various things went on in Australia that rather meant that Australian academics started doing more research and making more changes. So in Australia, there was a famous case called the MyMaster essay mill which was reported by the Sydney Morning Herald, and they'd got into the records of a contract cheating firm and found details of their customers and the work that had been produced, much of which was for Australian students but not exclusively Australian students. That rather forced the hand of Australian universities to say they were going to be addressing this type of problem. We haven't had quite that same news story in the UK.

Do you think we need an expose in the UK then to drive research?

I don't yeah, I don't ever wish that problem on anyone and in any case, with AI, that I'm sure we'll come to in more detail later in our chat, then it may not be the right time to go down that route. But, do I think universities want to

address this issue? I think no university wants to be known as a hotbed for student cheating, but at the same time, if you're seen to be doing too much about this then it looks like you have a problem there.

Ben Clayson:
Yes

Thomas Lancaster:
Which the media will pick up on, and I've seen that repeatedly in things in the UK like, UK newspaper league tables of the worst universities for cheating - they use freedom information act requests to get details of the number of people who have cheated at different universities there and they rank them, but often there's no account taken based on the size of the university that you'd expect the larger the university the more cases.

There's also...[it's] very hard, it's a point I try and make every time someone asks me about this, to get across the idea that actually, if you're finding and detecting more cases, it's a good thing, because you're doing something about this

Carly Culver:
Yes

Thomas Lancaster:
And not ignoring it, as opposed to being the worst university out there.

Ben Clayson:
Yeah

Thomas Lancaster:
So I think there's a bit of a disincentive for universities to address this too much in terms of research or practice, but at the same time I'm very glad this is changing a bit, that the words academic integrity are appearing much more prominently in universities, that individuals are much more interested about it than they were before. And we get many students as well who are very much working towards the cause of academic integrity, they don't like the idea other people are getting qualifications by false pretences, and they value the educational system. So, things are changing in a positive way - partly forced by AI as well - but something that is a positive move, it's just taken quite a long time.

Carly Culver:
So, I'm quite interested to talk about contract cheating as an industry. We were having an interesting conversation earlier that obviously you often, like you said, think of it that a student is buying an essay or an assignment from another person and that's that. But actually, obviously, it's a whole industry generating I don't know how many millions of pounds or dollars around the world, I'm sure you can tell me, and obviously there's lots of players in that. And one of those players is the people traditionally who are writing those essays, and I know you were telling me about some work that you did around people in other countries that generate those essays, so maybe you can tell me more about that.

Thomas Lancaster:
Yeah, I mean, like so many things, it's hard to ever get an accurate figure. We tend to say hundreds of millions of pounds or hundreds of millions of dollars of work going through contract cheating firms every single year, and of course firms are very keen to protect this source of revenue because that is their livelihood. But complex flows of information, a student could outsource work to somebody locally they've met who's advertised on a notice board or

they've put flyers in university library books, which has happened in the past as well, or somebody who they think is going to be a tutor, so that very direct connection. They could find a firm online that is advertising prominently, even though advertising is more difficult than it used to be in the UK or in England and Wales because of various legal reasons, there are still ways this gets through. There are many influencers out there promoting this through social media, so if you to look on TikTok then there are both blatant adverts and subtle adverts, so you can see things like in the middle of a video, somebody suddenly says "oh are you having a hard time at university? Are you finding your essays difficult? This is the firm I use that has helped me," and just slot that in the middle of the video as a paid promotion.

Carly Culver:
Yeah

Thomas Lancaster:
At the same time, they can be more blatantly saying "Oh, I'll go to this site and it will rewrite your work" or "it will rewrite AI so it looks like it was written by a human" or whatever it might be. Or "have you considered buying this new pair of glasses there which will display information, or has a camera because you could use that to cheat there?" In fact, probably say it a bit more blatantly than "have you considered," that's just my more mild-mannered way of expressing all of these type of things! But there's a massive industry promoting things going alongside it. There are many people involved as writers in this as well, not always directly connected to by a student. If you're a student, you go to an essay mill, you hire somebody - they've got a photo, then you've no guarantee who you're hiring is the same person whose photo was there. A lot of these are stock images from around the web, or nowadays there can be AI-generated images that look quite convincing - especially if the hands are out of the shot so nobody has six fingers for that as well!

Carly Culver:
I thought they nailed hands now, i thought that was an old problem now!

Thomas Lancaster:
I think hands have got better, but I think they're not always as perfect as they can be. The number of fingers that are slightly out of proportion, things like that, it's less likely now you're going to get six of them, but you may get five that aren't quite the lengths you would expect or, as an example I shared on social media recently that people were pointing out, slightly dodgy looking fingernails!

Carly Culver:
Ah okay

Thomas Lancaster:
So there are indicators but you just glance at these and you don't think too much about them, then you don't you don't say anything. But it's very likely at the end of this chain of people there is going to be somebody who's very low paid doing the work, often not based in the UK, often based in an economy where, rightly or wrongly, they can work for a much lower wage, but it seems reasonable in that particular location. So I, for instance, looked a lot at the market in Kenya, where being an academic writer is pushed as being a professional level job.

Carly Culver:
Okay

Thomas Lancaster:

That there was a push from the Kenyan government I believe, at one point, to encourage people to sign up for gig economy type work there. So work from home, "be your own boss," all the things that were promoted as being a good thing, "be in control of your own destiny," you get paid based on how much work you do, and there are, you know, I will say, very academically able people working in Kenya, you know, very, very strong English as you'd expect. And they have very good qualifications in writing essays,

Carly Culver:
Yeah

Thomas Lancaster:
Because they're experienced and practiced, and there is a certain skill to writing an essay that the more you do it the better you get, the faster you get, the better you get at finding the type of sources you know that markers will want to see as well out of this, and, being fast of course makes a difference when you're paid by the word, or the page, for that. So, there are a lot of people working there.

I was part of film recently called 'The Shadow Scholars' - it's been going around film festivals, it's an incredible piece of work. I have quite a small role because it's very much about the Kenyans who are working in the industry, they're looking at their own lives - day to-day, they have exactly the same commitments as the rest of us, the same family challenges, the same need to make money, some...now, people who make ethical decisions about what type of work they will take on, what type of work they won't take on. Some people, for instance, won't help a nurse to cheat because they believe in the well, that these nurses may not be directly treating them or their family, but they understand the value of having a qualified health care, set of professionals

Carly Culver:
Yes

Thomas Lancaster:
Out there, so I'm, don't particularly want to go and, I would rather people chose a different line of work, but I understand why they are in this line of work, and why this is a good idea. And I can't really blame people for taking on work in that type of situation, cause who knows what any of us would do -

Carly Culver:
Absolutely

Thomas Lancaster:
If we were in the same position.

Carly Culver:
Yeah absolutely.

Ben Clayson:
So, you mentioned earlier regulation as it applies to Essay Mill-type businesses, could you tell us a bit more about how the challenge is being addressed by regulators and law etc, governments in the UK?

Thomas Lancaster:
Yeah, so the whole legal side surrounding contract heating is different around the world. It's different in different countries in the UK, I believe most of the legislation we have focuses particularly on England and Wales for various reasons. I don't want to go too much into the nuances of the law because that is such a specialist topic, but one of the

higher education acts essentially made it illegal to provide contract cheating/essay mill services within the UK there. I believe it also made advertising those services very difficult. But it's a tough law to enforce because companies are not necessarily based in the UK. Even if they have .co.uk domain, they may also have many other domains for different countries, you can see that if you look at their sites, and let's go back to say a specialist essay mill focusing in on nursing, but then you look at the photos and you realize well, they are not the uniforms that nurses in the UK would wear

Carly Culver:
Yeah

Thomas Lancaster:
Because this is a standard photo from a different country. And these things stand out to me, they clearly don't always stand out to the students who then go and buy from these sites, but so far there hasn't been a huge amount of direct enforcement of that law that I'm aware of. There are certainly smaller firms that are still advertising there and it's very tough.

Now, one thing about the legal side of things that in general, and we'll take the English version of this, it doesn't look to criminalize students, so we're not expecting a student to end up in prison because they used a contract cheating firm. Now, there are occasionally reasons why a student could end up in prison for types of academic cheating, particularly to do with things like impersonations in exams and things that perhaps could be more classed as fraud rather than just contract cheating - even though you could argue that contract cheating is a form of fraudulent activity as part of this there - but in general, I would rather we found ways to support students and avoid them being in this position in the first place.

Because when a student buys an assignment online, they're buying from a very dangerous industry. I've already said you don't know who's going to be at the other end writing this. There are various firms nowadays that ask to be paid using Bitcoin or other cryptocurrency, completely untraceable even if you pay with a credit card. If you don't get anything back, then what do you do about it?

Carly Culver
Yeah, yeah

Thomas Lancaster:
Who do you go to? Maybe you get your money back from the credit card company and say this wasn't delivered there. Firms often nowadays ask students to send over copies of their ID which they will say is to safeguard them, send a copy of your driving license or some other document which opens up students to all kinds of identity fraud issues as well, just like any other type of fraud. We also know of students who are being blackmailed or extorted, or they get the work, but then 6 months down the line they're sent a demand for more money or they'll be reported to their university so, these things can happen as well.

I will just say for any students listening to this, if you're in this position then please tell somebody, and please don't send money because it will not stop after a single request, it will keep appearing. But there may be firms out there that pride themselves on being more ethical, but who knows what will happen. All you need is a disgruntled writer for that firm who, a few months down the line, has kept the information about who they're writing for, and then they go after you personally.

Carly Culver:
Yes

Thomas Lancaster:
So, it doesn't matter who the firm is, and with many of these people being outside the UK, it's very hard to do anything about them.

Carly Culver:
Yes

Ben Clayson:
So, looking at it from a student perspective, my most immediate response to counter those risks would be to shift my attention to generative AI services, where I don't have to engage with a company that I might not be able to have any accountability with in the future. Can you tell us something about whether or not that is happening in the world of students, and how this sort of service is being affected by the growth in AI tools?

Thomas Lancaster
Well, look I mean GenAI is the single biggest change to education we've seen in the last 50 years, so it's disrupting teaching, it's disrupting assessment, it's making major changes to what we're going to do going forward, so I can quite understand that students are deciding now "I'll go directly to the Gen AI tools," or to ChatGPT, or to Google Gemini, or to whichever their preferred solution is to get the work done, and to bypass hiring somebody entirely, and we could have a whole great conversation about Gen AI and how it's being used and being misused.

Now, first of all, are students doing that? Yes, we know students who are outsourcing directly to Gen AI. Some of them are doing it quite well, they're learning something along the way, they're building up their assignment answer through a whole series of prompts and looking back at what they've done and then making changes themselves and checking the information. There are some people who think they can just write a one-sentence prompt and they get their answer and hand it in, and that might or might not be detected. It's not the easiest thing to get away with because I find that you need quite detailed prompts now to get anything good out of these systems, and if you're not the best prompter in the world, your English maybe is not as great as you'd like it to be for various reasons, then it's a bit of a high-risk situation to go straight to the tool and hand something in, because there might be things that are wrong, there might still be elucidated references in there, there might be information that just does not match the kind of things you've been taught that you don't pick up on. Sometimes, we even see lines left in that still say things like as "a large language model this..." that people have not picked up on! So, what is happening is there definitely is still a market for students to go straight to contract cheating providers, and the providers are picking up on this as well in their sales copy, they are saying things like "your work is going to be written by a human as opposed to an AI" there, "you're not going to be detected by AI detectors." There's a whole different conversation to be had about how well AI detection works!

I mentioned earlier, in terms of plagiarism and just standard English language text, that even a tool like Turnitin, which helps to look at similarity, still needs the output confirmed by hand - the same is true for any AI detector - and it's very hard to make a judgment about this afterwards. But what do we do as a result of this? So, the student still goes to the firm because they think they're going to get a better output at the end. Now, of course, this firm could still be using AI, but maybe they disguise it better.

There's also a separate issue that a lot of students have not thought about yet, that actually AI systems do start to watermark text.

Carly Culver:
Yes

Thomas Lancaster:

We know this is happening, even though we don't know exactly know how this is done. So, when I say watermarking, what I mean for example is, let's say that, essentially, you've got a certain amount of randomness when you use a tool like ChatGPT. Because if you ask the same question twice, you won't get the same answer twice, because it is generated on a token by token, or word by word basis based on the previous discussion. And what you might find is that five words are generated completely randomly, bearing in mind they have to comply with the English language rules etc, but then the sixth word is generated according to a known formula which the tool can then recognize afterwards, so it's less random than it might be. And so essentially every sixth word then forms this watermark which isn't immediately visible to a human but is visible to a machine that knows what to look for.

Now, we don't know the exact algorithm being used for watermarking text produced by ChatGPT, but there is something in there that can be picked up on, and at some stage in the future, I imagine OpenAI is going to start selling their service to detect these hidden watermarks they've been embedding, and suddenly universities will have a huge number of historic cases

Carly Culver:
Yes

Thomas Lancaster:
Where AI has been used without permission to go through and determine what to do with. But um

Carly Culver:

We raised that as an interesting example about what would you do if you detected that, you know, when I graduated from university 20 years ago, I cheated using a contract mill, or using generative AI that's 20 years in the future? What do you do in that scenario? What impact does that have?

Thomas Lancaster:

Yeah, and this is a very tricky question, I published a paper on this with a few prominent colleagues from around the UK earlier this year, looking at historic cases of contract cheating, and Gen AI use fits naturally into that kind of discussion.

I think the good news is that if you cheated 20 years ago there's a very good chance universities have absolutely no record of any of this because they don't keep the information for quite that long there! I mean, I doubt my assignments I handed in as university students still exist anywhere either, I'm not even sure they existed for that long after I graduated in the first place. But maybe, if you're a student now, in 20 years then the world will have moved on so much that this will be a non a non-issue.

But what about if you're a first-year student now, a second-year student now, but when you go into your third year this historic misconduct comes to light? Possibly through watermarking, possibly because unfortunately a third party has reported you to your university and they've tried to extort you, which does happen as well there. Now, sometimes it can be because a university has been suspicious about something in your third year, and they've gone back and looked at the earlier documents to try and verify, is this the same writing style in the first year as a third year? And although we expect people's writing to improve over time then, we all have certain indicators that we leave in - there are words I overuse I shouldn't do, there are certain types of punctuation we use, some people use a lot of short sentences, some people use very dense paragraphs, just to give you a few ideas. So, universities have to know what they're going to do. How far back can they go and say "well, we found these previous cases, you should not have had these marks" and you will have to either redo this, there, or what do you do about it? That's relatively possible to address while a student is still on the degree and universities certainly can go back in time and look at historic

assignments because they have a duty to do that, because students should only get an award for when it's deserved and when they've done the work there. It's trickier if somebody is already graduated but again, these things can happen. Universities should have a policy in place for this, but I don't want to...every university has got its own regulations for this there, but there definitely should be something. But it becomes more of a problem if somebody has graduated, they've gone into a job, they're doing well at their job, maybe the firm is quite happy and they well

Carly Culver:
That's what I was going to ask you, Ben, as somebody who employs lots of people, what would you, how would you react in that scenario, if someone came to you and said "actually, this person didn't gain the degree that you thought they had," that was the reason you offered them the job?

Ben Clayson:
We have seen this already, whereby we've received job applications from people who we have then employed only to find that their skills in the workplace didn't correlate at all with the quality of their application. So, for example, the covering letter might be utterly perfect, really impressive, but then you find out that they can't actually write without using a tool like Grammarly, even a basic email. And so, it's interesting, because from a professional perspective, calling somebody out on something like this and challenging them directly, and effectively accusing them of fraudulent behaviourmight not be diplomatic in the workplace. However, bringing it to people's attention so that it can be addressed from a professional level, in our experience, means that people then move on and hopefully reconsider their actions when they apply for a job with somebody else.

I think when you look at kind of the idea of historically challenging an award that has been made to somebody by a university, for example, one of the really interesting things there would be to do with kind of legal consequences.

Carly Culver:
Yes

Ben Clayson:
Because the only reason that this might ever come to light is because of some huge professional negligence case or something, so if you imagine a situation where a scientist or a doctor was responsible for something, and then it turned out that they should never have passed their degree because they were cheating all the way through with AI tools, but the, you know, the actual consequence of them cheating is they've been in a position of great responsibility and something has happened which has then resulted in injury or damage of some type. The reason that this will be unpicked is because somebody's going to have to pay the bill

Carly Culver:
Yes

Ben Clayson:
Somebody's insurance will have to cover all of this. But I think it would be extremely difficult to prove, is my thinking, as it stands. Because you'd have to prove, obviously, that it was the case beyond any reasonable doubt, that the person did cheat and did use all of those tools in order to achieve the qualification. And then obviously, qualifications, especially over multiple years, are deep things that involve different types of assessment and so on, so I think it might happen. And like you say, the AI and the introduction of these tools is changing every facet of education and I think it, there'll be a point where it becomes possible to track somebody's sort of educational development over the course of their entire life, effectively, but I think we're a way away from that when we can't even get fingers looking correct in images at the moment.

Thomas Lancaster:

Yeah, well it's a very it's a very tricky thing. I mean there are cases, let's say it's a medical professional we're talking about, and a university believes they shouldn't have been awarded a degree, then there's a certain duty of care to the public to then go and do something about that. And also the, you know medical council, and the other bodies that govern whether somebody is qualified to practice or not, need to be consulted.

So, we often talk in academic integrity about some subjects being, students being hit more than others by any case of misconduct. Because let's say you're training to be a historian and your found to have taken shortcuts, you're probably not going to be disqualified from practicing history. But if you're training to become a lawyer, a solicitor, and you're found to have breached academic integrity

Carly Culver:

Yes

Thomas Lancaster:

Then you may well be disqualified from ever working in that profession. So, I think there is a certain duty that universities have to look into this. Now, whether rescinding an award is possible will depend entirely on regulations. I mean it shouldn't be done without a lot of care. I will say, if anyone watching this is worried about medical professionals, then there's a huge amount more to pass a medical degree than just doing written assignments or anything like that, there's a huge amount of practical tests and practical knowledge that have to be done. But, in terms of the evidence standard, incidentally, most universities use 'balance of probabilities' as opposed to 'beyond reasonable doubt.' Now, I do feel to rescind the degree you need to be more confident than just a 50/50

Carly Culver:

Yes

Thomas Lancaster:

There and probably need to be evidence this had happened repeatedly or something like that, but there's still a discussion to be had, which I'm not sure that every university has had that discussion yet.

Carly Culver:

So, moving beyond kind of university level qualifications, we've seen the sort of evolution of contract teaching in a way to kind of other services that purport to support people in their...I hate to say real lives, that's insulting! But do you know what I mean, in their professional lives as well as just within their kind of studying. Yeah, tell me more about those that we've kind of explored, and what those services are offering, and what your thoughts on those are?

Thomas Lancaster:

Yeah, so we're talking a lot today about student cheating. I will say, but this is the bit that interests people, as opposed to the idea we want everyone to act ethically and with academic integrity, but people are always interested - how do they get one over on the system? Or how do they get an advantage? Particularly, how do they get an unfair advantage? Because it's perfectly fine to get a fair advantage by studying more or by being prepared, or looking at old exam questions to see what type of questions are likely to come up in an exam, but in terms of an unfair advantage...

We mentioned some of the international work I've been involved with so, around close to 10 years ago, I was part of a team who visited various countries around Southeast Europe and spoke to students there and looked at what was going on. And one thing we found there was a market for exams about hidden earpieces, so we're talking miniature earpieces put inside the ear which are so small they're almost undetectable, but the word the students would use was whisper that somebody outside the room would then whisper answers to them through this earpiece during an exam,

and that's something we've not come across quite so much in the UK but was quite popular over there, and almost a form of contract cheating, I'll say a related area.

Carly Culver:
Yeah

Thomas Lancaster:
Because students would hire these for an exam, but they wouldn't really be hiring the earpiece, they would be hiring the person at the other end of the earpiece to feed answers to them during the exam there. So, exam cheating technology is a big thing.

Thinking more about today's situation then, what are our biggest challenges? It's things like mobile phones. Students take a mobile phone into an exam room, they disappear to use the bathroom, there they go into a cubicle, the mobile phone comes out and they check something. Now, hopefully there's a bit of assessment security in place to stop that happening too regularly, but I know these things happen. People have smartwatches there, people wear them all the time now, they may not think there is anything wrong with that, they just forget to take them off during an exam, but they could be misused. Hidden earpieces still happen, you know, imagine somebody with long hair - even if it's not a very tiny earpiece like I mentioned earlier, these are very easy to hide and we don't traditionally ask people to pull their hair back and show everything on the way into an exam hall.

Smart glasses now are another emerging technology. I'm waiting for somebody to buy me a pair, until that happens, I keep reading about them and finding about them, but they could have a little camera in them.

Carly Culver:
Sure

Thomas Lancaster:
Whether they're easy to see or not depends on the device. They could have a little screen inside the lens that lets you look up things during the exam, and a lot of these are very hard to recognize because they look like regular glasses, which is deliberate, because they could be used in circumstances outside an exam room. There are all kinds of things, there are people who, who sell calculator shells. You put your mobile phone inside that shell, it looks like a legitimate calculator because you can do calculator functions, but if not, but you might be able to type certain things in the calculator and then communicate with a mobile phone and get information from a human or even get information now from an AI system at the other side. So, it's not just hidden notes, which still can happen there, it's a very sophisticated system selling exam cheating services and technology.

Carly Culver:
So, and like I said, we're seeing these being applied like I said, not just in assessments and in university settings, but in the workplace, in interviews and I think it's an interesting question as to like....obviously, if someone said they were going to cheat in an exam, we say "Oh no, that's terrible" and "you can't do that" and "we're going to put all these rules and regulations in place to do that." But then if they brought it into the workplace, would it be perceived more as a tool to help them be more efficient or better at their job? Like where, I think that's an interesting divide maybe. What do you think about that?

Thomas Lancaster:
Yeah, I mean there are some fascinating questions about what are students allowed to do compared to what are our employees allowed to do?

Carly Culver:
Yeah

Thomas Lancaster:
And the fact that universities are preparing students for the workplace, which means preparing them to use current technology and working methods, even if this includes things like Gen AI. Now, there is a challenge in that in that in general, universities have to be able to show that students have the skills to complete tasks unaided, that they have the core knowledge.

So, let's go back to a medical professional again. You would want that medical professional to know certain parts of the body and to know certain things without having to look it up on a computer every single time, even if the computer was there. But at the same time, perhaps somebody has an obscure condition and these happen as well, then having access to computer with all that knowledge and able to go through research papers is probably going to be an essential skill to save people's lives at some point as well.

Carly Culver:
Absolutely

Thomas Lancaster:
So, there is very much a balance. I also often [hear] things like "well, why are our lecturers allowed to do this, but we're not allowed to do this?" Well, because the lecturers completed their training and they are also in a workplace having to work efficiently with the current available technology, just as you will as a student in the future

Carly Culver:
Yeah

Thomas Lancaster:
For that, but I mean I think lecturers should acknowledge the type of things they're doing there, but it's still efficiencies, so as a computer scientist, modern computer programmers, they have to be able to do things by themselves, but they will probably have to use AI to program more efficiently

Carly Culver:
Yes

Thomas Lancaster:
To write more lines of code in a session, but to a high standard they still need all the underlying skills to check their code works; to check they're not leaving severe security flaws. There are all kinds of cyber security risks out there from people who just think AI can program but they don't know what's going on in the background, so we're seeing quite a shift about what's acceptable in education, what's expected in education, what's acceptable in the workplace, what's expected in the workplace.

Now, you mentioned as well about the kind of firms that are selling cheating technology and about the process of getting jobs. There are firms out there now that will sell you technology to cheat during a job interview, so if you're doing this remotely, as often happens, then you get answers on your screen about the kind of thing you should say in response to an interview question, and Gen AI can do that quite well there, and it's a real risk. I don't want to particularly promote those firms, but that same technology perhaps could be used in educational setting, get answers during Viber

Carly Culver:
Yes

Thomas Lancaster:
Or something like that. Now, what about if this technology isn't on a screen, it is inside the smart glasses instead so it's very hard to detect. Now, I still think that it is very hard to read answers that are being prepared for you and to communicate them in a sensible way, there is quite a skill needed.

Carly Culver:
Yes

Thomas Lancaster:
Every time I see a newsreader on TV dealing with an auto que and dealing with all the late breaking news, I'm incredibly impressed because that is not easy. Even as an educator people say "oh well, AI will write lesson plans" "AI will write lecture slides" - it is incredibly difficult to teach something that has been written by even a third party let alone an AI, because we all have our own style

Carly Culver:
Yes

Thomas Lancaster:
And the way we work on things, and the points we would emphasise, which aren't necessarily the same points AI has emphasised, so learning how to use these tools well is quite essential but, this technology is ever developing.

Now, some people might say "well okay, I want to go and work in sales so having access to information about my product there is useful, being able to address objections and being given ideas about what to say if a customer doesn't want to buy, that is incredibly useful." Even down to things like facial recognition, "who is this person I met once 10 years ago at a conference?" That could be incredibly useful as well for that, so there are uses. But it's that thin divide between using these ethically and using them unethically that we need to think about.

Carly Culver:
Yeah, and I think like, being honest about the use of them as well as whether you're sort of excluding your use of them versus saying "yes, I am using this technology at this time" is probably the difference there, right, sort of declaring it versus not declaring it.

Thomas Lancaster:
Yeah, I think it's knowing what you're allowed to do in different situations that is not always communicated as well as it could be to students, because the rules can change from assignment to assignment and from year to year in particular. I like to think as a bit of a continuum, that first of all we need to assess that students can complete work unaided, but there is a stage when we allow the use of AI. Now, there are different ways that people want students to acknowledge this. Some people say things like "hand in a copy of all your chat with ChatGPT" or something else, I just...my view of that is just completely unwieldy there. You're talking, you know, if I do something using these tools, I might bounce around between ChatGPT and Gemini, maybe even Grock and other systems. I might restart chat sessions because I don't like the output, I might write something with system A then ask system B to go and critique it.

Carly Culver:
Yes

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Thomas Lancaster:
To pick up on the different things, so you're talking reems of stuff that doesn't really make sense to provide in that way. And that's before we start thinking of AI agents and things outside of the norm of just being a chatbot, without getting too technical there.

So, and there's also the problem, let's say you're using office software, use microsoft word, or using Google docs,

Carly Culver:
Yes

Thomas Lancaster:
They will start suggesting now in real time

Carly Culver:
Yes

Thomas Lancaster:
Using gen AI, and again, you can't really document that process. So all I think we can do is to say, acknowledge the tools used and support you got, whether this is technical tools, whether this is AI, whether this is third parties, because people still ask a friend to proof read their work, that still happens. But I think they should be acknowledged there to think about it as a crucial skill. So if I was doing a presentation, as I mentioned, I like to do the slides myself because I like to be in control of what's being said. It doesn't mean I won't ask AI to suggest ideas for good points I could make which I might include occasionally, there. But if it's something like an image to illustrate a slide, then I personally would be quite happy to use gen AI to produce a suitable image because that's not a skill I'm being assessed on as a computer scientist.

Carly Culver:
Yes

Thomas Lancaster:
Or anything like that. I mean if you're being assesses as an artist that may be completely different. Or if you're being assessed on accuracy of diagrams, you would probably not go down that particular route there. It's all about that acknowledging that, it's all about that, acting ethically as well as part of that process, and sticking within the rules and requirements of a university.

Carly Culver:
So, to round out our conversation then in very practical terms, what was the one piece of advice you would give students at university now in regards to all of the cheating technology and services we've talked about today?

Thomas Lancaster:
Yeah thanks, it's been a really fascinating conversation. We've focused a lot more on the negatives, that perhaps happens sometimes.

Before it ends I want to say that the vast majority of students work very hard, that they would have no intention of cheating, and sometimes people cheat purely accidentally because they don't understand the rules, they don't even understand just the basics of how to write and to reference, and those are things we have to continue to address. What we see is that AI is, in some ways, making teaching and learning harder, because you not only need to understand all the basics, you need to understand all the advanced skills about using this new and emerging, and other changing types of technology.

Now, in my wider work, I've also looked a lot in areas like student employability, because I feel very strongly about supporting every student so they can achieve the best outcomes possible to them. So, I would say to students: think about your future, think about learning to use technologies beyond your course, think about skills beyond your course, because that is going to set you aside from other people who you're competing for jobs. And it's also going to show that you're willing to learn for yourself, rather than just being fed things based on what is being delivered by your lecturers, because life-long learning is essential for every job now, things are changing so quickly. But approach everything with academic integrity in mind, without setting out to get an unfair advantage. Because I mentioned earlier, it's perfectly fine to get a fair advantage, it's perfectly fine to work harder than other people, bearing in mind everyone's home/work life balance there, but don't spend your time trying to beat the system: spend your time trying to get better.

Carly Culver:
That's great advice, and like I said, great advice for university and beyond, for everything. Well, we wanted to say thank you so much again for joining us today. If people want to follow more of what you're doing, your current research, where can they do that?

Thomas Lancaster:
Yeah, thanks. I'm quite active on social media, I have a website: thomaslancaster.co.uk. Occasionally I keep it up to date, but I do post on the blog. I'm on X, formally Twitter, as @DrLancaster. I'm on various other sites, Bluesky as well, perhaps the most prominent one. LinkedIn as well, feel free to connect with me and to talk to me. I do a lot of training courses for universities as well, and work with commercial providers, so if there's something I can do to help please look me up and drop me a line.

Carly Culver:
Thank you very much

Ben Clayson:
Thank you

Thomas Lancaster:
Thanks

Carly Culver:
So, thanks for watching this episode of the VICTVS podcast. If you're interested in seeing more of what we've discussed previously, you can fnd us on YouTube, or you can find copies of all of our previous episodes on the victvs.co.uk website, but also on all of the usual podcast providers.