

**AUTHORS:**Narend Baijnath¹
Divya Singh² **AFFILIATIONS:**¹Council on Higher Education,
Pretoria, South Africa²STADIO Holdings Ltd, Cape Town,
South Africa**CORRESPONDENCE TO:**

Divya Singh

EMAIL:

divyas@stadio.co.za

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Examination cheating: Risks to the quality and integrity of higher education

We examine the exigencies and impact of examination cheating, focusing specifically on the prevalence and risk of cheating taking place in examination venues. We document the problem with global coverage and note the consistency of the scourge and highlight the different approaches of institutions to dealing with the risk. Stressing the prejudice arising from examination cheating to both universities specifically and society generally, one of the root causes of the risk, namely the moral compass and ethical norms of university students and the societies in which they function, is discussed. The innovation of students when working out cheating practices and the facilitating effects of technology are considered as a backdrop to exemplars of good practices that have been implemented to mitigate the reality and risk of examination fraud. Recognising examination cheating as a fraud on society and a critical risk to university reputation, we question whether university leadership recognises the risk and gives it adequate (and responsible) emphasis in strategic and operational organisational risk identification and management.

Significance:

- Cheating in examinations, and especially in the examination venue, is a global scourge. A comparison of global good practices is presented which provides a framework for institutional discussion to begin to address and transparently deal with the issues and impact of examination cheating.
- Acknowledging technology as one of the significant enablers of examination fraud and noting the constraints confronting universities, there is nevertheless a critical need for institutions to mitigate the risk. In not doing so, universities, which are fundamentally supported by the fiscus and public taxpayers, are committing a fraud on society.
- The attitude of some students and academic staff, as well as public perceptions to examination cheating raise the lid on a moral decay that is beginning to manifest in society globally.
- Universities are challenged to address the issue of examination cheating proactively, openly and honestly. The repercussions of failing to do so are highlighted and exemplars are provided of what can and has already been tried and tested to mitigate the risks.

Introduction

It is unarguable that the university learning experience is not just about the pass mark, academic progression, and attainment of a qualification – it is also about the *student's journey* which equally includes the acquisition of skills and expertise, development of competencies necessary for the contemporary world of work, and personal growth and development. In keeping with these broad goals, learning at a university should be a scaffolded and developmental *process*, as well as an *outcome*. However, for many students, the *process* means little or nothing – their only focus is the degree certificate (the 'outcome'); abetted by universities for which the goal is frequently the *throughput target*, at the expense of the process.

Commonly, the outcomes are measured by some form of examination or assessment activity which provides a measure of the level of learning attained in the form of knowledge, skills, and/or pre-determined competencies. These generally are accepted without much criticism or question and have a high degree of credibility. There is therefore no gainsaying the value of the examination/assessment activity within the university system specifically, but also for society, generally. Who gets a job and what offers are made to graduates is significantly dictated by the results and learning outcomes reflected on the academic record. It is startling therefore when allegations arise of widespread examination cheating. Research by Baldwin et al. reporting on the results of a study involving 2459 medical students, immediately raises a red flag – they reported that 39% of the sample tested acknowledged that they had witnessed cheating in an examination; 66.5% had heard about examination cheating; and 5% (123 doctors) admitted that they had cheated in their examinations.¹ Without derogating from the importance of the research, the caution against drawing conclusions based on a single data source is apposite. Hence the question: was this an isolated transgression from almost 20 years past, or is examination cheating a greater reality in higher education than might be readily apparent?

The idea of cheating in examinations is antithetical to the nature and purpose of higher education with its emphasis on quality, competence and individual development. Yet there is a body of reporting, especially in the public media, that when read together paints an alarming picture of the high risk that universities are facing as a result of examination fraud. A scan of the available literature adds to our sense of disquiet that the prevalent risk is considerably greater than the attention that is being given to the problem of examination cheating by institutions of higher learning. Reports discussed below point to an absence of proactive mitigation of the risks of examination cheating and rather emphasise the reactive responses by institutions after a problem is exposed. However, with the scourge seemingly becoming more rampant, universities are beginning to acknowledge the negative impact on the integrity of qualifications and the prejudice to institutional reputation that arises every time a case of examination cheating is publicly exposed. The conundrum for proactive risk management is that examination cheating is rarely identified in an institutional risk register and is often a reactive and/or ad-hoc intervention by the management.

Examination cheating is a growing global problem that has affected universities without discrimination. The following analysis illuminates the extent of the problem and impels all institutions engaged in higher education to scrutinise the integrity and credibility of institutional examination processes. Within this context, organisational awareness of the risks of examination cheating introduced by technology, as well as the factors of human greed and student creativity, must be integral to the assessment.

Discussion: A global scan

In Australia in 2014, Fairfax Media reported widespread cheating at universities across New South Wales.² As a consequence, the University of Sydney conducted its own investigation on academic misconduct and confirmed that 'the problem of cheating in exams is not trivial'³. Highlighting the risk introduced by technology, the Deputy Vice Chancellor of Education at Wollongong University acknowledged that the '[d]igital age provides more opportunities for cheating'⁴. Also acknowledging the threats created by technology, Rajiv Gandhi University of Health Sciences in India, noting the reputational damage caused by the publicity of examination cheating, sought to mitigate the opportunities enabled by technology by introducing technology jammers to prevent information sharing, and metal detectors to proactively identify students carrying devices on their person.⁵ The Jawaharlal Institute of Post Graduate Medical Education and Research banned all wristwatches and even conducted tests to check students' earrings to see if they were hiding Bluetooth devices.⁵ Both Bangalore University and Rajiv Gandhi University also considered installing surveillance cameras in the examination venues, but the additional staff required and the added financial commitment in the face of constrained budgets, caused the operation to be aborted.⁵

An illuminating report by Transparency International indicates that 30% of Nigerians surveyed in 2013 paid a bribe during their higher education studies.⁶ Eziechina et al.⁷ confirm this report noting that: 'In contemporary Nigeria corruption of examination process comes in no other way than through examination malpractice [most of which] occurs while the examination is ongoing.' Harrison⁸ highlights the recurrence of the global trend with the increasing use of sophisticated technology in Nigerian universities to abet the fraudulent activities. In addition to smartwatches, he cites an example of wireless spy cameras being used to copy and transmit questions to third parties who then responded 'through linked invisible devices some of which are designed as zips and buttons'⁸. Reiterating the concerns raised earlier, Harrison points out that 'none of the said exams were cancelled post-discovery and students could continue with exams and graduate'⁸. Further analysing the influence of technology and considering social media specifically, in 2017, final-year medical students at the University of Glasgow (Scotland) were required to re-take their practical examinations after it was discovered that they had used WhatsApp, Facebook and the university's own Student Management System to share with colleagues waiting to take the practical examination the details of the cases they would encounter in the examination.⁹

In a widely publicised intervention to stop examination cheating, the Government of Algeria completely shut off the country's Internet for several hours each day for the six days of the scheduled 2018 high-school examination. Acknowledging the severe detriment caused by the proliferation of examination cheating, the Government also installed metal detectors at the entrance to examination venues, phone jammers and security cameras at more than 2000 examination centres.¹⁰ In 2017, Ethiopia also took the extreme step of blocking all social media sites in a 'proactive' bid to mitigate the risks of cheating in the country's university entrance examinations. Describing the problem as a national risk, the Government of Algeria noted that while it recognised the impact on many people – including the economic detriment – the consequences of the risk exceeded the public inconvenience.¹¹

One of the biggest education scams to grip India involved test-fixing of the admission examination for certain medical schools, as well as of the eligibility assessments for administrative positions within the state.¹² Known as the Vyapam scam (after the body conducting the admission tests), the scam operated from 2006 to 2013 and involved thousands

of students paying bribes of between USD40 000 and USD70 000 to a network of 'fixers' who were responsible for running the examinations.¹³ Sethi¹² describes the Vyapam scam as 'the stuff of myth and legend' and the dangerous nature of the operation was reinforced by the number of associated people found dead under mysterious circumstances. When it was eventually exposed, the investigations identified the involvement of, inter alia, high-ranking politicians, chief ministers, academics and doctors (see *Supplementary note 1* for more). Niazi¹³ notes that by April 2014 – a year after the investigation commenced – more than 1100 medical students admitted to various medical colleges in the state, who had taken the pre-medical test through Vyapam, had their enrolments cancelled when it became clear that they had gained admission through fraudulent means. The cancellation figure is significant: as Sethi points out, in 2013 there were only 1659 seats available for admission to the medical schools under the control of Vyapam (and 40 086 applicants).¹² Some 630 students appealed the decision to strike them from the medical fraternity, but the Indian High Court rejected the appeal on the grounds that the appellants 'had obtained admissions illegally and were therefore ineligible to hold degrees or practice medicine'¹⁴ (*Supplementary note 2*).

As early as 1999, Bjrklund and Wenestam¹⁵ highlighted the increasing problem of cheating at undergraduate level in the Nordic countries, re-iterating the reality that 'it is, however, not a new phenomenon, but a well-known problem in many European countries, as well as in the United States of America'. Analysing the facts of the different cases reported in the popular media, what is evident is institutional attitude – some universities are far more willing to acknowledge the problem and seek solutions and longer-term remediating strategies, whilst others choose to downplay the significance of the fraudulent conduct in the belief that they are protecting institutional reputation. In a reported case of examination cheating at the Royal Free and University College London Medical School, a student who was caught copying in her final examination was nevertheless allowed to graduate as the university claimed that she 'had been an exemplary student, and there was no indication that she had done this before'¹⁶. On the other hand, Harvard University suspended almost 2% of its undergraduate body in 2012 for collusion and collaboration in a take-home examination.¹⁷ In the Harvard case, it is noteworthy that not all students came out in support of the university to condemn the dishonest practices of their fellow students: rather, while some students indicated satisfaction with the steps taken against cheating, a significant student reaction was anger against the university for, amongst other reasons, the time that it took to complete the investigation and the emotional 'torture' for the students charged.¹⁷ This report provides an interesting insight into how students view and experience examination cheating and may be a reason why the real extent of the problem remains hidden. Further corroborating the proposition that examination cheating has been and is a real problem for higher education institutions, the US Education Portal recorded that, in 1940, 20% of college students in the USA admitted to cheating during their academic careers, whereas today that number ranges between 75% and 98%.¹⁸

As universities are pressed upon to implement contingency plans and operations to guard against the risks of examination cheating, they are also required to allocate the necessary budgets and resources to support these programmes. All these initiatives add significantly to the already high cost of education. Most universities simply do not have the necessary resources on the scale required for countermeasures that will adequately assure the integrity of their examinations in the operating budgets received through state subsidies or the national fiscus. However, institutions cannot accept the risk, share it, or transfer it – which leaves the remaining option of avoiding it or, at least, mitigating it. Under these circumstances, the decision that organisational management will need to confront is whether to choose a zero-tolerance model at exorbitant cost, or a risk-tolerance model with lower financial impact. Acknowledging the materiality of the *impact* of examination cheating, institutions will need to make their decision with a clear and informed insight on the *likelihood* of the occurrence when determining appropriate treatment plans and resourcing their risk mitigation strategies. The Makerere University degree fraud scourge in 2015 presents a clear warning of what may



result when the risk assessment activity is either not conducted or is not conducted taking proper cognisance of *all* factors.

In 2015, the University of Makerere in Uganda was confronted with a scourge of degree fraud when it was revealed that 600 of the 12 000 graduating students (i.e. 5% of their total annual throughput) had obtained their results through corrupt activity, and as the investigation unfolded, it became apparent that the 2015 incident was not isolated, and that general examination fraud was endemic at the university.¹⁹ The Makerere University case (Supplementary note 3), like the Vyapam scam, raises a significant risk for universities – namely the involvement of unscrupulous staff colluding with students and facilitating the fraudulent activity. These integrity breaches are often aided by absent or weak systems and a poor control environment because of resource constraints (for example, in the case of Makerere University, concurrent freezing of posts). Practice shows that when jobs are at risk, it is frequently the administrative positions that are the first to be negatively impacted. The reduction in staff numbers results in jobs being consolidated, which correlates directly with poor governance and higher risk because there is now no proper segregation of roles and functions, and the appropriate checks and balances are no longer in place. In such situations, one person is given too much authority and control over critical processes, which creates a fertile environment for impropriety to take root and flourish.

Universities globally acknowledge that cheating techniques today have advanced far beyond notes on pieces of paper, with technology proving to be a significant enabler of examination cheating activities. Recognising the efficacy of smartwatches as ‘wrist computers’, several universities have taken steps to exclude them from the examination venue. What is interesting is that, notwithstanding the identified potential as an enabler of fraud, universities deal with the use of smartwatches rather differently. Rangongo notes that, in South Africa, the University of Cape Town explicitly excludes such devices on the person or desk of a student, whereas the University of KwaZulu-Natal bans them entirely in the examination venue. Stellenbosch University permits students to enter the examination venue with a smartwatch but they are then required to switch off the device and place it face down on their desk; a similar approach is adopted at the University of Pretoria, but it is further required that the device be switched off and placed on the floor, under a chair and out of the student’s line of sight. Monash University (South Africa) also requires that all smartwatches be switched off and placed in a bag on the floor. The rule at Rhodes University is that students found wearing a ‘questionable electronic device’ are required to clarify its function or remove it.²⁰ The university approach to smartwatches and watches has reached South Africa a little later than its global counterparts: in the UK, as early as 2015, the City University of London had already introduced rules to prohibit the use of all wristwatches during examinations, Goldsmiths University had required that all watches be stored under desks, and Southampton University required all watches to be placed in a clear plastic bag on the desk. The University of London limits its rules to removal of electronic watches, and at Oxford University and Cambridge University, ‘students’ watches are subject to examination by invigilators²¹. Explaining its stance on the removal of all watches, Goldsmiths University pointed out that it was (1) to avoid discrimination against students with digital watches; and (2) to compensate for the realities of under-resourcing of universities, which means that the university does not have the time to check every single watch that comes into an examination room.²¹ Student reaction at Southampton University to the ban was again mixed with many being strongly critical of it but others supporting the steps taken by the University for a proactive warning to would-be cheaters.²¹ In Japan, Kyoto University issued a blanket ban on all wristwatches, reiterating the justification

that it was not always easy to tell at a glance if a watch was analogue or smart.¹⁰ At the University of New South Wales (Australia), the restriction applies to all watches which may be neither worn nor placed on desks during an examination. Le Trobe University (in Melbourne) allows for regular watches to be placed on the student’s desk while the examination is being written, but expressly prescribes that no smartwatches may be brought into an examination venue.^{10,22} In a conscientious effort to eliminate the risk posed by technology to the integrity of the results of the

university entrance examinations, China has adopted a far more extreme approach by using drones in examination venues. The drones are geared not only to scan the examination halls but ‘they also locate suspicious radio signals created by hidden earpieces used to obtain answers to examination questions’²².

Evidence of the increasing creativity and innovation characterising examination cheating globally reinforces the concern at universities that examination fraud needs serious engagement as part of both their strategic and operational risk assessments. For example, while universities generally have an invigilation protocol for the examination venue, less attention is paid to something as mundane as toilet breaks. The literature shows that students will use the toilet for phone calls, to access materials that were hidden in the stalls, or even to use the Internet to source answers. When the University of Maastricht (the Netherlands) became aware of this exploitation during toilet breaks, it introduced specific equipment to detect the use of smartphones and other electronic devices in the toilets so that when a smartphone was turned on or data or texts transferred, the equipment gave an alert to the responsible monitor.^{23,24} As part of its overall review, the University of Maastricht also reduced the number of toilet visits allowed per student; and like many of its counterparts, the University banned the wearing of smartwatches during the examination session. As a practical approach to mitigate the risk of fraud in multiple choice examinations, Maastricht University decided to present more than one examination question paper in the instance of multiple-choice examinations.²³

It is anticipated that the list of universities and countries in which examination fraud has been identified will continue to grow as detection improves. Cheating has become a business and as the returns increase, so too do the repertoire and complexity of the methods and techniques employed. The US Education Portal correctly characterises the incentive for examination cheating by noting that ‘today students are cheating not just to pass but to get ahead’¹⁸. With the increasingly competitive job market, economic uncertainties, and an emerging demand for ‘immediate gratification’, the conventional quest in university education of *time to mature* and *earning your place* appears to be overtaken by the impulsion to get ahead by any means possible. The overwhelming obsession with performance both in the university sector and in society generally is a significant spur for cheating behaviours and the pressures come from varying and often multiple sources. For instance, (1) the expectation and/or desire to be named on the university honours lists, (2) the aspiration to be awarded a scholarship or admission to postgraduate programmes, (3) the home with family expectations of success, (4) society with the intense competition for jobs, or (5) sometimes it is just a personal choice motivated by greed, dishonesty and an underdeveloped moral compass. The external factors are often enabled by an internal institutional facilitating environment which includes identified systemic loopholes including ineffective deterrents and the increasing ease to cheat, questionable academic values, and the fact that sometimes – even when cheaters are caught – the cases are handled feebly by their lecturers rather than being reported to the management structures, or are addressed weakly by the management structures with an emphasis on not exposing the problem for fear of reputational damage. The literature draws attention to the high numbers of university students who have admitted to cheating, yet who have not been caught nor disciplined by their institutions. This climate sets the tone for others to follow and is probably a key contributor to why cheating has become prevalent at institutions of higher education. The problem is exacerbated by the fact that, as the cheating culture becomes more entrenched and known in student circles, and where the sanctions for examination cheating are less stringent because of ‘external factors’, cheating carries less of a stigma ‘because everyone is doing it’ and students are more willing to take the risk. These factors – individually and collectively – pose a significant risk to the credibility and integrity of the overall academic project and universities ignore the risks at their peril.

However, while examination fraud is often linked to social drivers, a closer analysis of the problem highlights the uglier underbelly – a lack of moral rectitude. Acknowledging social and economic pressures as possible catalysts, it is, however, without question that the student who



cheats in the examination does so with a conscious decision to be *dishonest*, to take the easy route to a self-serving end and to focusing only on obtaining 'the piece of paper'. One is left to wonder whether the full impact, seriousness and risk to others of entering a job or profession without the requisite skills and competence is ever considered. From an institutional perspective, this may create a secondary risk, namely the possibility of a legal challenge from a member of society who suffers harm at the hands of an incompetent graduate who succeeded only because the university failed to properly monitor its risk universe and/or implement reasonable controls to assure the credibility and integrity of its qualifications. A scan of the available literature and case law reveals no decisions on the point but suffice it to point out that what, after all, is a risk other than 'exposure to a proposition of which one is uncertain'?²⁴

Some ideas for addressing the risk

As noted by Gareth Crossman of the UK Quality Assurance Agency for Higher Education:

*If you are realistic about it and say is it possible to create an environment where it is impossible for students to find a way to cheat, the answer is probably not.*²⁵

Highlighting the worldwide trend in examination cheating, Crossman classifies the risk as 'an international issue which demands an international response'²⁵. Agreeing with the need for global research on the problem, the UNESCO International Institute for Educational Planning and the International Quality Group of the US Council for Higher Education Accreditation are currently engaged in a research project to ascertain what quality assurance and accreditation bodies globally are doing to deal with academic corruption.²⁵ They point out that as the problem of examination cheating becomes more exposed and the concomitant risks become clearer, universities will need to become more serious about confronting cheats, as well as proactive in closing not just the systemic opportunities, but also addressing staff attitudes, and in educating students on the consequences of examination fraud because, as Carter points out, even without technology, students are incredibly innovative and can be totally ingenuous when devising activities for examination cheating.²⁶

One of the first steps in addressing the problem of examination cheating, notes O'Malley²⁵ is to '[persuade] hard-pressed academic staff on the front line that it is not in their best interests to ignore it...'. Institutions must have a policy and the will to act against offenders and deal with cheats consistently, fairly and firmly. This aspect of punishment and deterrence was addressed succinctly by the Indian Supreme Court: 'If our country is to progress, we must maintain high educational standards, and this is only possible if malpractices in examinations are curbed with an iron hand.'²⁷ (Supplementary note 4)

Despite acknowledging the role of restorative justice in an environment of 'learning', allowing identified cheats to evade sanction will not send the correct message to the student body. Academic staff have a responsibility to ensure that the right thing is done in the circumstances of each case. Acknowledging this truth, several institutions – especially those emphasising punishment as a deterrent – also publish the names of the students found guilty of disciplinary infractions in student newspapers or in a register that is shared between universities. It may even be suggested that the external factors that are so often stressed in mitigation, albeit real, are no more than an excuse used by the cheaters who are caught, as human behaviour is such that one would always rather find someone or something else to blame rather than acknowledging guilt. A case in point is that of a 23-year-old law student from the UK who was desperate to become a barrister, for which a specific admission score was required. From the available facts, the student first attempted to hold up a university cleaner at gunpoint to obtain the keys to the law department, and when that attempt failed, she resorted to breaking into the offices and amending her examination marks. Her crime was discovered, and she was charged with robbery, possession of a firearm and forgery. She admitted the offences and blamed her conduct on the 'pressures to get an upper second degree

to become a barrister'²⁸. The case ended tragically when the student committed suicide. The father of the young student publicly criticised the university authorities for going to the police to report the alleged crimes, rather than approaching his daughter directly. 'Almost every adult in the country knows the mental stress people are under to pass their exams,' was the father's response.²⁸

Examination cheating is fraud – committed both on the university and on society that accepts the performance marks as being valid, and, accordingly, awards recognition and due benefits based on the results. Understanding that the problem is often hidden and silent because innocent bystanders do not wish to become involved as accusers or witnesses, some universities have introduced Whistleblower Hotline Services with the hope that the anonymity may encourage reporting. Universities are also seeing value in re-introducing the Student Honour Code, developed with the student body, stressing the importance of moral integrity. The premise of the collectively developed Honour Code is that peer pressure and self-policing will assist in reducing the problem of dishonesty and examination cheating (Supplementary note 5). However, the steep road to success and turning the tide on examination cheating was summed up by the response of students in the USA to the inclusion of examination cheating in the Honour Code. Contrary to Management's expectations, many students were simply not prepared to follow through in reporting others for cheating, notwithstanding strong support for the notion of the Honour Code. McCabe et al., in an earlier submission for the Constitutional Rights Foundation²⁹, summarised the problem: 'Students sense a deterioration of general societal values, and incorporate that into their own lives.'²⁷ Continuing this theme, the Constitutional Rights Foundation points out that 'cheating does not have the stigma it once had in American society'²⁹. A similar attitude was indicated in a study including students at four medical schools in Croatia. Notwithstanding the information that more than 99% of the Croatian respondents self-reported engaging in at least one activity of academic dishonesty and 78% admitted to frequently cheating in their assessments, only 3 students (out of the sample of 481) admitted to having reported another student for cheating.³⁰

Critical to promoting trust is the requirement that examination and student disciplinary policies and procedures must firstly be applied, and secondly be applied consistently with universities ensuring that the processes are robust and that all role players understand the seriousness of the risk. Inherent in the risk mitigation strategy are robust invigilator practices and universities need to ensure that those proctoring the examinations are thoroughly trained and vigilant. Students with the intention to cheat notoriously observe the behaviours of the invigilators and often design their cheating practices according to where the invigilator stands, at what point the invigilator opens their reading material, and whether the invigilator can be distracted so that answer books may be swapped.³¹ In addition, whilst cheating practices are becoming more creative, even without technology, for example, writing answers in microscopic text and sticking the paper underneath one's fingernails, using nail art to take maths formulae into the examination venue, or writing notes inside one's shoes, in all of the examples cited, the cheaters' success is materially aided by the inattentiveness of the venue invigilator.

Furthermore, and notwithstanding the financial constraint indicated by Bangalore University and referenced earlier, both Curran et al.³² and Eziechina et al.⁷ highlight the efficacy of strategically positioned CCTV cameras in the examination venues as a means of not only deterring potential cheaters but also keeping an eye on invigilator conduct. To be effective in ameliorating the risk of examination cheating and ensuring best value for what will undoubtedly be a considerable expense for the institution, Eziechina et al.⁷ emphasise the importance of ensuring that (1) the parties – both students and invigilators – are aware of the existence of the cameras *and* that they are being watched, and (2) the cameras are maintained (added costs) and that they always work. The research of the Constitutional Rights Foundation shows that 'as the risk of students getting caught for cheating increases, the instances of cheating decreases'²⁹. However, universities embarking on such an initiative will be advised to take note of the decision by the European Court of Human Rights which ruled that the use of camera surveillance



by the University of Montenegro in its lecture halls constituted an unjustifiable limitation of the right to privacy under Article 8 of the European Convention on Human Rights, notwithstanding the fact that there was no audio recording and thus no recording of the teaching or discussions.³² Regarding the installation of surveillance cameras outside the Dean's office, the Court relied on the Montenegro *Personal Data Protection Act*, section 36 which permits video surveillance in official or business premises 'but only if ... safety of people or property or the protection of confidential data, cannot be achieved in any other way'³³.

The longer the problem of examination cheating remains underexposed and unaddressed, the more ingrained it becomes as a facet of the normal student experience – 'everyone cheats' or 'everyone else is doing it'. If one accepts the proposition that *today's students are tomorrow's leaders* and the general principle that the university is often where character is developed, then when students succeed through dishonest means to get ahead at university, this dishonesty often shapes their behaviours in the workplace and in life more generally, thus affecting the moral fabric of the entire society. Universities turning a blind eye to the threats of examination cheating with the idea that they are avoiding reputational prejudice, are being short-sighted because if nothing is done, the danger of reputational risk remains – that is, in the workplace, the student who is now the employee is often not competent at their job and institutional standards and reputation are called into question.

Conclusion

Acknowledging the proliferation of venue-based examination cheating, the most significant query for the higher education sector is: how many institutions of higher learning have identified examination cheating as a risk on their Strategic Institutional Risk Registers? And if not, is this because it has been considered and deemed to not be a material risk? Or because it has not even been considered? Or because universities are confident in their systems? Or because of the naïve belief that examination fraud will not take place within their institutions? Or because the leadership does not want to know the extent of the problem? The integrity of examinations is a fundamental element of quality and concomitantly institutional reputation and sustainability, and it must be a strategic focus of the institutional leadership to assure and safeguard the value of qualifications offered. Examination fraud is also a significant socio-economic risk, and the importance of paying attention to the triad of factors – (1) integrity/quality of the certified examination result, (2) social expectations/acceptance/belief, and (3) economic return on investment – was persuasively summarised by Shirley Alexander, Deputy Vice Chancellor of the University of Technology in Australia:

Taxpayers spend a lot of money on university education. It is absolutely incumbent on us that when we put a stamp on their graduation certificate that says this person has met the requirements of the degree, that they actually have.²

Authors' contributions

Both authors contributed equally to the development of the paper. The authors jointly conceptualised the research focus and format, as well as the methodology that would be followed in developing the paper. D.S. was primarily responsible for the research and information gathering and compiled the first draft of the paper, while N.B. critically reviewed the paper, validated the information and provided supporting enhancements and commentary.

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