QQI Academic Integrity Update: April 2023

The QQI academic integrity update is circulated periodically to Irish providers of further education and training and higher education (public and private). Each update takes a thematic focus and includes information on trends and developments in the area of academic integrity.

The update is accompanied by a list of platforms and sites that may be used by learners for academic misconduct.

QQI encourages you to circulate this update and accompanying documents to all staff, professional and academic, and to nominate a central point of contact within the organisation to whom staff can report any relevant information, services or websites - for members of the National Academic Integrity Network (NAIN), this could be your nominated NAIN representative. If you'd like to highlight content for

inclusion in the next edition of the Academic Integrity Update, you can do so by emailing it to academicintegrity@qqi.ie.

April 2023

Quality and Qualifications Ireland

In this Academic Integrity Update

- **A Focus on Artificial Intelligence and Academic Integrity**

This quarter's guest contributor is Dr Perry Share, Head of Student Success, Atlantic Technological University, and member of the National Academic Integrity Network (NAIN). In his article, Perry focuses on the impact of artificial intelligence on academic writing and academic integrity and considers how providers might respond to challenges posed by artificial intelligence and directs readers to useful resources and guidance to assist in doing so.

- **Update on the Global Academic Integrity Network**

An update on the membership and recent activity of the Global Academic Integrity Network (GAIN) is included below.

- **Threats to Academic Integrity**

During quarter 1 of 2023, QQI has been alerted by HEIs to a range of websites and practices that may pose a threat to academic integrity. These have been collated and summarised in this newsletter to ensure that all providers are aware of, and can respond to, potential issues of concern. In addition, the usual list of websites and services that may be used by learners for the purpose of academic integrity accompanies this academic integrity update.

- **QQI's reporting to advertising, publishing and social media platforms**

QQI has established processes to identify and reports content advertising or promoting contract cheating services to advertising, publishing and social media platforms. A full summary of activity to date is provided below.

Artificial Intelligence and Academic Writing: A Consideration of the Issues for Teaching, Learning and Assessment

Dr Perry Share, Atlantic Technological University Sligo

Background

The global launch of ChatGPT, an Artificial Intelligence (AI)-based chatbot, on 30 November 2022, has sent shockwaves across the education system. ChatGPT is based on generative AI, which uses a vast corpus of text 'scraped' from the internet and other textual sources, to 'generate' new texts based on 'prompts' (which can be a question, a set of instructions or even just a phrase). The process is based on an approach to AI called the Large Language Model (LLM).

While generative AI has been in development for some time, and previous services such as the GPT3 'playground' have been available on a limited basis, ChatGPT has been particularly attractive due to its highly intuitive chatbot interface. It did not take long (a month) for ChatGPT to garner over 100 million users globally. Since its launch, there have been many updates to the service, and the new version of GPT - GPT4 - has been incorporated into the paid service, ChatGPT+. The company behind GPT, OpenAI, has made the platform available for developers through its API or Application Programming Interface, while most recently (23 March) they have enabled 'plug-ins' to ChatGPT, allowing it to access information from external service providers, such as travel booking companies (e.g., Expedia, Kayak).

OpenAI has a close relationship with the global tech company, Microsoft. Microsoft is a key provider of technological products and services such as word processing software, spreadsheets, a search engine, cloud services and conferencing software. Microsoft has already started to incorporate GPT technology into its offerings, via a service called *CoPilot*. Microsoft is, of course, a major supplier of services to Irish higher education institutions, where it is used by nearly all students and staff. A major rival tech company, Google, has also developed its own LLM and has incorporated this into its own products, releasing a new search engine, *Bard* to compete with Microsoft's *Bing*. The competition between these tech giants is arguably driving the rapid pace of release of these AI products, without forewarning to society in general, and higher education in particular.

Artificial intelligence and academic writing

The new AI platforms and products can carry out a dazzling array of tasks for users: generation of video and audio from text prompts, creation of new images and artworks, computer coding, automated creation of websites and other digital artefacts, and complex manipulation of data and documents. Services such as ChatGPT have had their limitations, such as an information horizon limited to 2021 and a tendency to fabricate information (such as academic references), but these are gradually being addressed. For example, the ChatGPT plug-ins will give it access to real-time information from the internet, while the likelihood of 'hallucination' (making things up) has been reduced in the most recent version, GPT4.

While philosophers, neurologists and others debate the extent to which AI can be said to be 'self-aware' or 'sentient', the reality is that ChatGPT and similar technologies are able to produce high quality, coherent, well-informed, and relevant text in response to user prompts, in virtually any desired format or style, and that this capacity is only going to improve into the future.

I asked ChatGPT (free version) about the importance of academic writing in learning. In less than two seconds, it generated the following text:

Academic writing plays a crucial role in learning, as it helps students to develop a range of skills and competencies that are essential for success in their academic and professional lives. Some of the key benefits of academic writing in learning include:

1.   *Developing critical thinking skills:* Academic writing requires students to analyse and evaluate information critically. This process helps students to develop their critical thinking skills, enabling them to make informed decisions and solve problems effectively.

2.   *Enhancing communication skills*: Writing in an academic context requires students to be clear and concise in their expression of ideas. This practice helps students to develop their communication skills, both written and oral, which are essential for success in any field.

3.   *Improving research skills*: Academic writing involves extensive research, which helps students to improve their research skills. Through this process, students learn how to identify and evaluate sources, synthesize information, and use evidence to support their arguments.

4.   *Developing creativity and originality*: Academic writing encourages students to think creatively and develop their own unique ideas. By exploring a topic in depth and developing original arguments, students learn how to express their individuality and creativity.

5.   *Preparing for the professional world:* Academic writing prepares students for the demands of the professional world by teaching them how to write reports, proposals, and other types of documents that are commonly used in the workplace.

We can probably agree, as suggested by ChatGPT, that *'academic writing is an essential part of the learning process, as it helps students to develop a range of skills and competencies that are essential for success in their academic and professional lives'*. Writing is central to all practice in higher education, even in highly applied fields such as medicine, fine art or construction economics. Holistically, it helps us to build knowledge in long-term memory and to sustain personal and professional identity. More pragmatically, it is a means to develop critical thinking , research and other skills, as outlined above. In education it also has a key purpose as a tool for assessment of learning: academic writing is how

learners demonstrate their learning and make it available for judgement by others. This may happen in a wide range of formats: traditional exams, essays, reports, eportfolios, reflective journals, work placement reports, online discussion fora, oral presentations and so on. ChatGPT and other AI tools can create all of these.

Responding to the challenge of AI

It is clear that tools such as ChatGPT will have a very significant impact on the practice of academic writing. Already AI-based 'helper' platforms such as Quillbot, Wordtune and Grammerly have been used by academic writers to 'polish' their prose, other tools such as elicit.org and perplexity.ai are very useful for the identification of references. A reasonable knowledge of how to prompt LLM-based tools allow learners to produce high quality text, of up to 50 pages in length with GPT4. The tools can summarise extremely effectively, translate faultlessly between numerous languages, produce detailed essay plans, compose code, create film scripts, analyse images and many other tasks routinely set for learners.

What then is the future for academic writing? At this stage in the evolution of the technology, there is no clear answer. Some place faith in the technology of 'detection' – tools similar to Turnitin that can 'detect' AI-produced text. The current consensus is that such tools will be easy to evade or 'game'; even that produced by OpenAI itself was ineffective. Nonetheless, IT entrepreneurs will seek to develop and promote such tools. But even if the detection tools are effective, we do not yet have any reliable basis on which to interpret their output: is 45% of an essay written by AI 'too much', what about 10%, or any percentage? What if AI is used to structure the outline of a paper, or to check for references, grammar and spelling, or to write code, or to create images? Unlike the phenomenon of 'plagiarism', we do not have decades of discussion, analysis and established practice and norms to draw upon.

There are many sources of recommendation for learners, educators and providers. The resource document referenced at the end of the article lists many of these. One considered and comprehensive guide has recently been developed by a group of educators in German universities: *Unlocking the power of generative AI models and systems such as GPT-4 and ChatGPT for Higher Education*. It provides useful advice for students and for lecturers, as reproduced below:
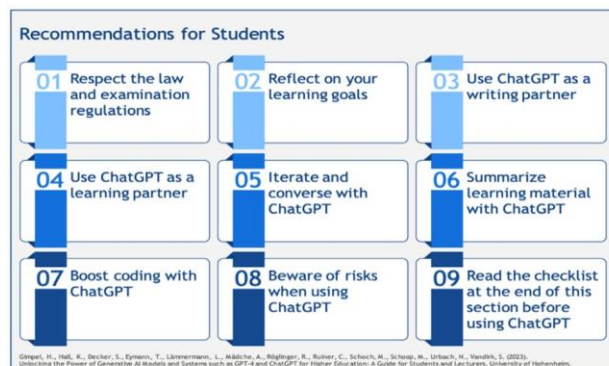

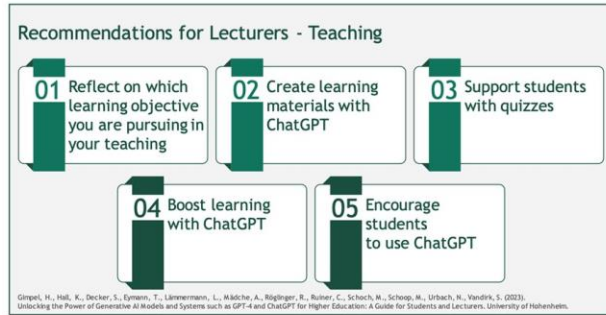Figure 4. Summary of recommendations for students

Figure 8. Summary of recommendations for lecturers regarding teaching

Guidelines have also been produced by other national authorities such as

1. QAA, UK: The rise of artificial intelligence software and potential risks for academic integrity: briefing paper for HE providers

2. Australian Academic Integrity Network (AAIN) Generative Artificial Intelligence Guidelines : available on the NAIN Members' Hub and here

AI and education

There is a lot of work to do to develop agreed policies, procedures and ways of working that are educationally valid. It may well be that established ways of assessing learning may need to change, perhaps fundamentally. This will shape how learning and teaching are done, with consequential effects on pedagogy, the design of learning environments – perhaps even a revaluation of the place of teaching in the hierarchy of higher education.

There has been a rapidly evolving discussion on how to adapt to an AI world of higher education. Changes to assessment have been suggested: at one extreme there have been calls for a return to reliance on proctored, in-person closed book exams or in-class handwritten assignments. Some have called for use of AI tools to be 'banned' and for penalties to be applied to those who use them. For example, ChatGPT has recently been blocked by the data protection authority in Italy over concerns with privacy and its compliance with GDPR – according to reports, the EU data protection authorities are coordinating with the Italian office to understand these concerns further.

Others have stressed more interactive and scaffolded approaches to writing, more 'authentic assessment' and the development of 'AI literacy' amongst learners and educators (though without any consensus on what this might mean). One thing that is clear: whatever approach taken will require a significant investment of additional resources in staff training, changes to academic work patterns, new policies and procedures, rewriting of syllabi and a wholesale review of approaches to learning, teaching and assessment. This will be challenging to achieve, especially as the technology will be rapidly developing in parallel.

Further reading

The author has compiled an extensive set of resources that embraces many aspects of AI in education, including policy documents, informational resources such as podcasts and videos, ideas for new approaches to teaching and assessment, background documents on the development of the technology,

including social and economic aspects, and broader discussions of philosophical and existential questions about AI.

This set of resources has been made available on:

- The NAIN Members' Hub

- Academic Integrity (Private HEIs) Hub

- QQI-PSRB Engagement Hub

Please contact academicintegrity@qqi.ie if you are not a member of these groups, and would like a copy.

Update from the Global Academic Integrity Network

The Global Academic Integrity Network (GAIN) was co-founded by QQI and the Australian Tertiary Education Quality and Standards Agency (TEQSA) and launched by Minister Simon Harris at QQI's 10-year anniversary conference in October 2022.

GAIN is a collective of quality assurance agencies, qualifications authorities, academic recognition bodies and other regulators. The variety of organisations represented in GAIN mean that the network has a breadth of expertise on different types of academic fraud; through the network, members can disseminate new developments and research on contract cheating and academic fraud across jurisdictions. Members aim to develop and implement common, global approaches to combatting these challenges.

GAIN currently has 26 members (see below for the full membership list) from across the globe, who aim to disrupt the business models of contract cheating service providers and other bad actors thereby protecting learners, education providers, and national qualifications systems. The network is endorsed by the European Network for Academic Integrity (ENAI), the European Association for Quality Assurance in Higher Education (ENQA) and the Council of Europe.

GAIN meets online, once per quarter. The first network meeting took place in December 2022, and was followed by a meeting in February 2023, attended by members representing 14 jurisdictions from across three continents, as well as from UNESCO. At the most recent meeting, chaired by QQI, members welcomed the first guest presenter to the network, who detailed the business and operating model of a well-known provider of fake qualifications, contract cheating services and other services that rely on academic fraud. Members also discussed the implications of large language models such as ChatGPT for artificial intelligence and steps being taken within their own jurisdictions to support providers, their learners and staff, to meet the challenges posed by these developments.

The next meeting of GAIN will take place at the beginning of May and will be chaired by CIMEA, the Italian national academic recognition body.

You can read more about GAIN on its website: Global Academic Integrity Network.

ASQA (Australia)	Office of the Ombudsperson for Academic Ethics & Procedures (Lithuania)
TEQSA (Australia)	NZQA (New Zealand)
NEAA (Bulgaria)	Northern Ireland Department for the Economy
HCÉRES (France)	PEQAB (Ontario, Canada)
NCEQE (Georgia)	ARACIS (Romania)
MAB (Hungary)	SAQA (South Africa)
UNESCO	AVAP (Valencia, Spain)
QQI (Ireland)	AAC-DEVA (Andalusia, Spain)
CIMEA (Italy)	AQUIB (Mallorca, Spain)
IQAA (Kazakhstan)	ENIC-NARIC Sweden (Sweden)
Commission for University Education (Kenya)	QAA (UK)
KAA (Kosovo)	NAQA (Ukraine
Zambian Higher Education Authority (Zambia)	ZAQA (Zambia)

1 - Full list of GAIN's current membership

Threats to Academic Integrity

QQI has been alerted by providers to a range of websites and practices that may pose a threat to academic integrity. These have been collated and summarised to ensure that all providers are aware of, and can respond to, potential issues of concern.

Contract Cheating Sites and Provider Webpages

QQI understands from providers that there has been an increase in emails from essay mills and similar services to HEIs asking to have links to their services included on institutional student resource and similar pages. The landing pages for these sites often appear innocuous or legitimate, but further exploration indicates that this is not always the case, or that content may need careful consideration before being promoted or carried by a provider on their webpage.

For example, an Irish university reported that it recently received an email request to include a link to an article on the following website: https://business-essay.com/. The landing page offers access to sample business essays submitted by learners as an aid to students in overcoming 'writer's block'. However, the website also includes AI writing tools and throughout the website are ads and chat service pop-ups for essay writing services. The AI tools, in particular, are specifically targeted at learners:

| Writing Toolbox	Citation Styles	Business Analysis
Conclusion Writer	APA-7 Title Page	SWOT Analysis
Reworder	MLA-9 Title Page	SOAR Analysis
Thesis Statement Writer	Harvard Title Page	PEST(EL) Analysis
Title Maker	Chicago Title Page	Porter 5 Forces Analysis
Question Generator	Turabian Title Page	VRIO Analysis
Summarizing Bot		
Sentence Rewriter		

2 - Tools, including AI tools, offered on www.business-essay.com

Infiltration of Student WhatsApp Groups

Essay mills infiltrating learner What's App groups and Facebook pages as a means of directly targeting learners with offers of cheating services is a longstanding practice that QQI has previously highlighted. It was recently reported to QQI that essay mills are now accessing both undergraduate and postgraduate groups at the point of establishment, potentially compromising these groups and their learners from day one. Some examples of the messages circulated to a new postgraduate What's App group are included below for illustrative purposes.
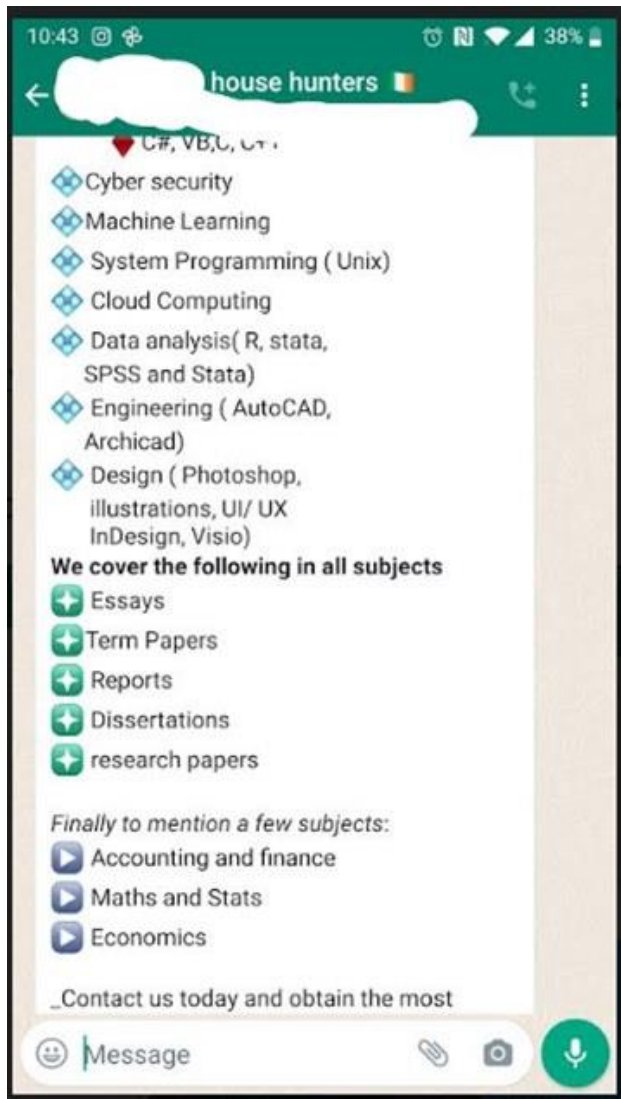
*3 - Sample message to postgraduate students' WhatsApp group*
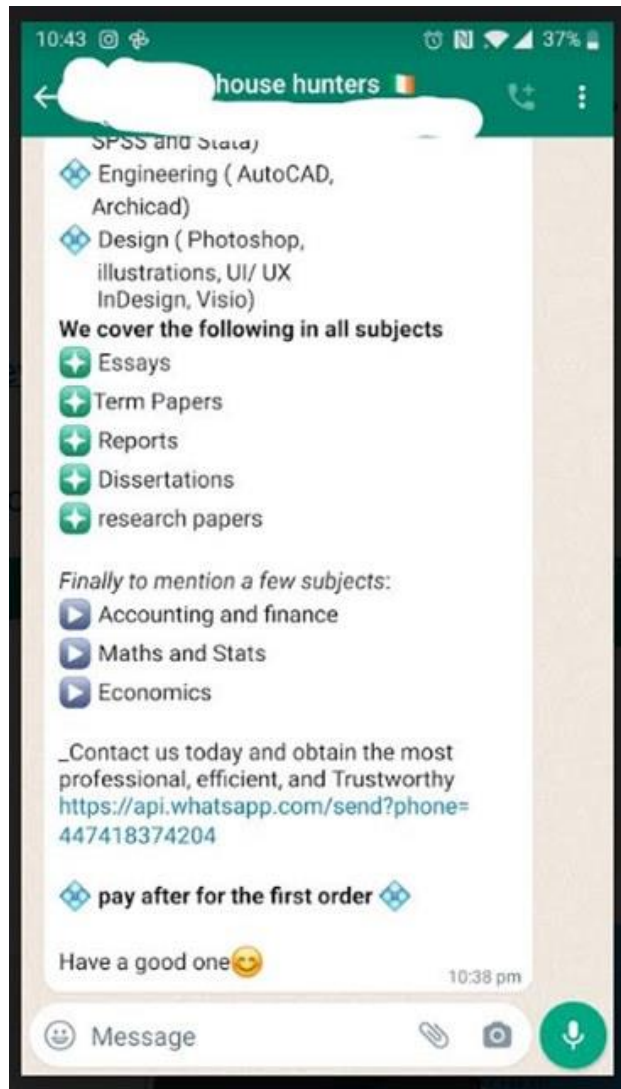
*4 - Sample message to postgraduate students' WhatsApp group*
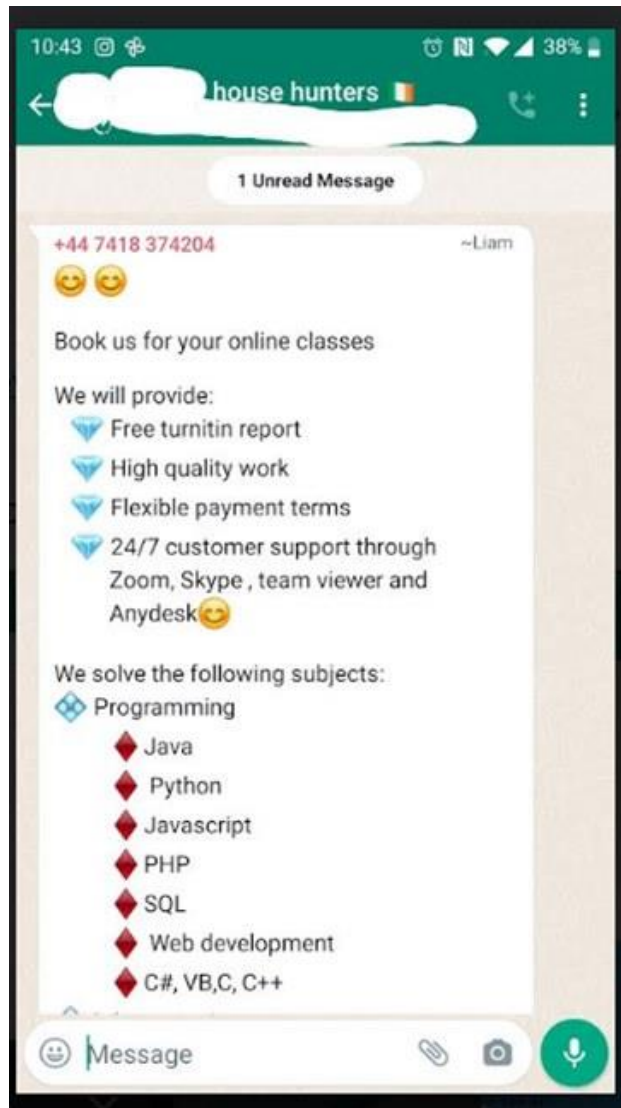
5 - Sample message to postgraduate students' WhatsApp group

Offers of Cheating Services

It has been reported to QQI that contract cheating service providers are also contacting potential customers (staff and learners) directly via LinkedIn. Examples of the kinds of offers made are provided below.
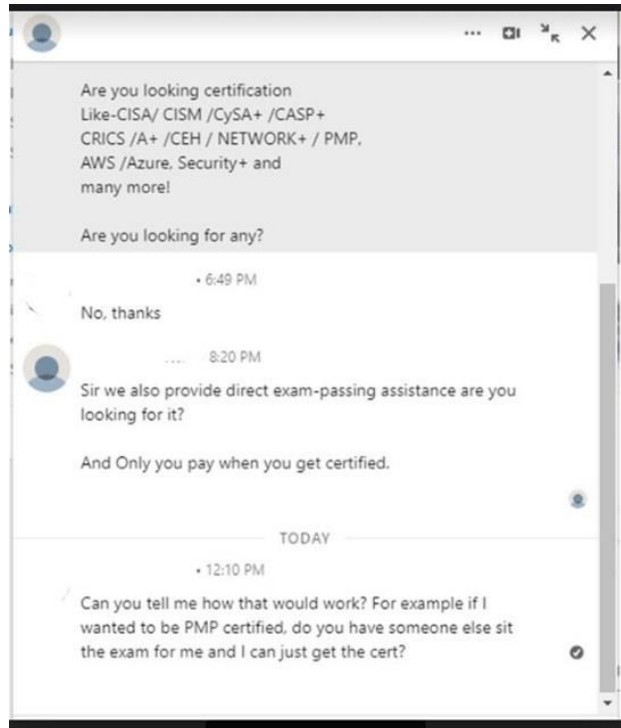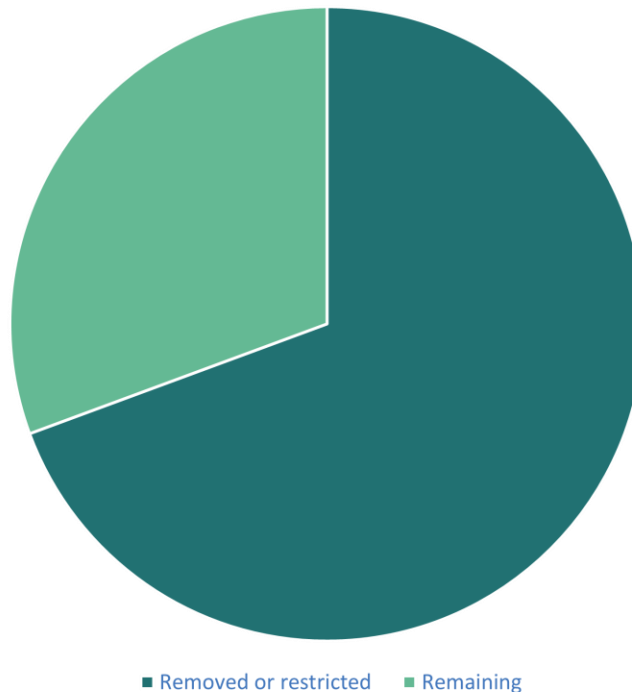
6 - Sample offer of contract cheating services made via LinkedIn
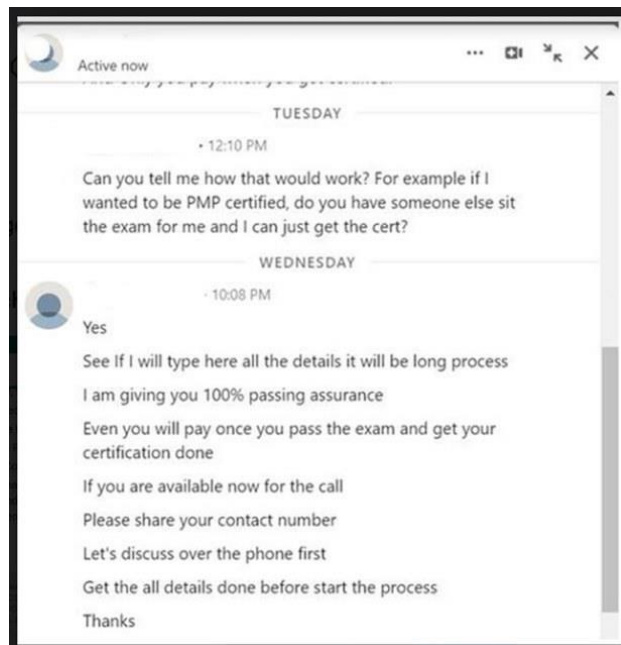
7 - Sample offer of contracting cheating services made via LinkedIn

Update on QQI's reporting activity with advertising, publishing and social media organisations

Content reported as being in breach of section 43A of the Qualifications and Quality Assurance Act 2012 (as amended)

■ Removed or restricted   ■ Remaining

Since August 2021, QQI and a number of organisations have agreed and implemented monitoring and reporting processes to identify advertisements, pages, posts and other content advertising contract cheating services and to remove such content from these organisations' platforms.

The organisations are:

- Distilled SCH (operator of Adverts.ie and DoneDeal)
- Google (reporting relates to the YouTube platform)
- Meta (operator of Facebook and Instagram)
- TikTok

Since August 2021, 431 pieces of content have been reported, with 299 of these removed from the platforms or restricted for Irish audiences (=69% of total). Full details of content reported and removed or restricted are available below. (You can click on the images to enlarge them.)

QQI encourages providers, their staff and learners, to report any content promoting contract cheating services to the above and other relevant platforms. As always, QQI also welcomes reports by providers, their staff and learners, of such content. QQI is particularly keen to hear about any novel or unusual activity or behaviour by contract cheating service providers in advertising or directly targeting learners

or staff. All reports can be sent to to academicintegrity@qqi.ie. Learners may also submit reports or comments through [Your own work, Your own degree, Your own achievement! (qqi.ie)](#).

| Platform	Pieces of content reported	Pieces of content removed or restricted for Irish audiences	Pieces of content reported but not removed or restricted
Distilled SCH (Adverts.ie; DoneDeal) *Reporting commenced August 2021*	20	20	0
Gumtree *Reporting commenced November 2022*	6	6	0
YouTube *Reporting commenced July 2022*	75	59	16
Facebook *Reporting commenced July 2022*	103	83	20
Instagram *Reporting commenced July 2022*	95	70	25
TikTok *Reporting commenced November 2022*	132	61	71
TOTAL	**431**	**299**	**132**
TOTAL (%) (rounded to nearest whole number, where necessary)	**100%**	**69%**	**31%**

Note: Content which has not been removed or restricted may be reported on more than one occasion, due to it appearing again in online searches. This may lead to apparent increases in the total pieces of content for any given platform.

8 - Summary of content infringing s. 43A Qualifications and Quality Assurance Act 2012 (as amended) reported by QQI to advertising, publication and social media platforms
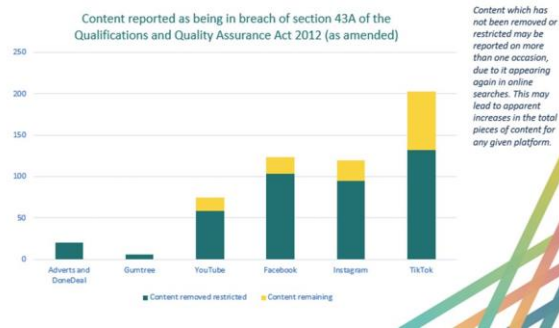
9 - Bar chart setting out the number of pieces of content reported by QQI to Adverts.ie and DoneDeal, Gumtree, YouTube, Facebook, Instagram and TikTok. Each bar shows the proportion of reported content removed/restricted and the proportion of content remaining on each platform.
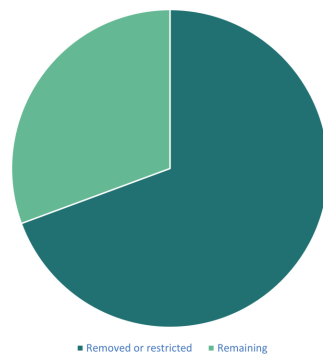
10 - Graph setting out the proportion of content removed/restricted by advertising/publishing/social media organisations following reporting by QQI.

The Next Academic Integrity Update

QQI's academic integrity update will be circulated to all providers four times per academic year. The next update will be circulated in **June 2023**.

We welcome any additions to the list of providers and sites, as well as other general updates you may have for the next academic integrity update. You can send this information to: academicintegrity@qqi.ie by **31 May 2023**.

Note: All images used in this update are licensed under Creative Commons. Links to third-party material and guest contributions included within this update do not necessarily reflect the considered views of QQI or commitment to a particular course of action.