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Exam Cheating Then and Now: A Comparison of Academic Dishonesty in the World's Oldest Testing System and Present-day Academia

Abstract

In recent years, cheating in exams has been reported to be a serious issue in many countries. Some believe the problem to be more severe, due to the development of modern technologies. But academic dishonesty is not a new phenomenon. This article is going to look into the cheating methods used in the world's first examination system in Imperial China and the means devised to prevent these malpractices. These are compared with examples of exam cheating observed in contemporary societies and the measures that institutions take to safeguard test and certificate validity.

Cheating practices in Imperial exams are described on the basis of the available literature and the preserved artefacts. The state of the problem of cheating by contemporary students has been assembled, based on research articles. Despite all the changes that have occurred in educational systems over the years, cheating methods have not in essence changed significantly.

Keywords

Introduction

One of the most widely cited definitions of *academic dishonesty* according to Whitley and Keith-Spiegel[1] is that of Pavela[2], who distinguished four types of the phenomenon: cheating, fabrication, plagiarism and facilitating. According to this author, *cheating* is "intentionally using or attempting to use unauthorized materials, information, or study aids in any academic exercise". He defines *facilitating academic dishonesty* as "intentionally or knowingly helping or attempting to help another to commit an act of academic dishonesty".

Plagiarism, according to this author, is "deliberate adoption or reproduction of ideas or words or statements of another person as one's own without acknowledgement". And *fabrication* is "intentional and unauthorised falsification or invention of any information or citation in an academic exercise".

Cizek provides an expanded definition of *academic cheating*: "any intentional action or behavior that violates the established rules governing the completion of a test or assignment; cheating gives one student an unfair advantage over other students on a test or an assignment and decreases the accuracy of the intended inferences arising from a student's performance on a test or an assignment."[3] According to this researcher, "a person may not actually take a test himself or herself, but may use another person (called a 'confederate') to take the test in his or her place."[4] Otherwise called *impersonation*, in Pavela's typology, this would be an example of an act of *facilitating academic dishonesty*.

All the above-mentioned types of academic malpractices are omnipresent in the contemporary educational systems. Reports in the popular press[5],

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[1]   B. E. Whitley, P. Keith-Spiegel, *Academic dishonesty. An educator's guide*, Mahwah, NJ 2002, Lawrence Erlbaum Associates, pp. 16–17.

[2]   G. Pavela, *Judicial review of academic decision-making after Horowitz*, "School Law Journal" 8 (1978) 1, p. 78.

[3]   G. J. Cizek, Cheating in academics, in: C. Spielberger (ed.), *Encyclopaedia of Applied Psychology*, San Diego, CA 2004, Academic Press, p. 308.

[4]   G. J. Cizek, *An overview of issues concerning cheating on large-scale tests*, in: J. O'Reilly (ed.), *Proceedings of the National Association of Test Directors*, Mesa, AZ 2001, NATD, p. 7.

[5]   Cf. R. Adams, *Rising number of pupils caught bringing phones into exams*, in: *The Guardian,* 2019, December 13. *https://www.theguardian.com/education/2019/dec/13/pupils-phones-exams-gcse-a-level-technology-cheat* (12.02.2023) and H. Richardson, *More students found cheating in GCSE and A-Level exams*, in: *BBC News*, 2018, January 5, https://www.bbc.com/news/education-42578874 (12.02.2023).

as well as in scientific research[6], prove that academic dishonesty is a serious problem and that it has increased dramatically in the last decades. Many see the cause of this rise in the development of technology and the possibilities that the Internet offers.[7] Shifting education online in effect of the global Covid-19 pandemic has brought exam cheating to yet another level.[8]

Due to the visible rise in exam cheating in recent years, and the debate that has arisen around the issue, some people tend to think that examination malpractice is a modern phenomenon. But cheating in exams is, in fact, as old

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[6]   Cf. G. J. Cizek, *An overview of issues concerning cheating on large-scale tests*, in: J. O'Reilly (ed.), *Proceedings of the National Association of Test Directors*, Mesa, AZ 2001, NATD, p. 7; M. Birks, J. Mills, S. Allen, S. Tee, *Managing the mutations: Academic misconduct in Australia, New Zealand and the UK*, "International Journal for Educational Integrity" 16 (2020) 6, (12.02.2023); L. Garavalia, E. Olson, E. Russell, L. Christensen, *How do students cheat?*, in: E. M. Anderman, T. B. Murdock (eds.), *Psychology of academic cheating*, Burlington, MA 2007, Elsevier Academic Press, pp. 33–58; D. L. McCabe, L. K. Treviño, K. D. Butterfield, *Cheating in academic institutions: A decade of research*. "Ethics & Behavior" 11 (2001) (3), pp. 219–232; M. Peters, *Academic integrity: An interview with Tracey Bretag*, "Educational Philosophy and Theory" 51 (2019) 8, pp. 751–756; A. M. Sendur, *(Nie)uczciwość akademicka polskich studentów a poświadczanie kwalifikacji* [Academic (dis)honesty of Polish students and the certification of their competences], in: A. Dąbrowski, R. Kucharczyk, A. Leńko-Szymańska, J. Sujecka-Zając (eds.), *Kompetencje dla XXI wieku: Certyfikacja biegłości językowej* [Competences of the 21st century: Certification of language proficiency], Warszawa 2020, Wydawnictwa Uniwersytetu Warszawskiego, pp. 244–266.

[7]   Cf. R. Adams, *Rising number of pupils caught bringing phones into exams*, in: *The Guardian,* 2019, December 13. https://www.theguardian.com/education/2019/dec/13/pupils-phones-exams-gcse-a-level-technology-cheat (12.02.2023); T. Hollman, N. Palmer, D. Chaffin, K. Luthans, *Lying, cheating, & stealing: Strategies for mitigating technology-driven academic dishonesty in collegiate schools of business*, "Mountain Plains Journal of Business and Technology" 22 (2021) 1, pp. 31–50; T. Lancaster, R. Clarke, *Rethinking assessment by examination in the age of contract cheating*, in: *Plagiarism across Europe and beyond 2017—Conference Proceedings*. Brno 2017, pp. 215–228; A. Lathrop, K. E. Foss, *Student cheating and plagiarism in the internet era: A wake-up call*, Englewood 2000, Libraries Unlimited; H. Mellar, R. Peytcheva-Forsyth, S. Kocdar, A. Karadeniz, B. Yovkova, *Addressing cheating in e-assessment using student authentication and authorship checking systems: Teachers' perspectives*. "International Journal of Educational Integrity" 14 (2018) 2, pp. 1–21; D. J. Pell, *That's cheating: The (online) academic cheating 'epidemic' and what we should do about it*, in: J. Baxter, G. Callaghan, J. McAvoy (eds.), *Creativity and critique in online learning* Cham 2018, Palgrave Macmillan, pp. 123–147; Y. Rosmansyah, I. Hendarto, D. Pratama, *Impersonation attack-defense tree*, "International Journal of Emerging Technologies in Learning (iJET)" 15 (2020) 19, pp. 239–246.

[8]   Cf. E. Bilen, A. Matros, *Online cheating amid COVID-19,* "Journal of Economic Behavior and Organization", 182 (2020), pp. 196–211; Sendur, A. M., & Kościńska, A. *Kształcenie w sieci—teoria i praktyka. Przewodnik dla nauczycieli języków obcych i nie tylko* [Web-based Education—Theories and Applications. Companion for Language Teachers and Other Educators], Kraków 2021, Oficyna Wydawnicza KAAFM, pp. 149–181.

as any examination system. And the oldest noted examination system was that in Imperial China: "In any history of testing, the Chinese Imperial examinations naturally come first, as this was the first state-wide effort to establish a testing system under centralized control."[9]

In this article we are going to look into the different cheating methods which examinees used in the Chinese Imperial exams and the procedures undertaken to prevent these practices. The account is based on the available literature on the subject and on the existing artefacts. We are also going to compare these malpractices with the ones which contemporary students use to achieve their goals, as well as the preventive measures adopted by educational and certification institutions to safeguard test and certificate validity. Thus, the research methodology that will be used in this article is literature review.

Cheating in the Chinese Imperial Examination System

The origins of the Imperial examination system—the Kējǔ[10]—can be traced back to the Imperial period of the Han dynasty (201 BCE–8 AD), when they were used to recruit members of the national bureaucracy. But it is during the Sui dynasty (581–617) that it became a fully-fledged examination system. It was extensively developed and expanded over the centuries until 1905, when it was eventually abolished during the final years of the Qing dynasty.

The Imperial examinations can be considered as the first standardised method of recruitment. Their aim was to select the best (at least in theory) candidates for government offices regardless of their social class. The Emperors' intent was

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9   B. Spolsky, *History of language testing*, in: E. Shohamy, I. Or, S. May (eds.), *Language testing and assessment. Encyclopedia of language and education*, New York 2017, Springer International Publishing, p. 376.

10   Cf. L. Cheng, A. Curtis, *English language assessment and the Chinese learner*, New York/London 2010, Routledge; H. De Weerdt, *Competition over content. Negotiating standards for the civil service examinations in Imperial China (1127–1279)*, Cambridge, MA 2007, Harvard University Asia Center; B. A. Elman, *A cultural history of civil examinations in late Imperial China*. Berkeley 2000, University of California Press; I. Miyazaki, *China's examination hell. The civil service examinations of Imperial China*, New Haven/London 1981, Yale University Press; B. Spolsky, *The state of the art in language assessment: Notes for the third millennium*, "Russian Language Journal", 55 (2005) 180/182, pp. 169–187; B. Spolsky, *History of language testing*, in: E. Shohamy, I. Or, S. May (eds.), *Language testing and assessment. Encyclopedia of language and education*, New York 2017, Springer International Publishing, pp. 375–384.

to recruit civil officials on the basis of merit rather than family or political con-
nections, reducing at the same time the power of aristocracy, and to promote
men who were more likely to be loyal to the emperor and not to their fam-
ily interests. In this way "the Chinese model set the precedent of using tests
as a competitive selection device."[11]

The reward was so lucrative and esteemed that hundreds of thousands
of candidates[12] took part in the consecutive stages of the examination process
over and over again, many well into their advancing years. Some devoted
their entire lives to taking the exams. The esteem and the financial benefits
that could be earned through obtaining good results in the examinations were
of such value that it was worthwhile to take the risks and try to cheat one's way
through the examinations.

Miyazaki[13], Elman[14], Cheng and Curtis[15], and Suen and Yu[16] describe
a number of noteworthy procedures introduced in the Imperial examina-
tions in order to prevent cheating, whereas Elman[17], Buckley Ebrey[18], and *The
Shanghai Imperial Examination System Museum* catalogue[19] present pictures of

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[11]   B. Spolsky, *The state of the art in language assessment: Notes for the third millennium*,
"Russian Language Journal", 55 (2005) 180/182, p. 169.

[12]   P. Buckley Ebrey, *The Cambridge illustrated history of China*, Cambridge 1996, Cambridge
University Press, p. 147 and H. De Weerdt, *Competition over content. Negotiating standards for
the civil service examinations in Imperial China (1127–1279)*, Cambridge, MA 2007, Harvard
University Asia Center, pp. 5–6.

[13]   I. Miyazaki, *China's examination hell. The civil service examinations of Imperial China*,
New Haven/London 1981, Yale University Press.

[14]   B. A. Elman, *A cultural history of civil examinations in late Imperial China*. Berkeley
2000, University of California Press and B. A. Elman, *Civil examinations and meritocracy in late
Imperial China*, Cambridge, MA 2013, Harvard University Press.

[15]   L. Cheng, A. Curtis, *English language assessment and the Chinese learner*, New York/
London 2010, Routledge.

[16]   H. K. Suen, L. Yu, *Chronic consequences of high-stakes testing? Lessons from the Chinese
civil service exam*, "Comparative Education Review" 50 (2006) 1, pp. 46–65.

[17]   B. A. Elman, *A cultural history of civil examinations in late Imperial China*. Berkeley
2000, University of California Press and B. A. Elman, *Civil examinations and meritocracy in late
Imperial China*, Cambridge, MA 2013, Harvard University Press.

[18]   P. Buckley Ebrey, *The Cambridge illustrated history of China*, Cambridge 1996, Cambridge
University Press, p. 147 and H. De Weerdt, *Competition over content. Negotiating standards for
the civil service examinations in Imperial China (1127–1279)*, Cambridge, MA 2007, Harvard
University Asia Center.

[19]   *Shanghai Imperial examination system museum catalogue, The.*, n.d.

historical exhibits, period pieces and reproductions portraying the reality of the system.

The Imperial system had probably one of the most elaborate security measures. The exams were strictly supervised to ensure transparency and to deter cheating. They were conducted under special, very stern conditions, at every level. In each provincial capital, there was a permanent examination compound. To make sure that no unauthorised person entered the hall and to prevent any communication with the outside world during the exams, there was only one entrance, which was used by the staff and the candidates alike. The site was isolated from the outside world by a great wall. There was a number of tall watchtowers on the site, from which the candidates were observed, as well as the main guard tower overlooking the whole compound. Inside, the compound was subdivided like a honeycomb. It contained an aggregation of thousands of single doorless rooms, or cells: each large enough to hold just one man. The cells were equipped with three long boards—one served as a desk, one as a seat and another one functioned as a shelf. Candidates taking provincial examinations spent three days and two nights in succession inside the cubicle.

There were some very strict rules and detailed specifications concerning clothing and personal items that could be brought into the compound. On entry, the candidates were searched twice—at the first and the second gate—to make sure they had no books, notes or money with which they could bribe a clerk. And it was not just the students who were searched. Minor administrative officials were also frisked upon entry to the compound. According to Miyazaki[20], the soldiers went as far as to cut open dumplings that the students brought with them, in order to examine their fillings. If something suspicious was found, the inspecting soldier received an award and the wrongdoer was punished. If any irregularity were to be discovered at the second gate, not only would the student be punished, but so would the first inspector.

Prior to the exam, test booklets were checked to make sure they were blank and that no cheat sheets had been smuggled in. According to Miyazaki, a candidate was allowed to leave his seat only once during the exam, to drink tea or go to the toilet. The students were not allowed to talk, to change seats or even to hum, even though it would have been quite natural when they were preparing rhymes for poems. Dropping a paper aroused suspicion, which could lead to the

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[20] I. Miyazaki, *China's examination hell. The civil service examinations of Imperial China*, New Haven/London 1981, Yale University Press, p. 44.

student having a special seal stamped onto his sheet. This could consequently affect the judge's impression and lead to the student's failure. The time allotted for the particular tasks was very restricted. Candidates' work on the tasks was monitored by marking their progress on the papers at a given time. If many candidates wrote almost identical answers, all were failed. After marking was completed, the candidate's papers from the earlier district and prefectural examinations were used to verify his identity by comparing the calligraphy.

In order for all the students to be treated equally and to prevent any possibility of the graders (judges) showing partiality towards certain candidates, severe restrictions connected with marking the papers were introduced. First of all, anonymity was ensured by having the examination papers coded. The candidate's name was removed from the answer sheet and only the seat number was used to identify him and his answer. Secondly, the place in which each examiner would serve was not decided until the last moment. The examiners were completely shut off in their quarters and could not leave the area until the last paper had been marked. But probably the most characteristic procedure that the Imperial examinations are famous for is the use of different colour ink and the copying of the students' papers before they were judged. The candidates were supposed to write their papers in black ink and no other colour was permitted. The black versions were then copied by clerks on separate sheets of paper, this time using vermilion ink. Next, both copies were passed on to the proofreaders, who made their corrections in yellow. Both, the copyists and the proofreaders, took full responsibility for their work by noting their names on the papers; any wrongdoing on the side of this staff was penalised. The vermilion copies were then judged by the examiners and marked, using blue ink.

If any signs of cheating were discovered, both the student and the staff member were punished. Heavy penalties were imposed on the cheating candidate or his accomplice if they were caught: from being caned or placed in stocks for a month, through public disgrace, a permanent stain on the professional record, to being barred from future examinations. If an examiner was found to have taken a bribe or shown favouritism, he could lose his office and might even be banished. There was also a registered case of death sentences being carried out on the chief examiner and some other highest-ranking officials who were accused of malfeasance.[21]

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[21]   I. Miyazaki, *China's examination hell. The civil service examinations of Imperial China*, New Haven/London 1981, Yale University Press, pp. 61–62.

Despite the fact that so much effort was made to prevent both the students and the examination staff from cheating, it is known that substitutes frequently sat the exams in place of the candidates, and the judges could not discover this deception from the papers alone.[22] According to Chen, as many as 30–40% of prefectural examinees during the late Qing dynasty were illegally hired substitutes.[23] In spite of the search procedures on entry to the compound, it was not rare for a candidate to slip something past the eyes of the inspectors. Miyazaki claims that "during their worst times […] enough books were brought in to stock a bookstore."[24] There is also proof available that candidates sneaked in cheat sheets on fans, items of clothing or written on their skin, hidden inside pockets, hats, the soles of their shoes, the linings of clothes, in the handles of pens, the bases of ink slabs and in lunch boxes. Notes on undergarments were sometimes written with invisible ink made from herbs, which became visible when rubbed with dirt.[25]

Publishers, who realised that many of the examination questions were repeated or just slightly modified in subsequent sessions, compiled and printed collections of examination answers for the candidates to memorise, or to use as cheat sheets. They did this in spite of the fact that official decrees outlawed such procedures.[26] These practices resemble what we would now call essay or paper mills.

Bribery of officials and compound workers was also a common activity. They might have been bribed to place cheat sheets in the exam booths before the exam started, to switch identification numbers of candidates with those obtaining high

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[22] I. Miyazaki, *China's examination hell. The civil service examinations of Imperial China*, New Haven/London 1981, Yale University Press, p. 21.

[23] As cited in H. K. Suen, L. Yu, *Chronic consequences of high-stakes testing? Lessons from the Chinese civil service exam*, "Comparative Education Review" 50 (2006) 1, pp. 46–65.

[24] I. Miyazaki, *China's examination hell. The civil service examinations of Imperial China*, New Haven/London 1981, Yale University Press, p. 44.

[25] M. Moore, *Ancient Chinese 'cheat sheets' discovered*, in: *The Telegraph*, 2009, July 15, https://www.telegraph.co.uk/news/worldnews/asia/china/5834418/Ancient-Chinese-cheat-sheets-discovered.htm (12.02.2023) and H. K. Suen, L. Yu, *Chronic consequences of high-stakes testing? Lessons from the Chinese civil service exam*, "Comparative Education Review" 50 (2006) 1, p. 57.

[26] I. Miyazaki, *China's examination hell. The civil service examinations of Imperial China*, New Haven/London 1981, Yale University Press, p. 17.

scores, or to give high scores to essays that had some secret signs in them, like a certain character appearing at a pre-arranged space and line.[27]

Despite the elaborate security measures to ensure transparency of the exams, including strict supervision, stern examination conditions, tough marking rules and severe punishments, cheating in the Imperial examination system flourished. The methods used by the test-takers do not seem very different from the ones used by students today. They involved impersonation, collusion, copying from notes smuggled into the examination hall on all kinds of materials, and bribery. The reward was so profitable that the benefits outweighed the potential risks.

A Comparison of Academic Cheating by the Contemporary Students and that in Imperial China

As has been demonstrated above, academic malpractice is not a new invention. It has existed from the moment the first high-stakes examinations were introduced many centuries ago. It is still present today and seems to be on the rise. But how much does the phenomenon itself and the activities connected with it in the modern world differ from those in the world's oldest testing system?

The existence of exam malpractice forces certification institutions into adopting tough security measures, meant to prevent exam cheating and to safeguard the validity of the results.[28] It is no longer a guard observing the test takers from a watchtower, but a human invigilator or a remote invigilation system that is meant to deter candidates from attempting any kind of academic fraud, or to observe any violation of rules. Specifications concerning personal items that can be brought into the examination room are laid down to prevent candidates from bringing in illicit materials, just like in the Chinese exams. Examination facilities have to meet special conditions. Candidates should be seated far apart so as to minimise distractions and to prevent prohibited collaboration. In some

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[27]   I. Miyazaki, *China's examination hell. The civil service examinations of Imperial China*, New Haven/London 1981, Yale University Press, p. 62.

[28]   Cf. Y. Rosmansyah, I. Hendarto, D. Pratama, *Impersonation attack-defense tree*, "International Journal of Emerging Technologies in Learning (iJET)" 15 (2020) 19, pp. 239–246; Cambridge Assessment International Education, *Cambridge Handbook 2021. Regulations and guidance for administering Cambridge exams*, Cambridge 2020, UCLES, pp. 105–108; https://www.ets.org/toefl/score-users/about/security (12.02.2023); https://www.occupationalenglishtest.org/test-regulations/ (12.02.2023).

venues, special partitions are available for the testing stations, which, in essence, resemble the exam cubicles from the Imperial exams. In high-stakes exams, rules and regulations state the sanctions applied against candidates or staff engaging in malpractice. They are not as extreme as the ones which culprits faced in Imperial China, but depending upon the stakes, they may be rather severe. Depending upon the certification institution and the jurisdiction of the country where the fraud has occurred, the examinee involved in malpractice may be banned from taking the test in future, be liable to legal action or may be reported to regulatory authorities. Coding papers in order to ensure students' anonymity, which has its beginnings in the Imperial exams, is now a regular procedure. Marking exam papers in high-stakes exams is also often conducted under strict restrictions.

The Covid-19 pandemic has brought about changes in education and in assessment. New cheating methods connected with e-learning and other kinds of online education have been in place for some time now[29], but the fast-paced transition from classroom teaching and assessment to distance education and online testing has made the problem more salient. Consequentially, new remote invigilation systems, which had already been in use prior to the pandemic, were further developed and introduced to the market on a much larger scale.[30]

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[29] Cf. M. Dadashzadeh, *The online examination dilemma: To proctor or not to proctor?*, "Journal of Instructional Pedagogies" 25 (2020), pp. 1–11; J. Davis, *Interview with a cyber-student: A look behind online cheating*, "Online Journal of Distance Learning Administration", 19 (2016) 3, https://www.learntechlib.org/p/193191/ (12.02.2023); L. P. Hollis, *Ghost-students and the new wave of online cheating for community college students*, "New Directions for Community Colleges" 183 (2018), pp. 25–34; T. Lancaster, R. Clarke, *Rethinking assessment by examination in the age of contract cheating*, in: *Plagiarism across Europe and beyond 2017—Conference Proceedings*. Brno 2017, pp. 215–228; H. Mellar, R. Peytcheva-Forsyth, S. Kocdar, A. Karadeniz, B. Yovkova, *Addressing cheating in e-assessment using student authentication and authorship checking systems: Teachers' perspectives.* "International Journal of Educational Integrity" 14 (2018) 2, pp. 1–21.

[30] Cf. O. Akaaboune, L. H. Blix, L. G. Carrington, C. D. Henderson, *Accountability in distance learning: The effect of remote proctoring on performance in online accounting courses*, "Journal of Emerging Technologies in Accounting" 19 (2022) 1, pp. 121–131; R. Bawarith, A. Basuhail, A. Fattouh, A. S. Gamalel-Din, *E-exam cheating detection system*, "International Journal of Advanced Computer Science and Applications" 8 (2017) 4, http://dx.doi.org/10.14569/IJACSA.2017.080425 (12.02.2023); M. Dadashzadeh, *The online examination dilemma: To proctor or not to proctor?*, "Journal of Instructional Pedagogies" 25 (2020), pp. 1–11; M. J. Hussein, J. Yusuf, A. S. Deb, L. Fong, S. Naidu, *An evaluation of online proctoring tools*, "Open Praxis" 12 (2020) 4, pp. 509–525; J. E. Purpura, M. Davoodifard, E. Voss, *Conversion to remote proctoring of the Community English Language Program online placement exam at Teachers College, Columbia University*, "Language Assessment Quarterly" 18 (2021) 1, pp. 42–50.

However, despite all of the measures taken, academic cheating seems to be ubiquitous. Traditional techniques that existed in the 1300-year history of the Chinese Imperial examinations are still in use: cheat notes and other illicit materials and equipment are smuggled into the examination rooms. Students bring in notes on pieces of paper, on school supplies like rulers or Tippex, and on one's body.[31] Electronic devices and the Internet are becoming the new cheat sheets.[32] Students smuggle in notes on their mobile phones, use the devices to check information on the Internet, take photographs of examination papers and send them to another person, with the aim of seeking help during an exam or saving them for future use, they also communicate with an accomplice outside of the exam room. Essay mills sell commissioned pieces of writing, and essay banks offer pre-written essays that students can purchase.[33] Facilitating academic dishonesty by hiring impersonators to sit the test, or even sit a whole

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[31] Cf. E. Denisova-Schmidt, Y. Prytula, N. R. Rumyantseva, *Beg, borrow, or steal: Determinants of student academic misconduct in Ukrainian higher education*, "Policy Reviews in Higher Education" 3 (2019) 1, pp. 4–27; S. Fontaine, E. Frenette, M. H. Hébert, *Exam cheating among Quebec's preservice teachers: The influencing factors*, "International Journal of Educational Integrity" 16 (2020) 14, https://doi.org/10.1007/s40979-020-00062-6; L. Garavalia, E. Olson, E. Russell, L. Christensen, *How do students cheat?*, in: E. M. Anderman, T. B. Murdock (eds.), *Psychology of academic cheating*, Burlington, MA 2007, Elsevier Academic Press, pp. 33–58; M. Sendur, *(Nie)uczciwość akademicka polskich studentów a poświadczanie kwalifikacji* [Academic (dis)honesty of Polish students and the certification of their competences], in: A. Dąbrowski, R. Kucharczyk, A. Leńko-Szymańska, J. Sujecka-Zając (eds.), *Kompetencje dla XXI wieku: Certyfikacja biegłości językowej* [Competences of the 21st century: Certification of language proficiency], Warszawa 2020, Wydawnictwa Uniwersytetu Warszawskiego, pp. 244–266.

[32] Cf. S. Fontaine, E. Frenette, M. H. Hébert, *Exam cheating among Quebec's preservice teachers: The influencing factors*, "International Journal of Educational Integrity" 16 (2020) 14, https://doi.org/10.1007/s40979-020-00062-6; L. Garavalia, E. Olson, E. Russell, L. Christensen, *How do students cheat?* in: E. M. Anderman, T. B. Murdock (eds.), *Psychology of academic cheating*, Burlington, MA 2007, Elsevier Academic Press, pp. 33–58; T. Lancaster, R. Clarke, *Rethinking assessment by examination in the age of contract cheating*, in: *Plagiarism across Europe and beyond 2017—Conference Proceedings*, Brno 2017, pp. 215–228; A. Lathrop, K. E. Foss, *Student cheating and plagiarism in the internet era: A wake-up call*, Englewood 2000, Libraries Unlimited; H. Mellar, R. Peytcheva-Forsyth, S. Kocdar, A. Karadeniz, B. Yovkova, *Addressing cheating in e-assessment using student authentication and authorship checking systems: Teachers' perspectives*, "International Journal of Educational Integrity" 14 (2018) 2, pp. 1–21.

[33] Cf. C. Crook, E. Nixon, *How Internet essay mill websites portray the student experience of higher education*, "The Internet and Higher Education" 48 (2021), pp. 1–9 and D. J. Pell, *That's cheating: The (online) academic cheating 'epidemic' and what we should do about it*, in: J. Baxter, G. Callaghan, J. McAvoy (eds.), *Creativity and critique in online learning*, Cham 2018, Palgrave Macmillan, pp. 123–147.

course for another student, is also present in contemporary education.[34] Different kinds of collusion and corruption, similar to those described in the literature on the Imperial examinations, are still not uncommon today.[35] Shon[36] and Davis, Drinan, and Gallant[37] describe in greater detail, the numerous ways in which contemporary students cheat in exams and classroom tests, at different levels of education.

Times have changed, but practices among students and exam candidates do not differ to a great extent. Examination forms and procedures are continuously being transformed; new cheating methods are born or old ones are modified. Academic misconduct has been with us for hundreds of years and does not seem to be heading for extinction.

Discussion

Cheating in exams is not a new phenomenon. It has existed from the moment the first examinations in which the test-taker had something to win or lose began. In the Chinese Imperial examinations, the candidate's future and the wellbeing of the whole family depended upon the results. In the modern culture, exams and other kinds of certification also play a crucial role. Thousands of candidates take exams in order to move through to the successive levels of education, or to

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[34] Cf. J. Davis, *Interview with a cyber-student: A look behind online cheating*, "Online Journal of Distance Learning Administration" 19 (2016) 3, https://www.learntechlib.org/p/193191/ (12.02.2023); L. P. Hollis, *Ghost-students and the new wave of online cheating for community college students*, "New Directions for Community Colleges" 183 (2018), pp. 25–34; Y. Rosmansyah, I. Hendarto, D. Pratama, *Impersonation attack-defense tree*, "International Journal of Emerging Technologies in Learning (iJET)" 15 (2020) 19, pp. 239–246.

[35] Cf. G. J. Cizek, *An overview of issues concerning cheating on large-scale tests*, in: J. O'Reilly (ed.), *Proceedings of the National Association of Test Directors*, Mesa, AZ 2001, NATD, pp. 1–30; E. Denisova-Schmidt, *Corruption in higher education: Global challenges and responses*, 2020, Brill; E. Denisova-Schmidt, Y. Prytula, N. R. Rumyantseva, *Beg, borrow, or steal: Determinants of student academic misconduct in Ukrainian higher education*, "Policy Reviews in Higher Education" 3 (2019) 1, pp. 4–27.

[36] P. C. H. Shon, *How college students cheat on in-class examinations: Creativity, strain, and techniques of innovation*, "Plagiary: Cross-Disciplinary Studies in Plagiarism, Fabrication, and Falsification" 1 (2006), pp. 130–148.

[37] S. F. Davis, P. F. Drinan, T. B. Gallant, *Cheating in school: What we know and what we can do*, Chichester 2009, Wiley-Blackwell, pp. 89–100.

receive an attestation of their knowledge, skills, competencies or expertise. Certificates open doors to better jobs or higher positions.

A wide range of similarities can be found between the systems. Starting from the examination venues, the rules and regulations concerning the test-takers and the examination staff, the sanctions imposed upon those who breached the rules, the ways of safeguarding the integrity of the exams by the use of a variety of invigilation methods, to the choice of cheating methods and techniques. The differences are mainly connected with the social, cultural and technological developments that have occurred over the hundreds of years in question. They relate mainly to the severity of the consequences imposed upon the wrongdoer, the forms in which exam invigilation is conducted, and the materials used in the particular cheating techniques.

Research studies have revealed multiple reasons for cheating in exams. Candidates point to the low usability of the tested material, to the fact that the material is too difficult and requires too much effort to learn, to heavy workload and insufficient study time.[38] But the primary motive is the desire to achieve a better grade. This was true in the Imperial examinations and it still is today. As Drake noted over 80 years ago, when he set out to find the answer to the question why students cheat: "it is evident that cheating grows out of the competitive system under which college credits are awarded."[39] Therefore the higher the stakes, the more there is to gain by illicit behaviours.

To many, cheating in tests and exams may seem a victimless crime that does not call for serious research. Others may think that trying to combat this state of affairs is doomed to failure, for it is inextricably bound with any examination system. So why is examination malpractice really a problem?

Obviously, it is morally and ethically wrong, and just because of this reason, it should be combatted. But primarily, there is the very significant issue of validity. The concept of validity refers to the accuracy of the interpretations about examinees, based upon their test scores. It is "the degree to which scores on an appropriately administered instrument support inferences about variation in the

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[38] A. M. Sendur, *(Nie)uczciwość akademicka polskich studentów a poświadczanie kwalifikacji* [Academic (dis)honesty of Polish students and the certification of their competences], in: A. Dąbrowski, R. Kucharczyk, A. Leńko-Szymańska, J. Sujecka-Zając (eds.), *Kompetencje dla XXI wieku: Certyfikacja biegłości językowej* [Competences of the 21st century: Certification of language proficiency], Warszawa 2020, Wydawnictwa Uniwersytetu Warszawskiego, p. 254.

[39] C. A. Drake, *Why Students Cheat*, "The Journal of Higher Education" 12 (1941) 8, p. 420.

characteristic that the instrument was developed to measure."[40] Considering that the main purpose of a graded test is to determine what students have learnt after instruction, cheating interferes with an evaluator's ability to make such judgments.[41] Therefore, the effects of exam cheating are inaccurate and unreliable inferences about the test-takers' knowledge, skill or ability.

Conclusions

In order to minimise the scope of exam cheating and its consequences, teachers and administrators should be aware of the prevalence of the dishonest behaviours. They should be familiar with the ways in which students cheat. But this knowledge alone is not enough. Greater consistency in policies and procedures is essential.[42] Teachers and institutions should create clear and straightforward rules of conduct concerning academic integrity, and make sure to consistently enforce them at every stage of education. And most importantly, they should convey the message about the importance of academic honesty and the consequences of dishonest behaviour to students from the earliest stages of education. Looking back in time, it would be unwise to believe that these measures will eradicate academic cheating completely, however, it seems to be the only way to at least deplete the unwelcome practices. Differences concerning attitudes towards cheating between nationalities have been observed in research studies[43], which allows us to believe that enforcing appropriate policies concerning academic integrity proves effectual in lowering the rate of dishonest behaviours in academia.

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[40] G. J. Cizek, *Defining and distinguishing validity: Interpretations of score meaning and justifications of test use*, "Psychological Methods" 17(1) (2012), p. 35.

[41] L. Garavalia, E. Olson, E. Russell, L. Christensen, *How do students cheat?*, in: E. M. Anderman, T. B. Murdock (eds.), *Psychology of academic cheating*, Burlington, MA 2007, Elsevier Academic Press, p. 35.

[42] Cf. M. Birks, J. Mills, S. Allen, S. Tee, *Managing the mutations: Academic misconduct in Australia, New Zealand and the UK*, "International Journal for Educational Integrity" 16 (2020) 6 and T. Hollman, N. Palmer, D. Chaffin, K. Luthans, *Lying, cheating, & stealing: Strategies for mitigating technology-driven academic dishonesty in collegiate schools of business*, "Mountain Plains Journal of Business and Technology" 22 (2021) 1, pp. 31–50.

[43] A. M. Sendur, Academic malpractice in tests and exams from an international perspective, "Przegląd Badań Edukacyjnych" ("Educational Studies Review"), 36 (2022) 1, pp. 153–175.

Bibliography

Adams R., *Rising number of pupils caught bringing phones into exams*, in: *The Guardian*, 2019, December 13, https://www.theguardian.com/education/2019/dec/13/pupils-phones-exams-gcse-a-level-technology-cheat (12.02.2023).

Akaaboune O., Blix L. H., Carrington L., & Henderson C., *Accountability in distance learning: The effect of remote proctoring on performance in online accounting courses*. "Journal of Emerging Technologies in Accounting" 19 (2022) 1, pp. 121–131.

Bawarith R., Basuhail A., Fattouh A., & Gamalel-Din S., *E-exam cheating detection system*, "International Journal of Advanced Computer Science and Applications" 8 (2017) 4, http://dx.doi.org/10.14569/IJACSA.2017.080425.

Bilen E., & Matros A., *Online cheating amid COVID-19*, "Journal of Economic Behavior and Organization" 182 (2020), pp. 196–211.

Birks M., Mills J., Allen S., & Tee S., *Managing the mutations: Academic misconduct in Australia, New Zealand and the UK*, "International Journal for Educational Integrity" 16 (2020) 6.

Buckley Ebrey P., *The Cambridge illustrated history of China*, Cambridge 1996, Cambridge University Press.

Cambridge Assessment International Education, *Cambridge Handbook 2021. Regulations and guidance for administering Cambridge exams*, Cambridge 2020, UCLES.

Cheng L., & Curtis A., *English language assessment and the Chinese learner*, New York/London 2010, Routledge.

Cizek G. J., *An overview of issues concerning cheating on large-scale tests*, in: J. O'Reilly (ed.), *Proceedings of the National Association of Test Directors*, Mesa, AZ 2001, NATD, pp. 1–30.

Cizek G. J., *Cheating in academics*, in: C. Spielberger (ed.), *Encyclopaedia of Applied Psychology*, San Diego, CA 2004, Academic Press, pp. 307–311.

Cizek G. J., *Defining and distinguishing validity: Interpretations of score meaning and justifications of test use*, "Psychological Methods" 17(1) (2012), pp. 31–43.

Crook C., & Nixon E., *How Internet essay mill websites portray the student experience of higher education*, "The Internet and Higher Education" 48 (2021), pp. 1–9.

Dadashzadeh M., *The online examination dilemma: To proctor or not to proctor?*, "Journal of Instructional Pedagogies" 25 (2020), pp. 1–11.

Davis J., *Interview with a cyber-student: A look behind online cheating*, "Online Journal of Distance Learning Administration" 19 (2016) 3, https://www.learntechlib.org/p/193191/ (12.02.2023).

Davis S. F., Drinan P. F., & Gallant T. B., *Cheating in school: What we know and what we can do*, Chichester 2009, Wiley-Blackwell.

De Weerdt H., *Competition over content. Negotiating standards for the civil service examinations in Imperial China (1127–1279)*, Cambridge, MA 2007, Harvard University Asia Center.

Denisova-Schmidt E., *Corruption in higher education: Global challenges and responses*, 2020, Brill.

Denisova-Schmidt E., Prytula Y., & Rumyantseva N. R., *Beg, borrow, or steal: Determinants of student academic misconduct in Ukrainian higher education*, "Policy Reviews in Higher Education" 3 (2019) 1, pp. 4–27.

Drake C. A., *Why students cheat*, "The Journal of Higher Education" 12 (1941) 8, pp. 418–420.

Elman B. A., *A cultural history of civil examinations in late Imperial China*. Berkeley 2000, University of California Press.

Elman B. A., *Civil examinations and meritocracy in late Imperial China*, Cambridge, MA 2013, Harvard University Press.

Fontaine S., Frenette E., & Hébert M. H., *Exam cheating among Quebec's preservice teachers: The influencing factors*, "International Journal of Educational Integrity" 16 (2020) 14, https://doi.org/10.1007/s40979-020-00062-6.

Garavalia L., Olson E., Russell E., & Christensen L., *How do students cheat?*, in: E. M. Anderman, T. B. Murdock (eds.), *Psychology of academic cheating*, Burlington, MA 2007, Elsevier Academic Press, pp. 33–58.

Hollis L. P., *Ghost-students and the new wave of online cheating for community college students*, "New Directions for Community Colleges" 183 (2018), pp. 25–34.

Hollman T., Palmer N., Chaffin D., & Luthans K., *Lying, cheating, & stealing: Strategies for mitigating technology-driven academic dishonesty in collegiate schools of business*, "Mountain Plains Journal of Business and Technology" 22 (2021) 1, pp. 31–50.

Hussein M. J., Yusuf J., Deb A. S., Fong L., & Naidu S., *An evaluation of online proctoring tools*, "Open Praxis" 12 (2020) 4, pp. 509–525.

Lancaster T., & Clarke R., *Rethinking assessment by examination in the age of contract cheating*, in: *Plagiarism across Europe and beyond 2017—Conference Proceedings*, Brno 2017, pp. 215–228.

Lathrop A., & Foss K. E., *Student cheating and plagiarism in the internet era: A wake-up call*, Englewood 2000, Libraries Unlimited.

McCabe D. L., Treviño L. K., & Butterfield K. D., *Cheating in academic institutions: A decade of research*, "Ethics & Behavior" 11 (2001) (3), pp. 219–232.

Mellar H., Peytcheva-Forsyth R., Kocdar S., Karadeniz A., & Yovkova B., *Addressing cheating in e-assessment using student authentication and authorship checking systems: Teachers' perspectives*, "International Journal of Educational Integrity" 14 (2018) 2, pp. 1–21.

Miyazaki I., *China's examination hell. The civil service examinations of Imperial China*, New Haven/London 1981, Yale University Press.

Moore M., *Ancient Chinese 'cheat sheets' discovered*, in: *The Telegraph*, 2009, July 15, https://www.telegraph.co.uk/news/worldnews/asia/china/5834418/Ancient-Chinese-cheat-sheets-discovered.html.10.Schirokauer (12.02.2023).

Pavela G., *Judicial review of academic decision-making after Horowitz*, "School Law Journal", 8 (1978) 1, pp. 55–75.

Pell D. J., *That's cheating: The (online) academic cheating 'epidemic' and what we should do about it*, in: J. Baxter, G. Callaghan, J. McAvoy (eds.), *Creativity and critique in online learning*, Cham 2018, Palgrave Macmillan, pp. 123–147.

Peters M., *Academic integrity: An interview with Tracey Bretag*, "Educational Philosophy and Theory" 51 (2019) 8, pp. 751–756.

Purpura J. E., Davoodifard M., & Voss E., *Conversion to remote proctoring of the Community English Language Program online placement exam at Teachers College, Columbia University*, "Language Assessment Quarterly" 18 (2021) 1, pp. 42–50.

Richardson H., *More students found cheating in GCSE and A-Level exams*, in: *BBC News*, 2018, January 5, https://www.bbc.com/news/education-42578874 (12.02.2023).

Rosmansyah Y., Hendarto, I., & Pratama, D., *Impersonation attack-defense tree*, "International Journal of Emerging Technologies in Learning (iJET)" 15 (2020) 19, pp. 239–246.

Sendur A. M., *(Nie)uczciwość akademicka polskich studentów a poświadczanie kwalifikacji* [Academic (dis)honesty of Polish students and the certification of their competences], in: A. Dąbrowski, R. Kucharczyk, A. Leńko-Szymańska, J. Sujecka-Zając (eds.), *Kompetencje dla XXI wieku: Certyfikacja biegłości językowej* [Competences of the 21st century: Certification of language proficiency], Warszawa 2020, Wydawnictwa Uniwersytetu Warszawskiego, pp. 244–266.

Sendur A. M., *Academic malpractice in tests and exams from an international perspective*, "Przegląd Badań Edukacyjnych" ("Educational Studies Review"), 36 (2022) 1, pp. 153–175.

Sendur, A. M., & Kościńska, A., *Kształcenie w sieci—teoria i praktyka. Przewodnik dla nauczycieli języków obcych i nie tylko* [Web-based education—Theories and applications. Companion for language teachers and other educators], Kraków 2021, Oficyna Wydawnicza KAAFM.

Shanghai Imperial examination system museum catalogue, The, n.d.

Shon P. C. H., *How college students cheat on in-class examinations: Creativity, strain, and techniques of innovation*, "Plagiary: Cross-Disciplinary Studies in Plagiarism, Fabrication, and Falsification" 1 (2006), pp. 130–148.

Spolsky B., *The state of the art in language assessment: Notes for the third millennium*, "Russian Language Journal" 55 (2005) 180/182, pp. 169–187.

Spolsky B., *History of language testing*, in: E. Shohamy, I. Or, S. May (eds.), *Language testing and assessment. Encyclopedia of language and education*, New York 2017, Springer International Publishing, pp. 375–384.

Suen H. K., & Yu L., *Chronic consequences of high-stakes testing? Lessons from the Chinese civil service exam*, "Comparative Education Review" 50 (2006) 1, pp. 46–65.

Whitley B. E., & Keith-Spiegel P., *Academic dishonesty. An educator's guide*, Mahwah, NJ 2002, Lawrence Erlbaum Associates.