

Amelia Przybył
Mikołaj Szafranski
Julia Jasińska
Konstanty Kowalewski
Jan Hincz
Marcin Skiba



COMPARING THE HIGHER EDUCATION SYSTEMS IN POLAND AND THE UK

Conclusions based on a case study analysis of the Warsaw School of Economics
and the University of Warsaw with the London School of Economics
and University College London.



ACKNOWLEDGEMENTS

We would like to express our special thanks to all those who have supported us in our study. We would like to mention representatives from Santander Universidades, especially Wojciech Leśniewski, for helping us get in touch with universities. Our sincere thanks also go to Marzenna Cichosz for her insights, and Daniel Lichota from the Warsaw School of Economics, for providing us with data.

TABLE OF CONTENTS

Executive summary - key messages:	4
Introduction	6
1. Access to higher education	7
Introduction	7
Student share	7
Recruitment processes and entry requirements	8
University fragmentation	10
Student diversity	10
Conclusions	11
Key message	11
2. Learning Structure	12
Course/degree comparison - Synthesis	12
Intended learning outcomes	13
Teaching methods and materials	16
Professional orientation of curricula	18
Assessment methods	19
Conclusions	23
3. Professional Development	24
Introduction	24
Popularity of career services	24
Available opportunities of professional development	26
Student satisfaction and expectations	28
Insight from the industry	29
Conclusions/recommendations	31
4. Academic research evaluation	32
Introduction	32
Measuring research excellency	32
The rigidity of Polish classification of academic publications	34
Classification of sciences: whither formality?	35
Conclusions/recommendations	36
5. Research and business	37
State of commercialization of research in Poland	37
State of commercialization of research in the UK	39
Case studies	39
UW	39
SGH	40
LSE	41
UCL	42
Conclusions	43

TABLE OF CONTENTS

Key Takeaway	44
Bibliography	45
Appendix:	48
Survey 1: Careers and University Experience - University of Warsaw (UW) and Warsaw School of Economics (SGH) Students	48
Survey 2: Careers and University Experience - University College London (UCL) and London School of Economics (LSE) Students	52
Survey 3: Survey for Employers	58
Table 1: Comparison of Methodology Courses	59

EXECUTIVE SUMMARY - KEY MESSAGES:

1. Poland should aim to build a smaller number of stronger, internationally recognised and well-funded universities.

- a. The Higher Education system in Poland should be motivating universities to focus on quality rather than quantity of students. In particular, promoting full-time studies.
- b. The system should promote consolidation of universities and dedicate a greater share of funding to universities showing best results in teaching and research.
- c. Promoting best Polish universities abroad should be encouraged to attract a greater share of diverse top international students.

2. Course convenors should restructure the syllabi and develop transparent modes of assessment. Teaching content should be unified between tutorial groups, and more time allocated to independent study.

- a. The course convenors should design the modules in a transparent fashion. First, there should be harmonized syllabi imposed on all teachers of a particular module. Secondly, fragmentation in the design of modules should be avoided. This way, the expectations towards students and the intended learning outcomes can be communicated more clearly.
- b. Guided independent study should be encouraged in lieu of burdening students' timetables with classroom teaching. In order to nurture independent thought, students need to be freed from the expectation to reproduce the lecturer's knowledge and understanding of the subject.
- c. Open-access courses should take up a smaller proportion of the degree. As long as they provide a perfunctory overview of other disciplines and assessment does not require a true effort, open-access courses do not add up to the ideal of holistic education.
Assessment marking standards should be uniformized and publicized by university departments. In order to avoid arbitrariness, exam content should also be made uniform. In the event when a module is taught by multiple lecturers, there should be no discrepancy in the examinable material. Furthermore, exam assessment should be performed by external, objective examiners.

3. Communication between career services and students should be improved. Students should also be provided with a more diverse range of professional development opportunities on campus.

- a. Although there are opportunities available (private consultations with career advisors, mentoring programmes, job fairs etc.) our studies has shown that many students are not informed about them. Career services should send out regular newsletters and update their online pages to increase student engagement.
- b. Polish universities should diversify the services that their provide. They could take an example from UK universities that organise career panels, career coffee mornings with individuals from the industry, company visits and alumni meetings. They should also engage more with students from studying all disciplines, particularly those that are less career-focused and are less on demand on the job market.
- c. Polish universities should establish working relationships with the industry to provide their students with more opportunities of development. Our survey and interviews have revealed that companies find it easier to engage students, if they can work with an active university career office.

4. The review of quality of research should be attuned to rewarding internationally recognized research only. Competition between universities on the domestic level should be replaced with a collective strife towards making Polish research globally known. Research in areas of social and cultural importance should be exempted from competition and ratings.

- a. The Polish system of impact review should be refocused in order to award points for truly outstanding research, and not any research. Domestic recognition of research outputs cannot be valued according the same criteria as international standing. Research in areas of particular social and cultural importance should be treated sui generis, and not in the same way as outputs that have the potential to compete internationally.
- b. Centrally-set indexes of publications and publishing presses should either be abolished in favour of review of merits and originality, or be attuned to the dimension of international competitiveness.
- c. A devolved system of administration of research resources should be contemplated in order to avoid political interference in the classification of research areas and cost indices.

5. Better communication should be cultivated between businesses and universities. To this end, it is essential to create a clearer and more comprehensive structure for business cooperation and R&D commercialization.

- a. Despite the Polish government's focus on strengthening science-business cooperation, the rapidly growing R&D expenditure does not have positive influence on innovation metrics such as public-private co-publications.
- b. Fostering communication and trust between innovative companies and universities requires the establishment of a structured system that enables easier cooperation with foreign businesses. The system should include a clear point of entry and a special team for managing key partners on top of existing solutions.
- c. In order to increase efficiency and relevancy of technology transfer, intellectual property regulations need to be further clarified and liberated.
- d. The number of researchers and research suitable for commercialization is too low to supply for above needs. PhD candidates need to be incentivized to graduate timely and consider collaborations with private sector.

INTRODUCTION

Brain drain is one of the main challenges crippling the development of Polish society. In the era of knowledge economy, the offer of Polish universities seems to be less appealing to the most talented graduates. It has become increasingly popular for the most ambitious students to associate their path of talent development with studying abroad. In 2017-2018, 7,545 Poles were students of UK universities.¹ Since 2013-2014, this number has increased by 45%.² We do not believe that this state of affairs is something to be cherished. As students of LSE born and raised in Poland, we regret that Polish higher education institutions do not have a prominent comparative advantage as the UK universities do. Why are Polish degrees “worth less” according to conventional wisdom? What impacts on the high position of UK universities in global rankings?

We have decided to answer these questions by conducting a comparative study of higher education institutions based in the capitals of both states. We contrast University of Warsaw (UW) with University College London (UCL) due to their interdisciplinary nature. In regards of specialized (social-sciences-focused) institutions, we chose to compare Warsaw School of Economics (SGH) with London School of Economics and Political Science (LSE). We submit that this approach is more commensurable than a comparison of higher education frameworks in abstracto, because of the country-specific variances (UK having different higher education arrangements in England, Wales, Scotland and Northern Ireland; Poland having a more dense network of institutions, with a more prominent number of private universities). The development of strong central higher education institutions should be a priority for all stakeholders involved in higher education policy-making. Poland has neglected the creation of global brands of academic excellence, despite having the intellectual capital to move beyond its peripheral position.

While we realize that the Polish government has undertaken significant steps to make the Polish higher education system more innovative, legal reform is not capable of addressing the latent cultural barriers to progress. It is also not able to address the discretionary management practices within universities and their departments. Our Report is therefore not to be read as a polemic with the 2018 Constitution for Science (Konstytucja dla Nauki) reform and its corollaries. We acknowledge that the student experience is construed differently in Poland and in the UK. Instead of proposing solutions to be implemented at the central level, we imagine that universities and members of academic staff can themselves pave the way to making students experience more meaningful. Notwithstanding the legal framework, universities retain a great degree of discretion over shaping the students’ takeaway. Therefore, our report is addressed to a variety of stakeholders: governmental policy-makers, university heads, heads of university departments, businesses cooperating with universities, academics, non-academic staff members, as well as students interested in making a change in the way higher education is provided.

The structure of the Report follows the life-cycle of student experience from admission procedures, through learning, to employability. To make the assessment of institutional strength complete, we further addressed the frameworks of review and commercialization of research outputs. We identified five distinct areas for comparison:

1. Access to higher education.
2. Learning structure.
3. Professional development opportunities.
4. Academic research evaluation.
5. Research and business.

1 HESA, n.d.

2 UKCISA, 2018

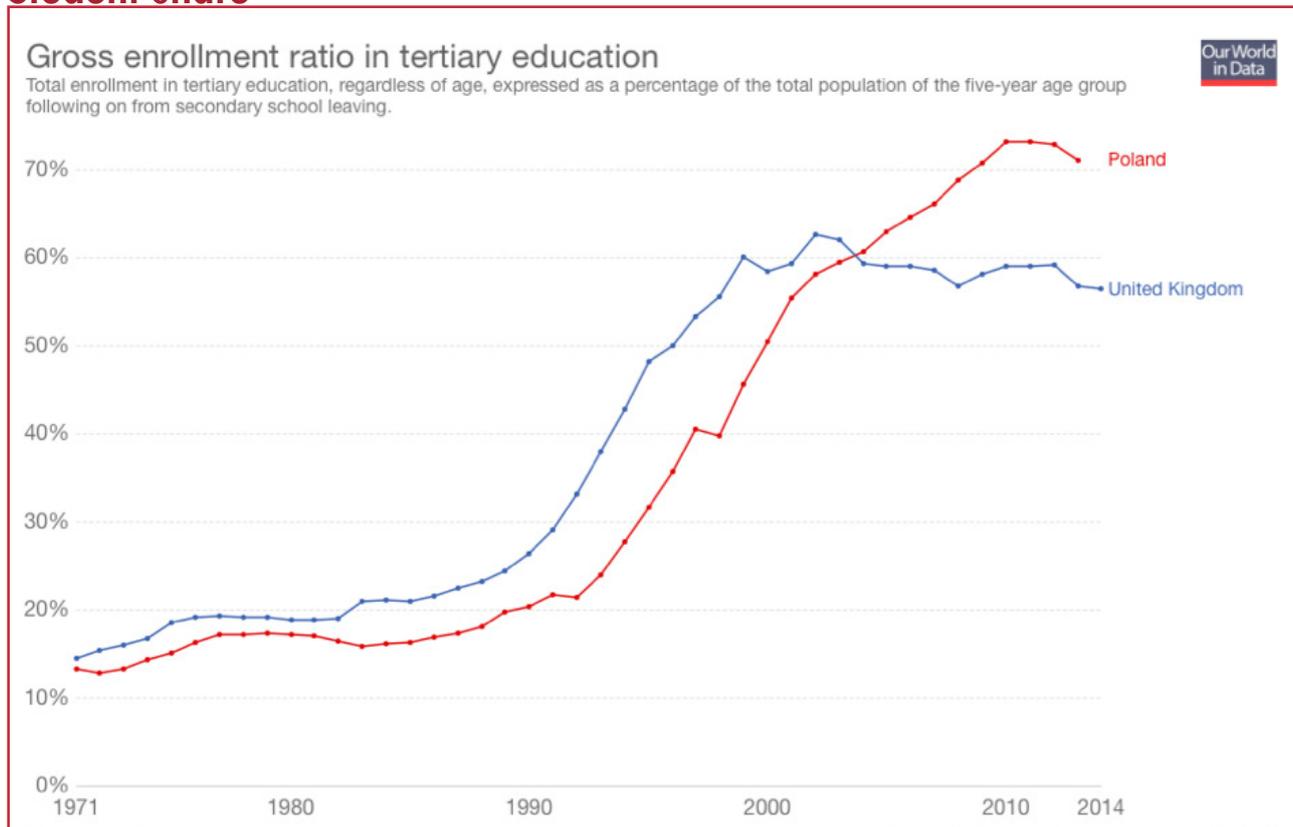
1. ACCESS TO HIGHER EDUCATION

Building a smaller number of stronger, internationally recognised and well-funded Polish universities.

Introduction

A good university brand can shape the perception of a university, attract renowned academics and talented students, and therefore contribute positively to the overall performance in rankings. In this section, we aim to explore some of the factors that either contribute to or stem from the image that is projected about the university. First, we examine the high share of students in Poland, and its impact on the creation of numerous private institutions. Second, we analyse factors such as entry requirements and university fragmentation. Finally, we consider student diversity.

Student share

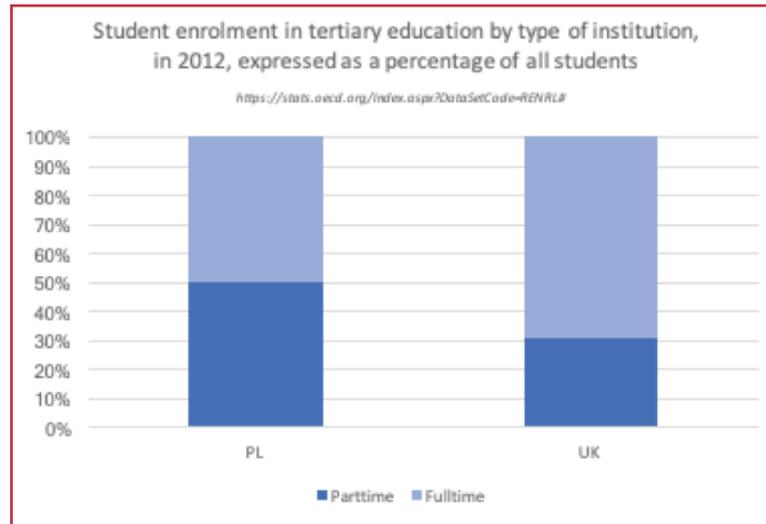


In Poland, there is a higher share of students in comparison with the UK, with a small international diversity. In the UK, the percentage of students enrolled in tertiary education has been significantly lower than in Poland since the second half of 2003. Gross enrolment in UK totalled 57% in 2013, in contrast to 71% in Poland. These numbers result from the fact that in Poland there is a great pressure to obtain a degree. To meet that high demand for higher education, more programmes and institutions were created, amongst them, private ones. Private institutions and part-time studies became the new means for meeting the demand for education. These programmes, most often offered as paid-for, do not have rigorous entry requirements unlike those in public institutions, that are free. Therefore, they continue to attract lower performing students, that are not accepted into selective public programmes.⁴

3 Our World in Data, 2017.

4 Musial, 2014

Moreover, private institutions are marginally involved in conducting and publishing research, which questions their academic legitimacy. This stems from the fact that academic faculty chooses to conduct their research at renowned public universities, as they attract top-performing academics and students, as well as provide access to better research facilities. Out of the 17,375 fully-employed academics in the private sector, a mere 588 listed private institutions as their primary workplace.⁵



Recruitment processes and entry requirements

At LSE and UCL, international students constitute the top 20% of their respective population. This is not the case in Poland due to the favourable conversion rates of foreign education systems.

General requirements for UCL from Polish Bacculaureateare (Matura): “at least 3 subjects passed at Extended Level with one at 85% and two at 72%.”. Entry requirements are likely to be higher for most courses, but even this minimum requirement, depending on the subject taken, forces students to be in the 86th percentile from the “easiest” subjects, with the requirement ranging to as high as even 100th national percentile.

Entry requirements for International Bacculaureate (IB) at LSE are just as rigorous – they range from 37 to 38 points, which requires prospective students to be at least in the top 20th in their cohort, with the numbers being higher for subject-specific Higher Level requirements, i.e. to be considered for a place at LSE, the student should obtain scores of at least 6 6 6 or 6 6 7 from courses at a Higher Level.

These two universities are very selective in their admissions, and even if one manages to obtain the aforementioned results, it does not mean that they will be offered a place in those institutions. On top of that, all candidates must submit a personal statement outlining their motivations to study the subject. This is supplemented by an outstanding reference from their school. The aim of this process it to enable the universities’ admissions team to have a more holistic view of a prospective student, who is being considered for these highly competitive offers.

In comparison, the Polish system is limited to points obtained in exams. This approach has certain advantages, as the admission process is characterised by minimal costs and maximal transparency. However, we would like to point out some potential areas of improvement:

- **There is an uneven conversion between the IB and the Polish system.**

To conduct a comparison in admission practices, we have compared different Extended Mathematics requirements, as we believe that this subject plays a substantial role in the recruitment process in many fields of study. All of the data used in this section are extracted from the 2018 admission process.

We have found that there are unfair advantages to different learning systems. In Warsaw School of Economics, a grade 5 (out of 7) in IB Higher Level Mathematics is converted into 100% of Polish “Matura Rozszerzona”. Analysing these scores, we further discovered significant discrepancies in percentiles of people who achieved such grades. Namely, IB students who obtained a grade 5 scored as the 41.86th percentile. The number of Polish matura students who obtained a 100% score was significantly lower, as the 100% result mark was reserved to the 100th percentile of all students. This evidences a heavy bias towards the IB system.

The numbers are not as drastic at the University of Warsaw, with a 7 in IB being translated to a 100% Matura result. However, they still show critical distinctions. Obtaining a 7 in IB, required students to be in the 86,3 percentile. Being in that percentile in Polish Matura meant obtaining 55%, which means that there is a difference of 45 percentage points for students who have performed similarly in their cohort.

We are aware that those systems are not equivalent – IB puts more emphasis on projects and essays rather than exams. However, we believe that nonetheless, these conversion rates put IB students in a privileged position without a valid reason.

- **There are significant disparities between the years in the difficulty in Polish Matura**

In 2018, out of the students that took the Polish “Matura rozszerzona”, top 10 percent scored 60% or better. Meanwhile, in 2017, to qualify in the top 10 percent, one had to obtain at least 73% or better. This data demonstrates that the burden of any changes in exam difficulty levels is placed solely on the students. In particular, people who decide to take a gap year, change their subject, or re-apply for other reasons may find the entry threshold to be significantly higher or lower. For example, the threshold for the Warsaw School of Economics changed by more than 20 points from 2017 to 2018 (out of the 333 points to obtain). The recruitment system should not be reduced to a gamble in this aspect.

We propose the introduction of percentiles in the admission process as a sound point of reference and a solution to the problems described above. Reliance on percentiles would put an end to the discrimination between various secondary education exam systems. Furthermore, it would ensure that Polish universities are supplied with high-performing students only.

University fragmentation

There is a high fragmentation of Polish tertiary education institutions – as of 2018, there are 405 universities in Poland, while the United Kingdom has only 280⁶. Considering the respective student population sizes (4,021,584 in Poland and 7,683,605 in the UK)⁷ in the age group of 15 to 24 years, British universities have almost 3 times as many potential students per university (9,930 in Poland and 27,441 in the UK).

synergy potential - resources are duplicated, and budget allocation and management practices are crippled with inefficiencies. Furthermore, according to Barbara Kudrycka, a Former Polish Minister of Science and Higher Education, Polish universities perform extremely low in international rankings due to their decentralization.⁸ Indeed, those rankings do favor interdisciplinary institutions rather than subject specific ones. In the Times' Top universities in the world 2019, the first mention of a Polish university is only at the 601st place⁹. Meanwhile, the UK scores significantly better, with 29 universities mentioned in the ranking of global Top 200.

We are aware that university consolidation would mean privileging universities in the biggest cities. This would raise issues of accessibility, in particular to those at a financial disadvantage who may not be able to afford moving out to more expensive cities and manage on their own. However, to solve this problem, we propose to establish a system of financial support that would enable top talents to pursue education at some of the best institutions. We believe that the cost of running such a programme would be less than that of financing sub-scale, lower quality institutions from public funding.

Student diversity

The UK experiences a significant influx of international students. 20% of all students are foreign¹⁰, which is not the case in Poland, where the international student community constituted a mere 5.6% in 2017¹¹. This negligible number in Poland also lacks in diversity - it is heavily dominated by Eastern European students, as Ukrainians comprise more than half (52%) of foreign students. The second biggest influx is from Belarus (8.3%)¹².

In 2007, the University of Warsaw (UW) only had 6% of foreign students. However, this university is an example, that if efforts are being made, it is possible to obtain a much more diverse range of international students. The university has introduced several initiatives to attract international students and researchers. For example, UW supports visits of foreign researchers and has launched the first-ever initiative in Poland of that kind, helping students with their transition to UW (Welcome Point). Even though Ukrainians still dominate in the international students' community, they constitute only a fifth of the foreign cohort¹³, significantly lower than on average in the country, and the university also welcomes representatives from more than a hundred other countries.

6 CSIC, 2018. As cited in Statista - The Statistics Portal.

7 United Nations, Department of Economic and Social Affairs, Population Division, 2017.

8 Kudrycka, 2012.

9 Times Higher Education, 2018.

10 HESA, n.d.

11 GUS, 2018.

12 Ibidem.

13 University of Warsaw, 2018.

According to Times Higher Education, LSE and UCL are respectively the 11th and 12th most international universities in the world.¹⁴ The international student community at LSE constituted 68% of all students in 2017¹⁵, and 47.1% at UCL. That being said, we realise that these universities are outliers not only in the UK but also globally. Such a high share of foreign students in Poland would be unreasonable. However, there is no doubt that an increase in the numbers of students from abroad would have many benefits. The universities would benefit from the exchange of knowledge and diverse experiences by students. Moreover, foreign students could financially contribute to the growth of the economy and support many jobs. According to London and Partners, foreign students in the UK had a Gross Value Added of GBP 1.62bn, and supported 37,417 jobs in the year 2013/2014. They point out 3 channels through which students contribute financially to the local economy: university fees, sustenance spending and visiting friends and relatives.¹⁶ This simple economic argument shows why increasing the number of international students should be a priority for Polish universities.

Conclusions

1. The Higher Education system in Poland should be motivating universities to focus on quality rather than quantity of students. In particular, promoting full-time studies.
2. The system should promote consolidation of universities and dedicate a greater share of funding to universities showing best results in teaching and research.
3. Promoting best Polish universities abroad should be encouraged to attract a greater share of diverse top international students.

Key message:

Poland should aim to build a smaller number of stronger, internationally recognised and well-funded universities.

¹⁴ Times Higher Education, 2018.

¹⁵ London School of Economics, 2018

¹⁶ London and Partners, 2014.

2. LEARNING STRUCTURE

Increasing intrinsic motivation by restructuring the syllabus as well as unifying content and assessment around key subjects and more time to self-study.

Course/degree comparison - Synthesis

The results of comparative analyses of degree programmes and individual modules show that there is much variation in learning outcomes and the ways of teaching between Polish and UK universities. This is indicative not only of differences in the teaching culture but also of a contrastive understanding of the role and function of university education. The acquisition of knowledge by students is based on different pedagogical models, favouring either guided independent study or classroom-authority-led teaching. As a result, students in the two countries do not share the same commitment to learning and adopt distinct approaches to managing their university workload.

Students in Poland and the UK are granted a different degree of autonomy. It transpires from the cases studies that Polish students are often discouraged from pursuing self-conducted inquiries. The expectation upon them is to reproduce knowledge contained in the course materials. In cases where the course syllabi do put a premium on independent study, students may find themselves unprepared or materially unable to conduct time-consuming inquiries on their own due to the volume of their university workload. Insufficient focus on individual intellectual endeavours distances students away from the paradigm of responsibility and organization of work. Ultimately, this may hinder the students' capacity to meet the demands of professional life after graduation.

However, the study does not suggest that the two pedagogical models are irreconcilable. The responsibilities of lecturers and students form part of the same bundle and thus can be redistributed without a radical and costly institutional struggle. The UK model could be refocused to provide students with deeper knowledge resources. In a similar vein, the Polish model could benefit from a greater emphasis on independent work. Finding the right balance is a task that belongs to course convenors, lecturers, tutors, and teaching assistants.

The analysis does not offer a critique of the content of curricula. It is not implied that the gap in the worldwide recognition between UK and Polish universities stems from a difference in local traditions of scientific inquiry. The focus of the discussion is a difference in student treatment, manifesting itself in the teaching methods, learning goals and student expectations. The study has not identified a need to update or westernize Polish curricula. In terms of quality of knowledge and the scientificity of teaching material, Polish universities are in a position to compete with their UK counterparts. What impacts their position however, is a disharmonious approach to the treatment of students vis-à-vis the leading global standards.

The study adopts a structural method of assessing the similarities and differences in approaches to teaching. It identifies 4 salient criteria for comparison and provides an overview of findings related to each criterion. Additional illustrations are provided in the form of case studies with comparisons of particular courses or degree programmes.

Intended learning outcomes

- **Differences in the pace of learning:** The degrees frequently set a different pace of studying in order to accommodate either a broader or deeper understanding of the subject.
 - LSE, BSc programmes centred around maths: The first year of study in the BSc programmes centred around maths at LSE is structured in a way which provides rigorous foundations of the subject. Compared to its counterpart at Warsaw School of Economics (SGH), algebra module builds on the theory of vector spaces rather than provide a ready to use methods. The analysis module is presented using a broader range of applications and with slightly more generality. Statistical curriculum at the LSE exposes students to the probability theory and common distributions of random variables.
 - SGH, BSc programmes centred around maths: In the first year of study relevant modules run for one semester only. Statistics, besides less material, often lacks formal proof work. Mathematics module introduces students to fewer topics, such as differential equations, which are a key tool used in modelling of social science problems tackled in subsequent years.
- **Structural differences in construction of courses:** The structure of the modules takes different shape across Polish and UK institutions. Fragmentation of modules in most cases makes it difficult to draw connections between courses despite the overlapping areas of study.
 - UW, BA in History: Students of the history BA programme at University of Warsaw (UW) are mandated to study ancient history in their first year. The study consists of 4 courses: 2 tutorial blocks (2x 4 ECTS), an exam (8 ECTS) and extended essay (6 ECTS). Elevating each assessment to the status of a separate subject creates an impression that the body of knowledge is disjointed and that each assessment is of different value. Disintegration also affects students' GPA by parcelling the grades for what essentially is one study area.
 - UCL, BA in History: In contrast, elective modules at UCL are constructed as broad (15 ECTS worth) and students receive a single grade based on mixed course assessment. Term essays amount to 25% of the grade, and exam performance for the remaining 75%.
 - LSE, BSc programmes centred around maths: The LSE programmes are characterised by a uniform structure of modules and transparency in regard to students expectations. The departments prepare an accessible list of available modules with information on the previous year's average class size, distribution of results, together with an indicative reading list.
- **Variance in transferable skills:** Transferable skills can vary across universities in the same field of study. This impacts on the students' professional qualifications: some may receive abilities applicable beyond their discipline, while others will be wedded to a particular career path solely because of the focus of their educational curricula
 - UW, BA in Economics: The BA Economics programme at UW provides a focus on theory. Topics such as probability theory, mathematical statistics, and econometrics are studied for an entire semester each.
 - UCL, BA in Economics: In contrast, the UCL programme mandates every student to learn some form of statistics or econometrics throughout the entire first and second year. For example, in a first year half module, Applied Economics, acquired proficiency in statistical methods is enhanced by the introduction of related software STATA. This also applies to a 2nd year half module, Computational Methods for Economists, where UCL students have the opportunity to perform economically inclined calculations not only on paper, but also on widely used softwares such as Mathematica, Matlab and Python, which brings curriculum closer to financial sector reality in which nobody does manually, what can be done far more efficiently by a computer. This dissonance fosters different skills, with the UCL programme locating the material in the context of its practical application in economics and finance.

- UW, BA in Political Science: The comparison of Introduction to Political Theory modules offered in the BA Politics programmes at UW and LSE shows radical discrepancies in the transferrable skills and learning goals. The UW module emphasises passive skills related to knowledge acquisition (understanding, summarising, identification, and to a lesser extent, analysis).
- LSE, BA in Political Science: The focal point of the LSE module is critical engagement with the texts of major political thinkers. Students are expected not only to be able to reproduce the arguments from the readings, but also compare and evaluate various claims, and unpack the normative assumptions encountered in literature.
- UW, BA in History: Divergence is also visible in studies of history, with methodology courses at UW and UCL putting emphasis on different takeaways. In structural terms, UW students only spend 15% of the first year (9 ECTS-worth of subjects) learning about the working methods of the discipline. Students do not embark on a research project, but rather submit a bibliography for a potential investigation. Albeit the syllabus for UW Introduction to Historical Research module claims that the aim is not to teach problem-solving but rather make students more aware of research procedures, it is hard to treat the two matters as separate. Students' progress can hardly be measured by reliance on some non-demanding or superfluous assignments.
- UCL, BA in History: Method courses comprise 50% of the first year of the BA programme and continue in the second year. Instead of offering a rushed overview of research approaches, UCL students embark on research projects conducted individually and in groups. The aim is to move beyond theoretical instruction and instead develop the students' presentational skills.

Comparison of methodology courses

Module	Introduction to Historical Research (UW)	Introduction to Academic Writing (UW)	Study Tour (UW)	Approaching History (UCL)	Making History (UCL)	Writing History (UCL)
Credits	4 ECTS	3 ECTS	2 ECTS	30 credits (15 ECTS equivalent)	15 credits (7.5 ECTS equivalent)	15 credits (7.5 ECTS equivalent)
Contact hours	22.5 hours (syllabus: 30 hours)	22.5 hours (syllabus: 30 hours)	3 day tour	40 hours	19 hours	15 hours
Form of classes	Tutorials (Objective: to prepare a bibliography for a research project)	Tutorials	Fieldwork: lectures, discussions, group exercises	Lectures	Lectures, workshops (Fieldwork class centred around a group project)	Large group workshops, small group tutorials
Assessment	Varies depending on tutor. Most commonly mentioned assessment criteria include: <ul style="list-style-type: none"> Attendance requirement (max 3 absences possible) Class participation In-class periodic tests Individual project submission - bibliography survey 	Varies depending on tutor. Most commonly mentioned assessment criteria include: <ul style="list-style-type: none"> Attendance requirement (max 3 absences possible) Homework hand-ins Class participation 	Active participation NB The course is graded, and not assessed on a pass/fail basis.	<ul style="list-style-type: none"> 3 hour unseen examination (100%), 1 question to be answered Example questions: <ul style="list-style-type: none"> “The nation-state is a modern invention.” Discuss. How do we know when political authority is legitimate? Formative assessment: <ul style="list-style-type: none"> Journal article review (500 words) Book review (1000 words) Essay plan (1 page) 	<ul style="list-style-type: none"> Individual learning journal - weekly submissions (10%; individual mark) Online group presentation: written submission (1500 words) and digital outputs (20 minutes of audio/video/text) (50%; group mark) Live group presentation (40%; group mark; the mark combines peer-assessment and assessment by staff) 	<ul style="list-style-type: none"> 2500 words essay related to another module (100%) Throughout the semester, students prepare an essay related to a topic from a different module, and engage in review and polishing of their work.

Teaching methods and materials

- **Classroom teaching vs. independent study:** The structure of teaching - including criteria such as: the prescribed number of contact hours, the intensity of class meetings, the number of courses, the size of classes - has a direct impact on the choice of teaching methods. Keeping the students' schedule busy translates into the expectation that acquisition of knowledge is an in-class activity. Conversely, a less rigid schedule does not translate into more leisure for students, as they are delegated more study responsibilities.
- SGH, BSc programmes centred around maths: The SGH degree programme consists of approximately 2050 hours of study in a three-year period.
- LSE, BSc programmes centred around maths: The LSE degree takes up between 720 and 960 hours. The difference indicates that higher education in the UK is not understood as a prolongation of authority-led teaching. Instead, time spent in class is to be used strategically, for the purpose of informing individual work.
- SGH, BSc in Management: In the case of marketing modules offered in the BSc Management programmes at SGH at LSE, the tutorials fulfil different functions. At SGH, the traditional free, tutor-led discussion style prevails, and 40% of the grade depends on the tutorial class performance.
- LSE, BSc in Management: At LSE, the goal of student interaction during tutorial is to prepare a marketing plan in the form of a group project. As a result, LSE students are taught not only academic excellence, but also disciplinary craftsmanship. Thus, the classical synthesis of lectures and tutorials can be enriched and refined by re-imagining the aims of class participation.
- UW, BA in Political Science: The leading teaching method for the UW Political Thought module is lecture, supplemented by presentation. Likewise, the LSE counterpart also relies on the traditional mix of lectures and tutorials. However, the autonomy of the lecturer is understood differently at the two institutions. As corroborated by student testimony, at UW the formal and material shape of the class depends on the teacher.
- LSE, BA in Political Science: At LSE, no variability is allowed in terms of the course content or the method of delivery of classes. Students at LSE are insulated from the threat of arbitrarily-set standards and incommensurable knowledge takeaways. The existence of a harmonized syllabus for all tutorial groups guarantees that each student leaves the course with the same knowledge.
- UW, BA in History: The UW programme takes the autonomy of the lecturer to the extreme by assigning superfluous responsibilities to teaching staff. The fieldwork component (Study Tour module) is realised by hosting a trip with the lecturer acting in the capacity of a tour guide. Although discussion is encouraged, the chief aim of the module is to receive knowledge passively, rather than have the students identify and analyse historical sites or objects.
- UCL, BA in History: In the Making History module at UCL, insights of the lecturer are not the starting point for fieldwork investigations. Instead, the role of the teacher is to verify and correct the approach taken by students in preparation for their group project.

Comparison of degree structure - BSc Management - SGH and LSE

	SGH	LSE
ECTS/Credits	<p>Whole Degree: 6 x 30 ECTS = 180 ECTS</p> <p>Every term: 30 ECTS</p> <p>ECTS differ according to the number of lectures, seminars and the way of assessment (exam/graded/not graded)</p>	<p>Whole Degree: 3 x 4 = 12 Units (+ LSE 100)</p> <p>Every term: 2 Units</p>
First Year Assessment	<ul style="list-style-type: none"> • 11 exams • 7 tutorial assessments • 2 colloquia/tests • 2 essays • 1 other • Foreign Language I and Foreign Language II assessments (no information in the syllabus) 	<ul style="list-style-type: none"> • 7 exams • 1 essay • 1 group project
First Year Subject	<p>Subjects=14</p> <ol style="list-style-type: none"> 1. Microeconomics I - 60h - 6 ECTS 2. Microeconomics II - 45h - 5 ECTS 3. Macroeconomics I - 60h - 6 ECTS 4. Foundations of Law - 30h - 4 ECTS 5. Accounting - 30h - 4 ECTS 6. Statistics - 60h - 7 ECTS 7. Mathematics - 75h - 8 ECTS 8. Economic geography/economic history - 30 h - 3 ECTS (9. Physical education - 30 h + 30 h - no ECTS 10. Foreign Language I - 60h + 60h - 3 ECTS x 2 11. Foreign Language II - 60h + 60h - 2 ECTS x 2 12. Method of studying proseminar - 10h - 1 ECTS 13. Introduction to Economic IT - 30h - 3 ETCS 14. Finance - 30h - 3 ECTS 	<p>Subjects=8</p> <ol style="list-style-type: none"> 1. Elements of Management Accounting and Financial Management , OR Elements of Financial Accounting - 35 or 33h - half unit 2. Finance - 20h - half unit 3. Economics A OR Economics B - 60h, 1 unit 4. Quantitative Methods (Mathematics) – 32h + 10h optional - half unit 5. Quantitative Methods (Statistics) – 32h + 10h optional - half unit 6. Operations Management - 19h - half unit 7. Organizational Behaviour and Leadership - 25h - half unit 8. LSE100: Understanding the Causes of Things - 15h of classes and 5h of specialized online lectures, plus optional workshops, in the term 1 - no value
Contact Hours	<p>385 contact hours in term 1</p> <p>375 contact hours in term 2</p> <p>TOTAL = 760</p>	<p>109 contact hours in term 1</p> <p>118 contact hours in term 2</p> <p>TOTAL = 227</p>

- **Engagement with teaching materials:** Teaching materials, as well as approaches to engagement with materials, vary across institutions. While neither Polish or UK universities attempt to spoon feed students, the materials are used to different ends.
- BSc subjects centred around maths: Workload expectations can be signalled to students in a transparent way. The students of BSc degrees focusing on maths at LSE are given course packs containing the teaching materials, including notes. However, the notes are not a full extract of examinable material, but rather introduce and guide the students' independent study.
- BSc in Management: Subjects permeated by globalized knowledge flows are taught using commensurable materials. A notable example here is the use of the same leading textbook by the marketing modules from BSc in Management offered by both SGH and LSE. Both institutions ensured that in terms of the content of the teaching, the selection of materials is attuned both to the local context of professional practice and the mainstream global literature.
- BA in History: Courses requiring deep engagement with written sources, such as BA History, promote different ways of interacting with texts. UCL devotes an entire 7.5-ECTS equivalent worth module (Approaching History) to acquaint students with the styles of argumentation and to teach the tasks of construction and deconstruction of historical claims. Students are also introduced to the innovative methods of presentation of data thanks to the digital humanities project element in the Making History module. Similar space for engagement with texts is not created at UW, with the majority of courses emphasising memorisation of claims contained in texts as the chief takeaway.

Professional orientation of curricula

- **Uses and abuses of open-access courses:** Students at Polish universities have a wide choice over the number of open-access modules offered at university-wide basis (i.e. non-departmental subjects). The courses are of little value (usually not exceeding 4 ECTS) and are supposed to provide the students with interdisciplinary knowledge.
- Evidence from Poland: In the UW BSc Economics programme, elective open-access modules take up 1/9 of the entire studies. The proportion signals the risk of jeopardising disciplinary studies. Due to the low ECTS value of open-access modules, students need to cope with more assessment. Moreover, the "first-come, first-served" enrolment procedure rarely translates into students ending up with their first choice modules. As a result, instead of acquiring holistic education, students may at the same time devote less attention to their main field of study and not approach the extra-disciplinary coursework with seriousness.
- Evidence from the UK: The approaches to opening up study to interdisciplinary insights vary depending on the programme. Some programmes at UCL envisage the possibility of studying a minor (a secondary academic discipline) and further allow to take courses from any department in the final year of studies. LSE students, when given the possibility to attend courses from other departments, are expected to submit a motivational statement to the programme director. They are also free to audit courses. This evidences that interdisciplinary development proceeds on a voluntary basis. The students' curiosity, rather than institutional coercion makes interdisciplinary studies possible.

- The aim of making university education holistic can hardly be met by allowing the students to cherry-pick from a smorgasbord of courses. Students hardly ever exercise the freedom to choose these courses in order to satiate their demand for knowledge of other disciplines. The choices are informed by practical considerations, such as the easiness of obtaining a pass.
- **Timeliness of specialisation:** The structure of degrees presupposes specialisation opportunities at different times. The general tendency of UK universities is to expose students to courses from other departments in their early studies. Access to specialist courses is granted in later years, in order to allow to make informed decisions. At all stages of study, the range of departmental elective modules is wide and thus accommodates student preferences. It is dubious whether a similar balance can be found in Polish universities, due to some programmes' inherent expectation that students will be able to commit to a particular specialism.
- SGH, BSc in Management: While SGH offers a wider range of elective and specialist courses, it requires students to commit to one out of three specialist strands. As a result, the student may choose to omit quantitative courses in second and their year of study altogether and sharpen a different set of abilities.
- LSE, BSc in Management: In contrast, LSE offers a broader and quantitative-focused course, which provides students with a wider palette of transferable skills. Whether specialisation is prudent at an early stage of bachelor's degree is to an extent dependent on the necessities of the local job market. However, this does not presuppose the need to allow students to acquire a universally applicable set of skills in order to facilitate any future decisions about switching to a different discipline.

Assessment methods

- **Formative and mid-term assessments:** The institutions in Poland and the UK adopt different modalities of verifying students' knowledge throughout the term.
- Evidence from Poland: In the UW BSc Economics programme, elective open-access modules take up 1/9 of the entire studies. The proportion signals the risk of jeopardising disciplinary studies. Due to the low ECTS value of open-access modules, students need to cope with more assessment. Moreover, the "first-come, first-served" enrolment procedure rarely translates into students ending up with their first choice modules. As a result, instead of acquiring holistic education, students may at the same time devote less attention to their main field of study and not approach the extra-disciplinary coursework with seriousness.
- Evidence from the UK: The approaches to opening up study to interdisciplinary insights vary depending on the programme. Some programmes at UCL envisage the possibility of studying a minor (a secondary academic discipline) and further allow to take courses from any department in the final year of studies. LSE students, when given the possibility to attend courses from other departments, are expected to submit a motivational statement to the programme director. They are also free to audit courses. This evidences that interdisciplinary development proceeds on a voluntary basis. The students' curiosity, rather than institutional coercion makes interdisciplinary studies possible.

- **Peer review:** Some institutions may choose to experiment with peer review as a way to make grading more fair. However, peer review is not to be introduced blindly, and there should be a clear role delineated for the course conveners to verify the scientificity of the assessment.
- Evidence from the UK: In the case of *Making History* module at UCL, one of the assessments (worth 40% of the final grade) is double graded by peers and the academic staff. This device ensures that students develop judicious skills of critical reflection and has the potential of building solidarity among students. However, insofar as first-year students might not be sensitive to criteria of scientificity and an objective framework of judgment cannot be imposed on them, it is prudent to moderate the grade and not to subject the entire module grade to peer assessment. Similar arrangements could be introduced on an informal basis, e.g. for the purpose of checking formative essays.
- **Oral exams:** The oral exam format is still widely utilized in Poland, while in the UK it has been swept away. Over-reliance on one-one-one oral assessment may raise concerns of arbitrary grading of students.
 - Evidence from Poland: In the case of the UW *Political Thought* module, there were no fixed criteria of exam performance. Exam preparation was facilitated only by a provisional list of sample exam questions supplied by the lecturer. The course syllabus is not of help to students, as the content of the course fluctuates according to the approach of the teacher. Since there are no limits to the numbers of questions that can be asked and no standards exist to guarantee that each student receives a question of commensurable complexity, and since there is no screening of the sole examiner's decision-making (even in the form of audio recordings to be checked by an external examiner), the utility of oral exams can be called into question. Without guarantees of procedural fairness and non-discrimination, the oral exam format produces an uneven confrontation between the student and the examiner and leads to inequalities between students.
- **Written exams:** Written exams are the most common way of assessment both in Poland and the UK. However, there are differences in the design of questions and marking standards.
 - Evidence from the UK: Transparency in marking standards is one of the paramount considerations of UK universities. In social sciences and humanities, the exam questions are designed to invite students to showcase a multitude of skills. A good understanding of the topic will not translate to a distinction if the answer is not structured coherently and does not present an attempt of critical engagements with key concepts or literature. Therefore, the lecturers are not in a position to produce a right model answer to any question posed. The expectation is that the students will be able to present how their own reasoning protocols apply to the literature discussed throughout the course. Furthermore, a selection of the exam papers is reviewed by an external examiner from another institution, in order to ensure that marking was conducted in an unbiased fashion.
 - Evidence from Poland: Written exams tend to be standardised only for teaching groups, but not on a subject-wide basis. Students have voiced concerns over the fairness of grading, which is conducted arbitrarily by the lecturers. Challenging a grade is difficult as long as it requires to confront the lecturer. Overall, this creates an impression of authoritarian control over marking standards. In terms of substance of the exams, the interviewed students have corroborated the conventional "learn by rote, pass, forget" expression is largely applicable because of the exam format. In social sciences, students' exam responses are frequently supposed to provide a descriptive overview of the issues discussed in class. Given the fragmentation of subjects, it would appear that students of Polish universities are expected to reproduce knowledge from different areas, but are not necessarily invited to draw connections between them.

COMPARING A POLITICAL SCIENCE CLASS: LSE AND UNIVERSITY OF WARSAW

	University of Warsaw	LSE
	Myśl Polityczna = Political Thought - Core module	Introduction to Political Theory - Core module
	2 ECTS - 60 hours (1 year module)	1 unit = 20 seminars - 41h (1 year module)
	60 hours = 8,2% of the year	41h = 33.7% of the year
Syllabus	<p>Learning outcomes:</p> <ul style="list-style-type: none"> • understanding of basic political concepts • knowledge on different stages of political thought • understanding the relationship between different ways of thinking about political order • can identify main concepts, ideas etc. • can analyse anthropological, epistemological, ethical, historical and philosophical of different political thoughts • the ability to notice varieties of issues connected to political thought 	<p>Learning outcomes:</p> <ul style="list-style-type: none"> • A study of the ideas of some of the major political theorists from the ancient Greeks to the 20th Century. • Each week has separate questions regarding particular thinkers. Some question focus on reconstructing the argument, others on comparing and contrasting previous thinkers to current thinkers, many questions are “does it matter if...?”, “to what extent...”, “critically evaluate...”, “what are the strengths and weaknesses?”
	The student also pointed out that the nature of the subject depends mostly on the teacher. This year there are two professors teaching the subject. One requires basic knowledge on most topics, the other one discusses less philosophers and wants his students to write more detailed and more focused exams. The student noticed that there are some classes which are taught very differently from this module and “everything depends on the teacher”.	The content is standardised regardless of the seminar tutor.
	<p>Compulsory reading: 6 textbooks about history of political thought for the year</p>	<p>Compulsory reading: Expected to do weekly required reading from basic texts that are discussed (e.g. Plato, Socrates and additional critical literature).</p>

COMPARING A POLITICAL SCIENCE CLASS: LSE AND UNIVERSITY OF WARSAW

<p>Methods of assessment</p>	<p>The website says that the final assessment is an oral exam that takes into consideration “mostly the level of knowledge and skills” - 2 questions, pass.</p> <p>The student of the module told us that there is actually a written exam. She mentioned she learned “not to trust online resources but only the teacher and the content he’s giving during class. During an oral exam one can be asked about anything”. The student says that most questions focus on concepts and you have to describe them (eg. “What was Hobbes’ “state of nature”?”). Questions are not critical.</p>	<p>The module consists of a summative essay (40%, 2000 words) due in second term and an exam (60%, duration: 2 hours) in the summer exam period.</p> <p>Most questions require critical thinking (“To what extent?”, “Do you agree?”,</p>
	<p>Example of an exam question: “Describe Plato’s ideal city”</p> <p><i>There is no information on what are the other criteria of assessment during the oral exam.</i></p>	<p>Example of an exam question: “What is Aristotle’s objection to Plato’s account of the ideal city, and is it convincing?”</p>

Conclusion

1. The course convenors should design the modules in a transparent fashion. First, there should be harmonized syllabi imposed on all teachers of a particular module. Secondly, fragmentation in the design of modules should be avoided. This way, the expectations towards students and the intended learning outcomes can be communicated more clearly.
2. Guided independent study should be encouraged in lieu of burdening students' timetables with classroom teaching. In order to nurture independent thought, students need to be freed from the expectation to reproduce the lecturer's knowledge and understanding of the subject.
3. Open-access courses should take up a smaller proportion of the degree. As long as they provide a perfunctory overview of other disciplines and assessment does not require a true effort, open-access courses do not add up to the ideal of holistic education.
4. Assessment marking standards should be uniformized and publicized by university departments. In order to avoid arbitrariness, exam content should also be made uniform. In the event when a module is taught by multiple lecturers, there should be no discrepancy in the examinable material. Furthermore, exam assessment should be performed by external, objective examiners.

Key message:

Course convenors should restructure the syllabi and develop transparent modes of assessment. Teaching content should be unified between tutorial groups, and more time allocated to independent study.

3. PROFESSIONAL DEVELOPMENT

Building a more diverse range of professional development opportunities on campus, and communicating them in a clearer way to students.

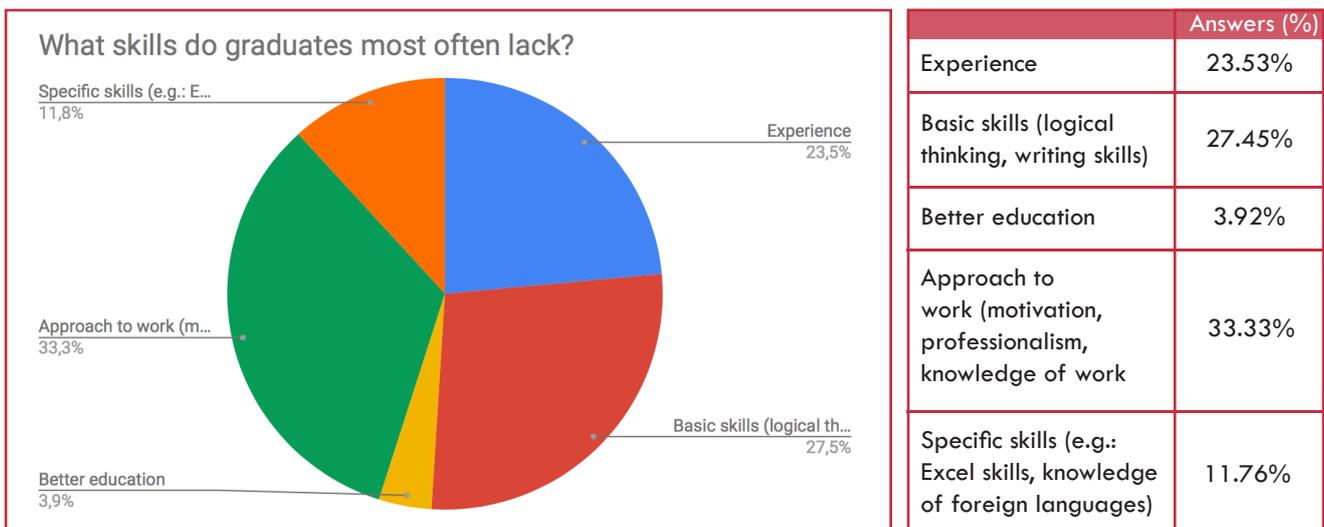
Introduction

Although universities are supposed to primarily provide academic qualifications, they also de facto prepare their students for finding a job after graduation. Some degrees, such as computer science and economics, have proven to provide better employment prospects than others.¹⁷ However, employers also increasingly value previous work experience that prepares students for the working environment. This is particularly useful for students that study degrees that are less desirable on the job market. Pursuing internships at university is also important for students' personal development. It allows them to gain a better understanding of the job market and gives a chance to consider different career options without committing to a particular profession.

Considering the importance of professional development at a young age, this report studies students' opportunities to get familiar with the job market at the university. To do this, we conducted a set of surveys and interviews among students from the LSE and UCL in the UK, and from SGH and UW in Poland. Additionally, we studied the career opportunities offered by universities online. We focused mainly on official career services provided by the university, as well as professional development provided by student societies. We also reached out to employers in Poland to gain a better understanding of their hiring needs. The underlying aim of this section is to identify the extent to which universities prepare students for the job market and encourage professional development.

Popularity of career services

Our study has demonstrated that there is a massive gap in the popularity of career services between Polish and British universities. Using career services is not popular at the University of Warsaw (UW) and Warsaw School of Economics (SGH) where 90.73% students answered they have never used career services and 65.37% know only one or no people that have ever used them. In contrast, 76.6% of the respondents from UCL and the LSE have used career services and the remaining students at least knew about their existence. While in Poland only 1.19% of the respondents knew 11-20 people that have used career services, in the UK 32.98% said they knew 11-20 or 21+.



Students at both UW and SGH either mentioned that their universities did not help much with job applications (eg. CVs, cover letters, advice concerning professional development), or they mistakenly claimed that there were no such opportunities available.

Some people have heard of job application support provided by the university, however, they were not aware whether the services were actually helpful. Interviewees from UW said that there is not much professional support provided by the university (either as part of career services or by the department) or they claimed that the opportunities advertised are not very appealing. It seems, however, that there are some differences in career support between different departments. For example, our interviews have revealed that the Computer Science department at UW seeks to inform their students about career opportunities more actively than the Political Science department.

One of the reasons why UW and SGH students know little about professional development provided by their universities is poor communication between the career office and students. 37.87% of the respondents said that the university never informs them about different events organised by career services or that it happens once every academic year. Only 14.79% hear about them at least as often as once every two weeks. Of course, there is information on career services provided online where students can find out more about different opportunities organised by the university.

Here, SGH seems to do a better job as it has a more engaging and clear website than UW. It is more visually appealing, easier to navigate and contains more information including articles with career advice written by university representatives and tailored to the needs of students. Nevertheless, UW seems to do a better job with specific events to develop students skills, eg. workshops on coaching and recruitment in February 2019. In contrast, SGH has a much more active cooperation with employers (eg. EY, Microsoft, Samsung Electronics) that conduct their own workshops on campus and all of these events are clearly advertised on the university's website. Nevertheless, it seems that both UW and SGH failed to present a comprehensive set of opportunities available. Our interviews revealed that there are different mentoring programmes and entrepreneurial initiatives such as Inkubator UW. However, none of this can be found on the websites.

Our interviews have confirmed the trend that university career services are not very popular in the case of the two Polish universities. One of the students said that at SGH "not many students know about career advisors". Another one claimed that students are aware about the mentoring programme but she said that it was not very popular. Lack of communication also became apparent while interviewing students from the University of Warsaw. A Political Science student mentioned that although there were multiple opportunities available that he has heard of, one "needs to know about them". A former Journalism and Media student from UW, currently studying at the LSE, said that she has "never received a newsletter from the university or any other information that they might have something interesting to offer". She admits that at the LSE "it is very easy to get involved".

The frequency of communications between career services and students at the LSE and UCL could explain why their students are much more aware of professional development opportunities at the university. More than half of the respondents receive an email from the career services office or their department at least once a week or more frequently. 28.72% responded that they are contacted every two weeks. Our interviews have confirmed that the universities put a lot of emphasis on engaging their students professionally. Interestingly, the university manages to engage students from degrees that are not instinctively associated with many promising career prospects. A History of Art student at the UCL said that "the official career services are advertised via email newsletters". This suggests, that UW and SGH could improve the student engagement with their services if they undertook similar measures. Sending out a bi-weekly newsletter or engaging academic departments does not require many resources but it could significantly increase students' awareness about different opportunities available.

Available opportunities of professional development

Our research has shown that despite the lack of popularity, both UW and SGH provide their students with support. The services offered include consultations with career advisors where students can discuss their CVs, cover letters and any career-related issues. They have platforms where different companies can advertise their latest job openings. SGH additionally offers a mentoring programme. It also has the so-called Centre of Cooperation with Business (Centrum Kooperacji z Biznesem) where different companies engage with students. Still, as our studies have demonstrated, many students are not aware that they can use these services. The annual report from UW for 2017 mentioned that 1 300 people used career services. This is not many, considering the fact that there are around 50,000 students studying at the university.¹⁸

Our survey has demonstrated, however, that the lack of active career services provided by both universities is partially substituted by popular student societies (“koła naukowe” and “organizacje studenckie”). In our interviews, students mentioned that some societies are sending newsletters with different career opportunities or advertise information on Facebook (eg. SKN Finansów at UW or CEMS Club at SGH). The respondents that had a chance to study both at the Warsaw School of Economics as well as at the University of Warsaw said that the former one has a much more active student community than the latter. Students from SGH underlined that many students are actively participating in student organisations and they believe that these activities enhance their career prospects.

An alternative source of career support is provided by the private sector itself. Some companies (eg. PZU, EY) advertise themselves at universities and conduct workshops. Students at UW mentioned that the jobs fair at the university were useful, while one of the interviewees from the Warsaw School of Economics said there was a “multitude of companies” targeting students on campus. Moreover, people often find different opportunities online (pracuj.pl or LinkedIn).

Our interviews suggested, however, that students can get more support with professional development mostly in the fields related to economics, finance, consulting and business. This is not surprising since these are the societies major corporations are most likely to get involved with. SGH seems to have a more professionally active student community than UW, and is a business-oriented institution. This is an issue as it suggests that students focusing on different degrees have little opportunities to interact with professionals. A Political Science student from UW said that although his department has a separate career office, he had an impression that it isn’t very active. The website was not updated regularly, students were not contacted about different opportunities and some job openings were outdated. Similarly, a student studying for a diploma in Philosophy at UW said that there was virtually no professional support, which was perhaps connected “to the nature of her degree”. A Linguistics student from UW said that although she has heard there are many good opportunities, she doesn’t know anyone who actually used them. She also mentioned that because her department is not on central campus, where most of the events take place, it is difficult to participate in them. Moreover, lecturers are often unsupportive and don’t allow students to miss class and attend an interesting career event. Consequently, most students need to act on their own. This suggests that students pursuing less business-oriented disciplines are less encouraged to get familiar with the job market.

In the UK, career services are the most important source of information about professional development - according to 25.78% of respondents. The interviews have indicated that the university organises a multitude of different activities that attempt to engage students professionally, no matter what degree they study. For example, the LSE organises a series of professional weeks, which included career in creative industries; political risk, conflict and security; finance; consulting; development; NGOs and international organisations and others. During a professional week students can meet alumni working in particular industries, attend a coffee morning and meet representatives from different companies or go to workshops related to a particular field. Altogether, the university aims to engage students from different disciplines through various methods. Although career services are dominated by large multinational companies that are also active in Warsaw, UCL and the LSE make an effort not to discriminate those that are not planning to pursue a career in a corporate environment.

The academic department also plays a crucial role. It often informs students about particular tailored opportunities. For example, a first-year Anthropology student at the LSE mentioned that she had meetings with alumni and relevant companies organised by her department very early on during her degree.

During a professional week students can meet alumni working in particular industries, attend a coffee morning and meet representatives from different companies or go to workshops related to a particular field. Altogether, the university aims to engage students from different disciplines through various methods. Although career services are dominated by large multinational companies that are also active in Warsaw, UCL and the LSE make an effort not to discriminate those that are not planning to pursue a career in a corporate environment.

The academic department also plays a crucial role. It often informs students about particular tailored opportunities. For example, a first-year Anthropology student at the LSE mentioned that she had meetings with alumni and relevant companies organised by her department very early on during her degree.

An Arts and Sciences student at the UCL said that his department makes sure that every single student has at least one internship during his undergraduate degree.

Finally, the companies themselves are also very active at the university. Like in Poland, big corporations visit universities and present themselves during job fairs and workshops. This was particularly clear after interviewing students studying STEM degrees. A student studying MSc in Business Analytics at UCL said that the engagement with companies was not even comparable to the one at SGH during her undergraduate degree. There were meetings with companies “non-stop”, additional classes regarding CV and cover letter writing and even advice what to wear for a job interview. Students know that they can always get support from the university. Our study has suggested that career services manage to engage a lot of niche companies and organisations, as well as to engage students from different disciplines. For example, the History of Art department at UCL organises occasional career meetings. This includes presentations and Q&As with industry professionals, such as the head of the art museum in Vienna, and a History of Art alumni panel. An MSc in EU Politics student at the LSE said that he had the chance to have professional development classes as part of his degree, organised by the “student engagement” representative in his department. These included political risk, lobbying and political blog writing workshops. Consequently, even though UK universities tend to be more career-oriented than Polish universities, they do not focus on the corporate environment only, thus increasing employability of students from different disciplines.

Interestingly, our study has revealed that in the UK the help of friends and family is much less important than in Poland, with 16.80% of the respondents citing it as useful. 34.35% of students in Poland pointed it out as the most useful source of information. This is an important difference, since gaining information about work opportunities from your social circle potentially limits students from underprivileged backgrounds. Of course, it could be argued that in the UK the university is paid, hence, less privileged students are automatically limited by not being given access to the university. However, the UK government acknowledges that issue and provides student loans that cover the education fees in an effort to fight limited accessibility. It covers three years of undergraduate studies and up to 10 000 pounds for postgraduate studies. Moreover, UK citizens are allowed to receive a so-called “maintenance loan” that provides up to £11,354 a year for living costs (with a flat in London costing approximately £8600 for 12 months). Consequently, less well-off students are not prevented from accessing higher education and, once they enter university, active career services help diminish social disparities in future opportunities.

Student satisfaction and expectations

In our survey, when asked whether they would like the university to offer more help with career services, 56.21% of students at UW and SGH replied “yes” while 37.28% said they don’t need it. 6.51% mentioned that they get help from other sources (student societies, internet, companies themselves, friends and family). Interestingly, however, when we mentioned different opportunities offered by career services that the students could potentially take part in if they were offered the chance, only 0.82% said they would not be interested while 0.7% claimed they don’t need them because they get enough help from other sources. Most respondents have chosen multiple options they’d like to get involved in, such as the most popular free Excel classes (with 13.6% of respondents interested in taking them) or IT classes, assistance with CVs and cover letters, company presentations, visits to the offices in the industry, networking breakfasts, career events organised for specific departments or meetings with working graduates from the department. This suggests that if the students were more aware of different professional development options offered by the university (such as CV and cover letter workshops that are already available) or were offered other forms of help, they would like to get involved.

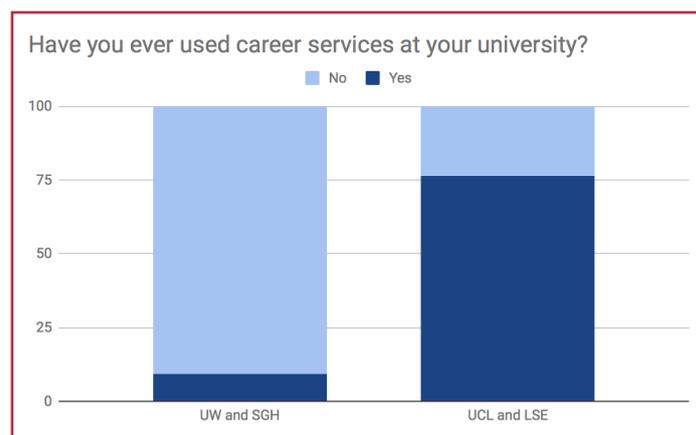
Students in the UK have also much higher satisfaction from career services provided at the university. 89.29% said that the workshops they have signed up for were useful. Interestingly, when asked whether they would like to get more help from the university in terms of career, 35.11% admitted they would while 36.17% said they are getting enough support. In our survey proposing different activities organised by career services, students in the UK have responded similarly to the Polish students - the answers were more or less evenly distributed among all options. Nevertheless, it seems that students in the UK were much more interested in CVs and cover letter support and least likely to get involved with Excel workshops.

Despite high student satisfaction from the provision of career services in the UK, students pointed out some relevant shortcomings. For example, an EU Politics student at the LSE mentioned that “although there are plenty of opportunities available, if you manage to grasp them it comes down to how much effort you put in finding them... I do genuinely believe that individual departments could do a much better job at coordinating with the LSE career service and provide comprehensive updates on new opportunities”. This suggests that sometimes students are perhaps overwhelmed with options from both departments and the universities and might get lost in what actually is available, as there is no comprehensive summary. This suggests that, just like in Poland, in some areas there is a need for a more integrated information system that students can keep up with. Similarly, a student from the UCL that is interested in a very specific career in multi-agent reinforcement learning research said that the career department can’t realistically offer him much help. Nevertheless, he said that it is possible to fill the gap by participating in a research group at the university.

Insight from the industry

To complete our research, we decided to contact employers from different industries in Poland to get a better understanding of their opinion on the skills of graduates and the needs of their businesses. We surveyed 27 employers and interviewed five of those that had much experience with employing graduates both from the UK and Poland.

Our research has suggested that it would be beneficial for career services at the university to support students more with career development. The largest part of survey respondents (27.66%) mentioned that they look at previous work experience while considering a graduate for a job. 17.02% said that they look at extracurricular activities, such as societies, organisations, personal projects or volunteering. It also seems that employers (33.33%) want graduates to have the right attitude towards work, which includes professionalism and an understanding of the work culture - all of which can be improved while having previous work experience.



Interestingly, 96.6% of our respondents said that they already are involved or wish to be involved in the close cooperation with students at the university. They were mostly happy to organise paid internships after which they could hire future graduates.

However, approximately 1/2 of them was also happy to organise insight days at the office for students, organise competitions on campus (eg. Hackathons, Datathons or marketing strategies competitions) or tell students about their company at the university. One of the respondents said during an interview that it is much easier to involve students if there is an active career office at the university that facilitates such cooperation.

Consequently, students at universities in the UK have an advantage, as they are told about many different opportunities from the beginning of their degree. Since career services at UW and SGH are not as developed, employers prefer to work directly with more active student societies. Arguably, however, student societies have a narrower reach than university career services, which would be able to email all students about arising opportunities. Consequently, student societies tend to involve those who are already interested.



During interviews our respondents have said that they look at candidates objectively. They generally do not express a preference for graduates of either Polish or UK universities. However, they noticed that students studying in the UK might have an easier path into the industry. One of the HR employees from a consultancy company mentioned that students studying in the UK tend to have broader work experience. Another employer from a different consultancy mentioned that over the years, particularly SGH students managed to narrow the gap compared to their UK counterparts. Nevertheless, he noticed that there is a big difference in confidence between students from Polish universities and those from the UK, especially when it comes to females. He said that this gives students from the UK an advantage particularly when giving presentations in front of the clients or reaching higher positions. Of course, we are unable to prove whether the lack of confidence is caused by less support from the university or perhaps it is the greater confidence that enables these women to study in the UK in the first place. However, the above information indicates that it would be beneficial to expose students at Polish universities to presentation workshops or personal brand building workshops that are available in the UK.

However, it seems that students from the UK might have an advantage not only because of richer CVs. It appears that their degrees are more focused on individual work and give more time for extracurricular activities that might better prepare for the workplace. One of the respondents that works in Private Equity said that graduates from the UK have more developed soft skills, particularly related to time management, their critical approach towards projects and a better understanding of the work culture. Another respondent from a consulting company said that in London students have a chance to get experience from practical classes conducted by industry professionals that effectively prepare them for the job market.

One of the HR employees from another consulting company said that if there are two candidates, one from a university in Poland and the other one from a university in the UK, and both had nothing to do with consulting at the university (either as part of the degree or by taking part in extracurricular activities), the latter candidate is definitely more likely to perform better during an interview. This is largely because the education in the UK places more emphasis on individual work and critical analysis, rather than theory. However, if there are two candidates, one from a Polish university and the other one from the UK, and both of them were involved in consulting societies or attended workshops organised by the university, there is no difference in skills between the two of them. This shows the importance of previous exposure to professional topics and to the work environment in enhancing a candidate's chance of securing a job after graduation.

Conclusions/recommendations

1. Although there are opportunities available (private consultations with career advisors, mentoring programmes, job fairs etc.) our studies have shown that many students are not informed about them. Career services should send out regular newsletters and update their online pages to increase student engagement.
2. Polish universities should diversify the services they provide. They could take an example from UK universities that organise career panels, career coffee mornings with individuals from the industry, company visits and alumni meetings. They should also engage more with students from all disciplines, particularly those that are less career-focused and are less demanded in the job market.
3. Polish universities should establish working relationships with the industries to provide their students with more opportunities for development. Our survey and interviews have revealed that companies find it easier to engage students if they can work with an active university career office.

Key message:

**Communication between career services and students should be improved.
Students should also be provided with a more diverse range of professional development opportunities on campus.**

4. ACADEMIC RESEARCH EVALUATION

Establishing an objective system that fosters and rewards internationally recognized research.

Introduction

The research-intensive function of university cannot be performed without building a sustainable environment for research. For academics to flourish, their autonomy needs to be coupled with institutional and administrative support. The case of institutional scrutiny of research quality proves that research can be facilitated or hindered, depending on the severity of review standards. Universities find themselves in the need to balance between, on the one hand, production of internationally recognised outputs, and, on the other hand, responsiveness to the local environment.

The Report lays out a framework for a comparative evaluation of research environment. In regards to Polish institutions responsible for scrutinising research excellency, due regard was paid to the developments after the enactment of the new higher education law. The underlying aim of this section is to identify the drivers and barriers of academic development.

Measuring research excellency

In the era of competition between scientific institutions, one cannot underestimate the importance of the evaluation of impact and research intensity. Impact review can contribute to the development of the universities' research function and inform their future decisions on resource allocation. It provides an opportunity to measure the reception of research outside academia and therefore measures how academic research connects to the world's problems. However, an impact review can be meaningful only when it proceeds according to transparent criteria, which can apply equally to research in all types of sciences.

The impact review is conducted in commensurable ways across Poland and the UK. The division of sciences and grading standards are structured in a matching way. Both systems of impact review contain sufficient checks to ensure non-discrimination of interdisciplinary research, with the UK REF dedicating a special panel to Interdisciplinary Research and the Polish law allowing for variation amongst heterogeneous academic institutions.¹⁹The only variance is in the Polish system distinguishing between Arts and Humanities, and the UK system treating Humanities as separate from Social Sciences. The UK solution is noteworthy due to the distinct function of Social Sciences to offer reflections critical for the development of Public Policy.

In regards to substantive standards of assessment, however, different methodologies are applied. The Polish system, led by Komisja Ewaluacji Jednostek Naukowych (Commission on Evaluation of Research Units, 'KEJN') favours systematic appraisal of types of academic publications, patents and achievements, identifying them in a statutory instrument.²⁰The UK Research Excellence Framework ('REF') considers a sample of publications of each member of staff selected for evaluation, and relies on peer review supplemented by citation data. There is significant discrepancy between the two approaches, as the Polish one does not involve a substantive review of the outputs, and ascribes value to the mere fact of attaining a publication in an outlet considered renowned on the basis of its impact factor. In the UK, a more resource-intensive approach is taken as the assessment is grounded in peer review. This requires academics participating in REF panels to review the work of their colleagues. However, because of the costs of the review, only a selection of work is submitted, with the cap set at four outputs per scholar. It has been further pointed out that peer review, beyond costfulness, requires supportive research cultures,

¹⁹ Science and Higher Education Minister's Statutory Instrument of 12 December 2016 on awarding categories to research units and universities which in accordance to their internal laws do not have an established basic organisational unit, 2016, §20.

²⁰ Ibidem, §10.

Criteria	Poland (KEJN)	UK (REF)
Division of sciences	<ul style="list-style-type: none"> • Humanities and social sciences • Science, technology, engineering and mathematics • Life sciences • Arts 	<ul style="list-style-type: none"> • Main Panel A: Medicine, health and life sciences • Main Panel B: Physical sciences, engineering and mathematics • Main Panel C: Social sciences • Main Panel D: Arts and humanities
Assessment standards	<p>Scientific and creative achievements</p> <ul style="list-style-type: none"> • Valuation of publications, patents, artwork etc. in accordance with scores set in the statutory instrument <p>Scientific potential</p> <ul style="list-style-type: none"> • Evaluation of mobility and development of academic staff, taking into account the organizational resourcefulness (e.g. university's own journals, or laboratories) <p>Practical effects of research and artistic activity</p> <ul style="list-style-type: none"> • Assessment of resources spent and acquired for research and development purposes, and of the applicability of research findings in the economics sphere <p>Other effects of research and artistic activity</p> <ul style="list-style-type: none"> • Evaluation of international recognition of the institution and the applicability of its research findings in areas of social importance 	<p>Outputs (65%)</p> <ul style="list-style-type: none"> • Peer review of outputs against the criteria of originality, science and rigour <p>Impact (20%)</p> <ul style="list-style-type: none"> • Evaluation of case studies in terms of reach and significance <p>Environment (15%)</p> <ul style="list-style-type: none"> • Assessment of vitality and sustainability of the institutional environment, taking into account support for research staff and students
Grading	<ul style="list-style-type: none"> • Leading (A+) • Very good (A) • Satisfactory, with a recommendation to improve research activity (B) • Unsatisfactory (C) 	<ul style="list-style-type: none"> • World-leading (4*) • Internationally excellent (3*) • Recognised internationally (2*) • Recognised nationally (1*)

as a mere focus on judgment may result in lowering of morale and instilling unhealthy competition.²¹ If the excellence review standards are transparent in both countries, why does Polish research not enjoy the same international recognition as research conducted in the UK? The fault might not lie in the misidentification of salient criteria of assessment of research excellence but rather in the objective of measuring the quality of academia by non-academic standards. While the focus on practical effects of research activity invites academic institutions to commercialize the results of research, it fails to address the different capacities of peripheral and central institutions and perpetuates inequalities between them. **The system of impact review thus creates an invisible endowment, since institutions situated close to business centres are more likely to establish business links.** Marketization, under the current framework of impact review, does not necessarily reflect the quality of research.

The consideration of other effects of research does not repair the imbalance caused by marketization demands. On the surface, it would appear that research can be valued when it leads to development of science, culture or national heritage, or when the activity has a significant social value.²² However, this presupposes that academic research is not able to shape what is considered a socially valuable activity. The standard is a retrogressive one, inasmuch as **research will only be considered valuable when it is in line with aims set by the statutory instrument** or when it follows orthodox ways of reasoning in a particular discipline.

The Polish impact review system also promises more than it can deliver. The identification of leading research bodies does not translate into an improvement of their international reputation. **The system stimulates competition on a nation-wide scale and is detached from the international dimension of competition.** As a result, the problem of improving the recognition of Polish research abroad is made invisible.

The rigidity of Polish classification of academic publications

Within the Polish system of review, the executive retains a considerable role in formulating impact indicators. The Ministry of Higher Education has a statutory power to draw up indexes of academic journals²³ and publishers²⁴ in accordance with their impact factor. The aim is to reward scholars for publishing their research with the most prominent journals or academic presses. In practical terms, the indexes are drafted as exhaustive lists of publication outlets.

The recent index of university presses publishing monographs²⁵ divides the publishers into two categories. The upper tier consists of 36 publishers from Western Europe and North America. The lower tier comprises 500 publishers from around the world. As a result, scholars will be rewarded equally for a publication with Springer and with the Stanisław Sakowicz's Institute of Inland Fisheries in Olsztyn, due to both publishing presses being placed in the lower tier. The lower tier of the index of academic presses does not differentiate between the local and global reach of publications. While local reception should not be dissuaded, it cannot be treated according to the same lines as foreign publications. International and local excellence are not two ends of the same stick, as no satisfactory balance can be found between the two categories. **In order to attune the indexes to premium international excellence, the indexes should contain only the names of the most renowned publication outlets. In order not to**

21 Harzing, 2018.

22 Science and Higher Education Minister's Statutory Instrument of 12 December 2016 on awarding categories to research units and universities which in accordance to their internal laws do not have an established basic organisational unit, 2016, §18.

23 Ibidem, §15.

24 Law of 20 July 2018 on Higher Education And Science, 2018, Art. 267(3).

25 Science and Higher Education Minister's Communique of 18 January 2019 on the index of publishing presses issuing scientific monographs, 2019.

leave behind research relevant for cultural reasons, a new system of valuation of domestically published research, in particular in the area of humanities, should be devised.

The index of academic journals relies on an impact factor from the Journal of Citation Report database. This assigns a fixed value to publications in a given journal, notwithstanding the submission's actual citation data. In the recent UK REF review, citation data was fetched with the help of Elsevier, an analytics company with its own database of publications.²⁶ **While the use of an external data provider might increase the costs of impact review, citation numbers can be identified adequately to a particular publication and not based on an assumption of the journal's reputation.** Consequently, scholars would be rewarded not for the achievement of publication in a renowned journal, but for the actual contribution they made to a field of study. However, even precise metrics should not necessarily be treated as objective indicators. In some disciplines, it is more common to publish monographs as opposed to articles, which means that citation counts of authors would be lower despite their efforts to produce a monograph. The publication of the last REF in 2014 sparked a debate about the meaningfulness of metrics. Calls for "responsible metrics" highlight the need to use diverse indicators and include data from multiple operators (such as funders, publishers, university ranking providers) in order to make the most out of quantitative assessment.²⁷

Classification of sciences: whither formality?

The Polish Minister of Higher Education has the power to issue a decree on the classification of sciences and research disciplines.²⁸ The terms of the higher education law of 2018 specify that the minister is bound to take into account the OECD classification of fields of science and technology and a range of policy considerations, such as national security or compliance with obligations under international law. In the UK, there is no formal classification of sciences set at the level of statutory instruments. A disciplinary division can only be inferred from the competences of seven Research Councils forming part of the United Kingdom Research and Innovation organization.²⁹

Poland has recently restructured its classification, with the effect of establishing eight distinct fields of study and 47 sub-disciplines. The discretion to align the Polish classification with the OECD standard has been exercised liberally. Theological studies were elevated to the level of an independent field of study (with only one sub-discipline). Controversial choices were also made on the level of disciplinary classification. The replacement of ethnology, culture studies and religious studies with a single category of "culture and religious studies" has sparked controversies about the international recognition of the scientificity of such a discipline.

The change may hinder the potential of academics to find external funding and to exercise mobility under Erasmus+ schemes. The Ministerial Decree has effectively created a new field of study, incommensurable with the well-established and globally recognised disciplines. It does not appear that the change can be justified by a pressing demand to recognise a new, interdisciplinary body of knowledge emerging in Polish academia. The case of anthropology/ethnology demonstrates that research is vulnerable to political interference. **In order to safeguard academics from the risk of politicians setting up agendas for research, a devolved administration of research activities can be considered.**

26 Research Excellence Framework, 2014.

27 Wilsdon, et al. 2015.

28 Law of 20 July 2018 on Higher Education And Science, 2018, Art. 5(3).

29 Higher Education and Research Act 2017, 2017, Section 91.

Conclusions/recommendations

1. The Polish system of impact review should be refocused in order to award points for truly outstanding research, and not any research. Domestic recognition of research outputs cannot be valued according the same criteria as international standing. Research in areas of particular social and cultural importance should be treated sui generis, and not in the same way as outputs that have the potential to compete internationally.
2. Centrally-set indexes of publications and publishing presses should either be abolished in favour of review of merits and originality, or be attuned to the dimension of international competitiveness.
3. A devolved system of administration of research resources should be contemplated in order to avoid political interference in the classification of research areas and cost indices.

Key message:

The review of quality of research should be attuned to rewarding internationally recognized research only. Competition between universities on the domestic level should be replaced with a collective strife towards making Polish research globally known. Research in areas of social and cultural importance should be exempted from competition and ratings.

5. RESEARCH AND BUSINESS

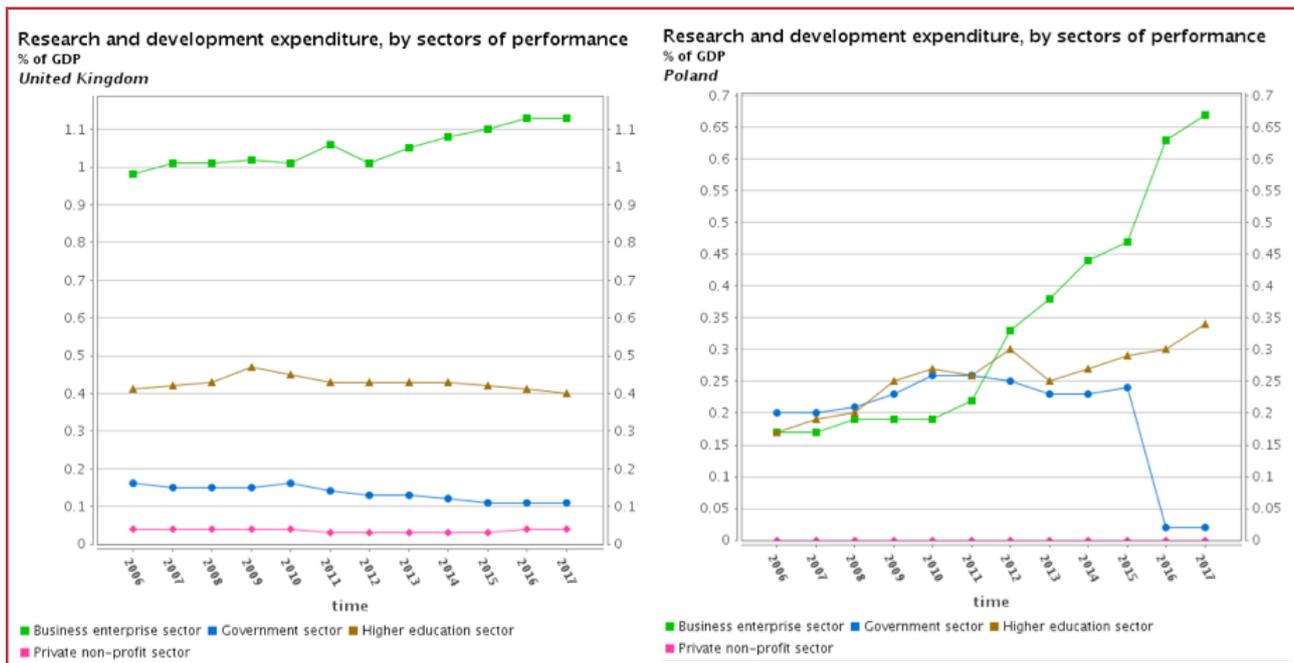
Cultivating better communication between businesses and universities by creating a clearer and more comprehensive structure for business cooperation and R&D commercialization

Introduction

We will start with a brief survey of the state of and institutions managing the commercialization of research in Poland. We will then assess the progress by describing evaluations made by NIK and the European Commission Policy Support Facility. Finally we will discuss case studies of business gateways of UW, SGH, UCL and LSE in the context of business cooperation.

State of commercialization of research in Poland

Eurostat data shows that Polish R&D expenditure is not only growing overall (GERD), but starts to converge towards more mature economies such as the UK, especially in the business enterprise sector (BERD). Yet, between years 2010-2017 Poland produced yearly an average of 5.19 public-private co-publications per 1 million people, about 8 times less than the EU average.³⁰ Many evidence suggest that this expenditure does not reflect the outputs and outcomes of innovation: the cooperation between industry and higher education institutions is on the very early stages of development with currently vague short term perspectives.



The first major step towards improving commercialization of research in Poland was the PO IR programme (Program Operacyjny Inteligentny Rozwój). It was announced in 2014 in order to facilitate the distribution of 2014-2020 EU funding scheme for Research & Development advancement in Polish enterprises. Four main axes were proposed³¹:

- Support for R&D in businesses** - with emphasis on SME (Small and medium-sized enterprises), consortia and research spin-offs (companies founded on the findings of a research group at a university).
- Support for innovation** - in form of Venture Capital and business incubators, providing growing companies with funds, management training or office space.
- Support for infrastructure and potential** - particularly by public sector, targeted at SME.
- Increasing scientific potential** - through higher education institutions development and support for individual researchers.

³⁰ Computed using European Innovation Scoreboard Interactive Tool, 2019.

³¹ Najda Consulting, 2014.

Ministry of Investment and Economic Development became the managing authority for the PO IR and NCBR (National Centre for Research and Development) was designated to act as an intermediate body for the I and IV axes of the programme.

In 2016 NIK (Polish Supreme Audit Office) announced³² that efforts made by the Ministry and the NCBR did not meet the expected results in supporting commercialization of research, pointing out that projects were not financed steadily and majority of them was ill-governed. It also specifies other issues with this ecosystem such as: fragmentation of policies, low commercialization potential of research output and generality of strategic recommendations. As far as the latter goes, Krajowy Program Badań (National Research Programme) outlined 7 separate strategic directions and Program Badań Stosowanych (Applied Research Programme) regarded centres that had ongoing research in 9 separate fields.

Insights from the EU Horizon 2020 Policy Support

The Peer Review of Poland's Higher Education and Science³³, requested by the Polish government, carried out in 2017, investigates the issue in more detail. There is a considerable overlap of findings in this report with the NIK announcement. In the chapter on science-business cooperation, the authors outline a set of issues, a relevant selection of which is presented below.

- **Lack of culture of university-industry collaboration**
 - Only about 10% of innovative companies cooperate with Higher Education Institutions.
 - Interviewees stated that the Polish industry is sceptical about the quality and usefulness of the research conducted by the universities
- **Technology Transfer Offices are largely irrelevant across the economy**
 - They present narrow focus, while lacking managerial and marketing skills
 - Results are uneven and often due to the efforts of innovative individuals
- **Lack of a clear but flexible model allowing universities to overrule national intellectual property rights regulations**
 - Interviews shown a degree of confusion among members of HE institutions regarding IP regulations: Poland's framework has changed twice in a few years which may have contributed to a lack of competence and knowledge about intellectual property
 - Currently, a mix of institutional and inventor ownership is used
 - The 2016 First Act on Innovation reduced extent of legal procedures
- **Low share of researchers and low output of young PhDs**
 - Researchers constitute 0.5% of total employment, less than 0.2% of which in business sector, compared to EU average of 0.8% and 0.4% respectively
 - 0.6 PhD graduates per 1000 population aged 25-34, one-third of the EU average (1.8)

32 NIK, 2016.

33 Marklund, et al., 2017.

State of commercialization of research in the UK

With a research productivity 3.6 times the world average, 17.6% of GERD funded from abroad and 61% of university-industry publications involving international businesses and ranked top 3 in the world in the Global Innovation Index since 2013, the UK is an indisputable leader in fostering science-business cooperation.³⁴ In 2015 Higher Education Funding Council for England estimated that every £1 invested by the Higher Education Innovation Funding has a return of £9.70 in benefits for the economy and society.³⁵

Most of the R&D funding is managed by the UK Research and Innovation (UKRI), an executive governmental body. A non-governmental organization, Council for Industry and Higher Education (CIHE, founded in 1986), replaced by NCUB (National Centre for Universities and Business) in 2013, had a fair share in building the UK's knowledge-based economy.

Recent advancements

In order to sustain its innovation output, on top of established programmes and funding schemes, UKRI continues to develop new solutions. ICURe (Innovation to Commercialisation of University Research), programme announced in 2014, aims to further improve on commercial awareness and enhance entrepreneurial skills of researchers. A pilot evaluated by Ipsos MORI "has been an effective and economical instrument for accelerating the commercialisation of academic research and producing a range of wider benefits in strengthening links with industry and enhancing the entrepreneurial skills of early career researcher".³⁶

Along with NCUB and other stakeholders, UKRI also develops the knowledge exchange framework (KEF)³⁷ in order to enable fair comparison of institutions and hence improve effectiveness of public funding. In January 2019, a pilot of 21 higher education institutions was started.

Konfer, an online tool for finding opportunities for science-business collaboration was created by NCUB to allow for a simpler and more accurate process of finding relevant research. It aggregates a variety of sources from ORCID data to social media.

Case studies

UW

University of Warsaw has a main TTO, UTTC, established in 1998. It has a branch designated to spin-off and R&D venture building (UWRC) as well as an incubator (Inkubator Uniwersytetu Warszawskiego). There is also an Offer Database³⁸ which serves as a centralized, online shop with patents, products and insights from UW researchers. The layout of the webpages of mentioned services is largely provisional and complicated, images are often of a very low quality with visible artifacts (distortions due to frequent changes in size of image files encoded in lossy compression such as JPEG). English version of the Offer Database is not available and materials linking to it result in 404 error described in Polish.

34 Universities UK, 2018

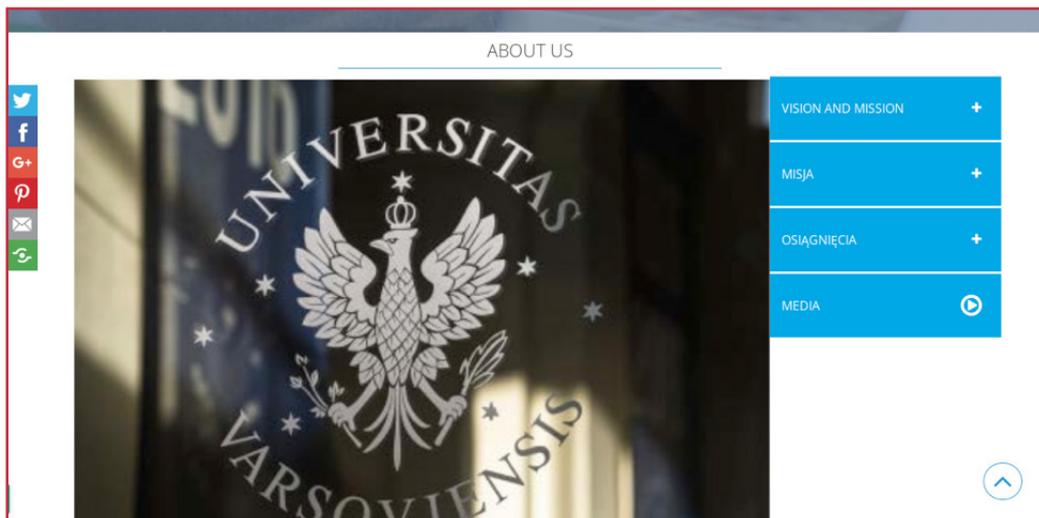
35 HEFCE, 2015.

36 Barrett, Ulrichsen, 2018.

37 Research England, n.d.

38 Baza Ofert UW

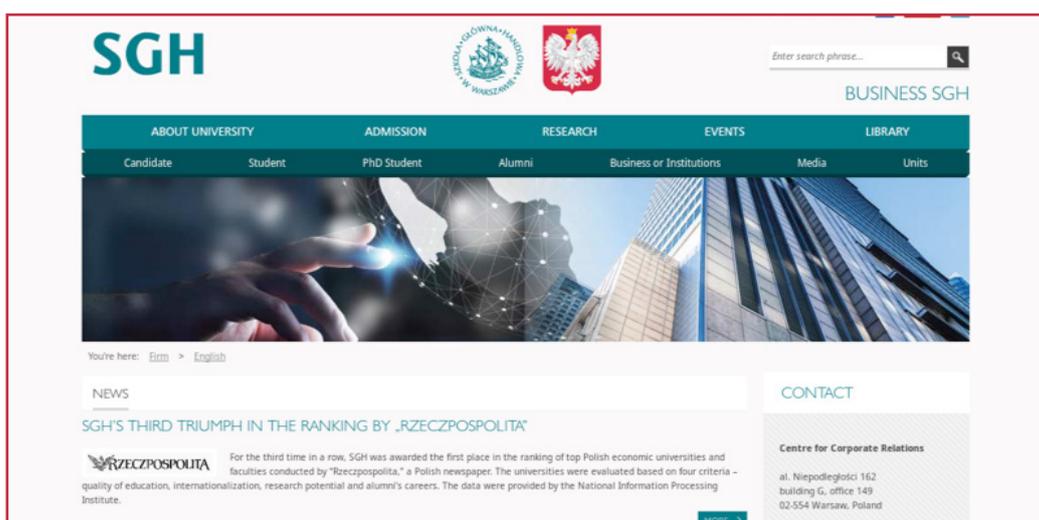
Point of entry for foreign businesses is limited to contact information to technology brokers. The site's translation is incomplete and inconsistent. Even though UW often cooperates with large finance and tech companies (e.g. Faculty of Mathematics, Informatics and Mechanics with Google), majority of these collaborations are career events, seminars and workshops for students and faculty.



SGH

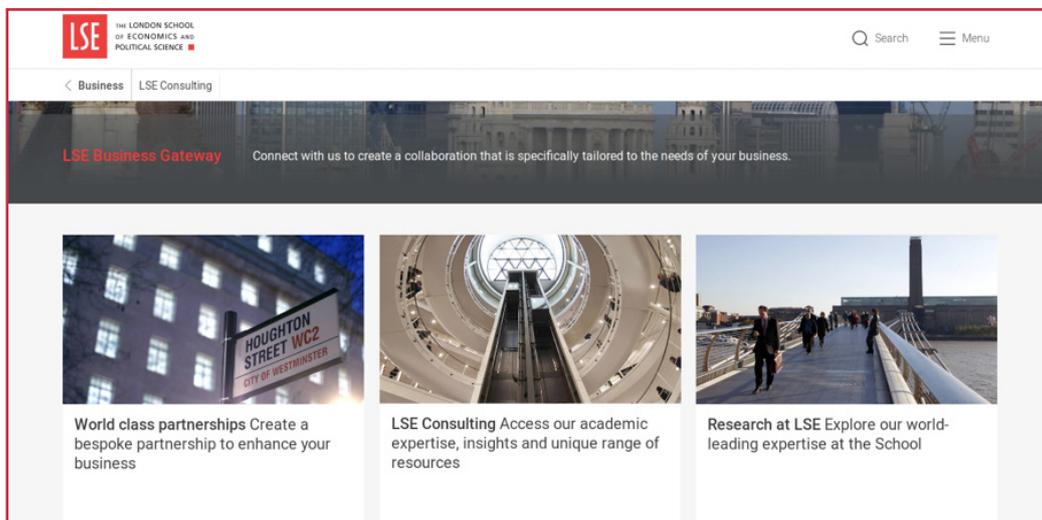
Warsaw School of Economics has a TTO offering a range of services, including management consulting, audits, expertises and market research. It claims to employ 790 researchers and to have conducted 289 projects in 2016, 74 of which were research projects. SGH Corporate Partners Club, founded in 1998, unites businesses cooperating with the SGH. The list includes companies such as EY, Santander L'Oréal, Microsoft and Samsung.

The point of entry for businesses is more accessible than in the case of the UW. The layout of the relevant webpages is homogeneous and professional. Unfortunately, the English version of the gateway lacks information about anything else than the Corporate Partners Club, the course offer and recent news about SGH in general. It also only provides contact information to the general division of business relations (In contrast, the Polish version offers a specific email to the TTO). Dead links and untranslated pages in translated context often occur. The existing cooperation with businesses that SGH promotes again largely revolves around career events, seminars and workshops. As noted on the site, the activities corporate sponsors engage in include "sponsoring of SGH Library, renovation and modernization of conference rooms, classrooms, halls, the SGH information centre and establishment



LSE

The LSE has a clear point of entry for business cooperation: LSE Business Gateway, which also promotes a separate centre for managing partnerships with larger corporations and foundations, LSE's Foundation and Business Partnerships. A centre for entrepreneurs, LSE Generate, is also available for students and faculty. It consists of Accelerators, a pitch competition and coworking spaces. LSE also provides a structured system for exposing personal overview and contact information about experts, along with a search engine (lse.ac.uk/People). LSE Consulting manages most of the non-academic collaborations, such as studies and evaluations ordered by local and international organisations, European institutions and national authorities.

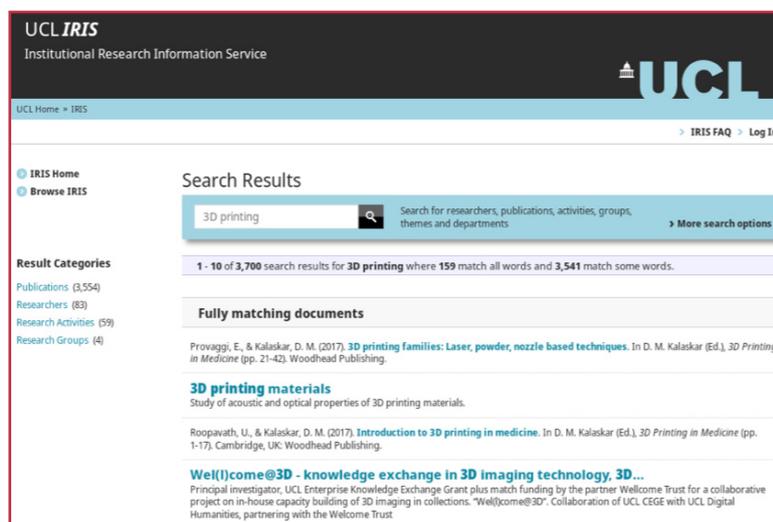


The Commercialisation Team “supports staff across LSE in identifying, protecting and marketing innovations, whether providing support when applying for translational funding, licensing IP to third parties, or forming brand-new ventures (spinouts)”. Currently, the concrete technology transfer activities are being outsourced to Oxentia - Oxford’s Global Innovation Consultancy.

UCL

University College London manages technology transfer through a central TTC - Research Services. Its division, Research Contracts, is responsible for “reviewing, advising on, drafting and negotiating all research related agreements”.³⁹ In 2016 UCL launched a research management system, Worktribe, “designed to support the whole project life cycle from proposal development to post-award management”.⁴⁰ In 2017 a community feedback and Post Award modules, a central research finance management system, MyFinance and a finance reporting tool, Axiom, were implemented.

UCL has a clear and comprehensive research and collaboration gateway with an updated set of relevant links. IRIS (Institutional Research Information Service) search engine provides clear and effective way of finding relevant research.



In 2018 the Worktribe Contracts Module which provides a workload management tool for open Research Contract negotiation cases was added. Extensive knowledge base is available online for all of the above, along with a Researcher’s Toolkit, starting page encompassing wide range of important information for researchers.

Researchers are encouraged to take part in business partnerships mainly through the Knowledge Transfer Partnership scheme. It is an agreement for one to three years which “typically costs around £120,000 a year”.⁴¹ Substantial part is covered by Innovation UK, government funding body.

39 UCL Research Contracts
40 UCL Worktribe
41 UCL Innovation & Enterprise

Conclusions

1. Despite the Polish government's focus on strengthening science-business cooperation, the rapidly growing R&D expenditure does not have positive influence on innovation metrics such as public-private co-publications.
2. Fostering communication and trust between innovative companies and universities requires the establishment of a structured system that enables easier cooperation with foreign businesses. The system should include a clear point of entry and a special team for managing key partners on top of existing solutions.
3. In order to increase efficiency and relevancy of technology transfer, intellectual property regulations need to be further clarified and liberated.
4. The number of researchers and research suitable for commercialization is too low to supply for above needs. PhD candidates need to be incentivized to graduate on time and consider collaborating with private sector.

Key message:

Better communication should be cultivated between businesses and universities. To this end, it is essential to create a clearer and more comprehensive structure for business cooperation and R&D commercialization.

KEY TAKEAWAYS

- Building a smaller number of stronger, internationally recognised and well-funded Polish universities.
- Increasing intrinsic motivation by restructuring the syllabus as well as unifying content and assessment around key subjects and more time to self-study.
- Improving communication between career services and students as well as diversifying opportunities of professional development at university
- Establishing an objective system that fosters and rewards internationally recognized research.
- Cultivating better communication between businesses and universities by creating a clearer and more comprehensive structure for business cooperation and R&D commercialization.

If you have any questions or comments about our report, do not hesitate to contact us at
info@polish-business.org

BIBLIOGRAPHY

Barrett, G., Ulrichsen, T. (2018). ICURe Evaluation. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/673319/ICure_Evaluation_Report.pdf

CSIC (Cybermetrics Lab - „Webometrics Ranking of World Universities”). (n.d). Estimated number of universities worldwide as of July 2018, by country. In Statista - The Statistics Portal. Retrieved from <https://www-statista-com.gate3.library.lse.ac.uk/statistics/918403/number-of-universities-worldwide-by-country>.

European Innovation Scoreboard Interactive Tool [Computer software]. (2019). Retrieved from <https://interactivetool.eu/>

Grupa Pracuj. (2018). Na bogato lub zaciskając pas, czyli o zarobkach tuż po studiach. Retrieved from <https://zarobki.pracuj.pl/raporty-i-trendy-placowe/ponad-4-5-tys-zl-pensji-po-studiach-sprawdzamy-kto-tyle-zarobi>

GUS. (2018). Szkolnictwo Wyższe w Roku Akademickim 2017/2018 (dane wstępne). Retrieved from <https://stat.gov.pl/obszary-tematyczne/edukacja/edukacja/szkolnictwo-wyzsze-w-roku-akademickim-20172018-dane-wstepne,8,5.html>

Harzing, A.-W. (2018). Running the REF on a rainy Sunday afternoon: Do metrics match peer review? Retrieved from <https://harzing.com/publications/white-papers/running-the-ref-on-a-rainy-sunday-afternoon-do-metrics-match-peer-review>

HEFCE. (2015). Knowledge exchange funding delivers £9.70 for every pound invested. Retrieved from <https://webarchive.nationalarchives.gov.uk/20160106173558/http://www.hefce.ac.uk/news/newsarchive/2015/Name,105790,en.html>

HESA. (n.d.). Where do HE students come from. Retrieved from <https://www.hesa.ac.uk/data-and-analysis/students/where-from>

Higher Education and Research Act 2017. (2017). Section 91. Retrieved from https://www.legislation.gov.uk/ukpga/2017/29/pdfs/ukpga_20170029_en.pdf

Kudrycka, B. (2012, October 2). „Dlaczego pani pozwala, żeby ludzie marnowali najlepsze lata życia?” - Żakowski do Kudryckiej. (J. Żakowski, Interviewer) [Audio file]. Retrieved from http://www.tokfm.pl/Tokfm/1,103085,12592386,_Dlaczego_pani_pozwala__zeby_ludzie_marnowali_najlepsze.html

Law of 20 July 2018 on Higher Education And Science. (2018). Art. 5(3), 267(3). Retrieved from <http://prawo.sejm.gov.pl/isap.nsf/download.xsp/WDU20180001668/U/D20181668Lj.pdf>

London and Partners. (2014). The Economic Impact of London’s International Students. Retrieved from http://files.londonandpartners.com/l-and-p/assets/media/students_impact_report.pdf

London School of Economics. (2018). LSE at a glance. Retrieved from <http://www.lse.ac.uk/about-lse/lse-at-a-glance>

Marklund, G., et al. (2017). Poland’s Higher Education and Science system doi: 10.2777/193011

BIBLIOGRAPHY

Musial, J. (2014). Polish Higher Education, *European Education*, 46:3, 55-74, DOI: 10.2753/EUE1056-4934460303

Najda Consulting. (2014). Współpraca, nauka i biznes B+R. Retrieved from <https://najdaconsulting.pl/wspolpraca-nauka-i-biznes-br/>

NIK. (2016). NIK o komercjalizacji badań naukowych. Retrieved from <https://www.nik.gov.pl/aktualnosci/nik-o-komercjalizacji-badan-naukowych.html>

Our World in Data, 2017. Gross enrollment ratio in tertiary education. Retrieved from <https://ourworldindata.org/grapher/gross-enrollment-ratio-in-tertiary-education?time=1971..2014&country=POL+GBR>

Research England. (n.d.). Knowledge exchange framework (KEF). Retrieved from <https://re.ukri.org/knowledge-exchange/knowledge-exchange-framework/>

Research Excellence Framework 2014. (2014). Guidance and criteria. Retrieved from <https://www.ref.ac.uk/2014/about/guidance/citationdata/>

Science and Higher Education Minister's Communique of 18 January 2019 on the index of publishing presses issuing scientific monographs. (2019). Retrieved from http://www.bip.nauka.gov.pl/g2/oryginal/2019_01/1c2912c1f994b8d37a305fac21b8ab54.pdf

Science and Higher Education Minister's Statutory Instrument of 12 December 2016 on awarding categories to research units and universities which in accordance to their internal laws do not have an established basic organisational unit. (2016). § 10, 15 18, 20. Retrieved from <http://prawo.sejm.gov.pl/isap.nsf/download.xsp/WDU20160002154/O/D20162154.pdf>

SGH. (n.d.). Doradztwo. Retrieved from <http://firma.sgh.waw.pl/pl/cbii/Strony/default.aspx>
Times Higher Education. (2018). Best universities in the world 2019. Retrieved from: <https://www.timeshighereducation.com/student/best-universities/best-universities-world>

Times Higher Education. (2018). Most international universities in the world 2018: top 200. Retrieved from <https://www.timeshighereducation.com/student/best-universities/most-international-universities-world-2018>

UCL. (n.d.). Innovation & Enterprise. Retrieved from <https://www.ucl.ac.uk/enterprise/businesses/grow-your-business-through-knowledge-transfer-partnership-ktp>

UCL. (n.d.). Worktribe Research Management. Retrieved from <https://www.ucl.ac.uk/research-services/worktribe-research-management>

UCL. (n.d.). Research Contracts. Retrieved from <https://www.ucl.ac.uk/research-services/research-contracts>

UKCISA. (2018). International student statistics: UK higher education. Retrieved from <https://www.ukcisa.org.uk/Research--Policy/Statistics/International-student-statistics-UK-higher-education>

BIBLIOGRAPHY

UK Government. (n.d.). Student finance. Retrieved from <https://www.gov.uk/student-finance>

United Nations, Department of Economic and Social Affairs, Population Division. (2017). World Population Prospects: The 2017 Revision, Key Findings and Advance Tables. Working Paper No. ESA/P/WP/248.

Universities UK. (2018). Higher education in facts and figures 2018. Retrieved from <https://www.universitiesuk.ac.uk/facts-and-stats/data-and-analysis/Pages/facts-and-figures-2018.aspx>

University of Warsaw. (n.d.). Baza Ofert. Retrieved from <https://oferta.uw.edu.pl/>

University of Warsaw. (2018). Sprawozdanie rektora Uniwersytetu Warszawskiego z działalności uczelni, 97-100. Retrieved from <https://www.uw.edu.pl/wp-content/uploads/2018/09/sprawozdanie-rektora-uw-za-2017.pdf>

Wilsdon, J., et al. (2015). The Metric Tide: Report of the Independent Review of the Role of Metrics in Research Assessment and Management. DOI: 10.13140/RG.2.1.4929.1363

APPENDIX:

Survey 1: Careers and University Experience - University of Warsaw (UW) and Warsaw School of Economics (SGH) Students

Our survey asking Polish students about their experiences at the university and with university career services had 19 questions in total. Availability of all questions was subject to previous answers.

Many people stopped finishing the survey at 6th or 7th question. There were 272 people that have finished the survey in total.

In the analysis of our survey we will only consider the answers of students from SGH and UW that did complete the survey - 205 people in total. Some questions were conditional according to the previous answers, hence, not every question has the sample of 205 people.

Q1: Have you ever used career services at your university

- Yes: 9.27%
- No: 90.73%

Q2: Have you ever heard about career services at your university?

- Yes: 71.71%
- No: 17.56%
- No answer: 10.73%
- Yes: 80.33%
- No: 19.67%

Q3: Have you ever arranged a private consultation through career services at your university?

- Yes: 5.85%
- No: 4.39%
- No answer: 89.76%
- Yes: 80.33%
- No: 19.67%

Q3: Have you ever arranged a private consultation through career services at your university? (eg. CV check, mock interview, cover letter advice etc.)

- Yes: 5.85%
- No: 4.39%
- No answer: 89.76%
- Yes: 80.33%
- No: 19.67%

Q4: Were they useful?

- Yes: 3.9%
- No: 2.44%
- No answer: 93.66%
- Yes: 61.51
- No: 38.49

Q5: Have you ever attended other events organised by career services? (eg. talks, networking events etc.)

- Yes: 1.95%
- No: 8.78%
- No answer: 89.27%
- Yes: 18.17
- No: 81.83

Q6: Were they useful?

- Yes: 1.95%
- No: 0%
- No answer: 98.05%
- Yes: 100%
- No: 0%

Q7: Would you want career services to offer you more help?

- Yes: 46.34%
- No, I don't need it: 30.73%
- No, I get help from other sources (what sources - societies, family, independent organisations?): 5.37%
- No answer: 17.56%
- Yes: 56.21%
- No, I don't need it: 37.28%
- No, I get help from other sources (what sources - societies, family, independent organisations?): 6.51%

- LinkedIn, Internet, Busola Project, Student organisations

Q8: In what events and meetings organised by career services would you take part/did you take part? (eg. CV check, mock interview, cover letter advice etc.)

- Excel Classes: 13.6%
- Digital Classes (Photoshop/Gimp/InDesign): 12.43%
- Company presentations: 11.37%
- Visits to offices in the industry: 12.43%
- Networking breakfasts/evenings: 12.78%
- Career events organised for my department (eg. European Institute, Finance, Economics etc.): 12.9%
- Meetings with working graduates from my department: 10.43%
- Assistance with CVs and Cover Letters: 12.54%
- None, I'm not interested: 0.82%
- None, I receive help from other sources (what sources?): 0.7%

- Answers include: project Busola, Assessment Centre workshops, "poor system provided by the university is substituted by student societies that do everything that's mentioned above or even more"

Q9: How often does your university inform you about different career services? (for example through email, posters, shoutouts during classes, teachers etc.)

- Never: 21.95%
- No answer: 17.56%
- Once a term: 13.66%
- Once in every 2 months: 13.66%
- Once per academic year: 9.27%
- Once a month: 11.71%
- Once every two weeks: 3.41%
- Every week or more often: 8.78%

- Never: 26.63%
- Once a term: 16.57%
- Once in every 2 months: 16.57%
- Once per academic year: 11.24%
- Once a month: 14.20%
- Once every two weeks: 4.14%
- Every week or more often: 10.65%

Q10: Approximately, how many people that have used career services at your university do you know?

- 0-1: 65.37%
- 2-5: 15.12%
- 6-10: 0.98%
- 11-20: 0.98%
- No answer: 17.56%

- 0-1: 79.28%
- 2-5: 18.34%
- 6-10: 1.19%
- 11-20: 1.19%

Q11: From where do you get information about different career and professional development opportunities?

- Career services at my university (including official career fairs, events with companies etc.): 8.75%
- My department: 11.25%
- Societies ("koła naukowe"): 17.5%
- Friends and family (in person/through email/on social media): 33.75%
- Companies themselves (including career fairs outside of the university, email, LinkedIn etc.): 27%
- No answer: 1.75%

- Career services at my university (including official career fairs, events with companies etc.): 8.91%
- My department: 11.45%
- Societies ("koła naukowe"): 17.81%
- Friends and family (in person/through email/on social media): 34.35%
- Companies themselves (including career fairs outside of the university, email, LinkedIn etc.): 27.48%

Q12: Are you active in any societies or do you participate in any extra-curricular projects?

- Yes: 62.44%
- No: 37.56%

Q13: What is the nature of these organisations?

- No answer: 37.56% 0%
- Academic: 29.76% 47.65%
- Cultural/entertaining: 9.76% 15.63%
- Business/career-related: 20.49% 32.81%
- Artistic/creative: 0.98% 1.57%
- Physical activity: 1.46% 2.34%
- Academic: 47.65%
- Cultural/entertaining: 15.63%
- Business/career-related: 32.81%
- Artistic/creative: 1.57%
- Physical activity: 2.34%

Q14: My main motivation to participate in these organisations is:

- No answer: 37.56%
- Developing my academic interests and knowledge: 15.12%
- Gaining skills useful in the job market: 22.44%
- The opportunity to spend time with like-minded people: 15.61%
- The opportunity to relax and have fun: 2.93%
- Meeting new friends: 6.34%
- Developing my academic interests and knowledge: 24.22%
- Gaining skills useful in the job market: 35.94%
- The opportunity to spend time with like-minded people: 25%
- The opportunity to relax and have fun: 4.69%
- Meeting new friends: 10.15%

Q15: What sources do you use MOST FREQUENTLY while studying for exams or completing your assignments?

- Notes from lectures: 18.69%
- Notes from seminars: 20.67%
- Textbooks: 18.69%
- Books and academic articles: 11.09%
- Notes provided by the teacher: 9.57%
- Lecture transcripts (skrypty wykładowcy): 17.78%
- Other (what?): 3.5%

-Answers include: notes written by other students (also older students), past exam papers, internet

Q16: How often do you see your professors during additional office hours? (including your personal tutor)

- Never: 47.32%
- Once per term: 29.27%
- Once a month: 9.27%
- Once every academic year: 8.78%
- Twice a month: 1.95%
- Once a week or more frequently: 2.44%
- 3 times a month: 0.98%

Q17: You're attending:

- UW: 58.54%
- SGH: 38.54%
- UW and SGH: 2.93%

Q18: You're studying:

- Humanities 21.21%
- Social Sciences 29%
- Mathematical/Computer Sciences 10.39%
- Natural Sciences 3.03%
- Business-related degree (including Accounting and Finance): 36.36%

Q19: At what level are you studying?

- Undergraduate: 68.29%
- Postgraduate: 30.24%
- PhD: 1.46%

Survey 2: Careers and University Experience - University College London (UCL) and London School of Economics (LSE) Students

The survey we have given to students in the UK at the LSE and at UCL had the same questions as the one given to Polish students. Some questions were adjusted to the circumstances of higher education in the UK. Altogether, we had 94 valid answers.

Sample size: 94 (80 LSE, 14 UCL)

Q1: Have you ever used career services at your university

- Yes 76.6%
- No 23.4%

Q2: Have you ever heard about career services at your university?

- No answer 76.6%
- Yes 23.4%
- No: 0%

Q3: Have you ever arranged a private consultation through career services at your university? (eg. CV check, mock interview, cover letter advice etc.)

- Yes 59.57%
- No answer 23.4%
- No 17.02%
- Yes 77.78%
- No 22.22%

Q4: Were they useful?

- Yes 53.19%
- No answer 40.43%
- No 6.38%
- Yes 89.29%
- No 10.71%

Q5: Have you ever attended other events organised by career services? (eg. talks, networking events etc.)

- Yes (what was the event?) 61.7%
- No answer 23.4%
- No 14.89%
- Yes 80.56%
- No 19.44%

Q4: Were they useful?

- Yes 56.38%
- No answer 38.3%
- No 5.32%
- Yes 91.38%
- No 8.62%

Q7: Would you want careers services to offer you more help?

- No, I get enough help from them 36.17%
- Yes (what kind of help?) 35.11%
- No, I get help from other sources (what sources - societies, family, independent organisations?) 14.89%
- No, I don't need it 13.83%

Q8: In what events and meetings organised by career services would you take part/did you take part?

- Excel Classes 9.02%
- Company presentations 13.79%
- Visits to offices in the industry 10.61%
- Networking breakfasts/evenings 12.73%
- Career events organised for my department (eg. European Institute, Finance, Economics etc.) 16.18%
- Meetings with working graduates from my department 12.73%
- Assistance with CVs and Cover Letters 17.51%
- Digital Classes (Photoshop/Gimp/InDesign) 6.37%
- No answer 0.53%
- None, I'm not interested 0.27%
- None, I receive help from other sources (what sources?) 0.27%
- None, I receive help from other sources (what sources?) 00.27%
- None, I'm not interested 00.27%
- Digital Classes (Photoshop/Gimp/InDesign) 06.40%
- Excel Classes 09.07%
- Visits to offices in the industry 10.67%
- Meetings with working graduates from my department 12.80%
- Networking breakfasts/evenings 12.80%
- Company presentations 13.86%
- Career events organised for my department (eg. European Institute, Finance, Economics etc.) 16.26%
- Assistance with CVs and Cover Letter 17.60%

Q9: How often does your university inform you about different career services? (for example through email, posters, shoutouts during classes, teachers etc.)

- Once a week or more often 51.06%
- Every two weeks 28.72%
- Once a month 13.83%
- Once per term 3.19%
- Never 2.13%
- Once every academic year 1.06%

Q10: Approximately, how many people that have used career services at your university do you know?

- 2-5 31.91%
- 6-10 19.15%
- 21+ 18.09%
- 0-1 15.96%
- 11-20 14.89%

Q11: From where do you get information about different career and professional development opportunities?

- Career services at my university (including official career fairs, events with companies etc.) 25.68%
- My department 22.96%
- Societies 14.4%
- Friends and family (in person/through email/on social media) 16.73%
- Companies themselves (including career fairs outside of the university, email, LinkedIn etc.) 19.84%
- No answer 0.39%
- Societies 14.46%
- Friends and family (in person/through email/on social media) 16.80%
- Companies themselves (including career fairs outside of the university, email, LinkedIn etc.) 19.92%
- My department 23.05%
- Career services at my university (including official career fairs, events with companies etc.) 25.78%

Q12: Are you active in any societies or do you participate in any extra-curricular projects?

- Yes 78.72%
- No 20.21%
- No answer 1.06%
- Yes 79.57%
- No 20.43%

Q13: What is the nature of these organisations?:

- Business/career-related 26.09%
- Academic 24.84%
- Physical activity 13.04%
- Cultural/entertaining 14.91%
- No answer 12.42%
- Artistic/creative 8.7%
- Artistic/creative 9.93%
- Physical activity 14.89%
- Cultural/entertaining 17.02%
- Academic 28.36%
- Business/career-related 29.79%

Q14: My main motivation to participate in these organisations is:

- Gaining skills useful in the job market 20.74%
- Developing my academic interests and knowledge 17.97%
- The opportunity to relax and have fun 14.29%
- Meeting new friends 19.82%
- The opportunity to spend time with like-minded people 17.97%
- No answer 9.22%

- The opportunity to relax and have fun 15.74%
- Developing my academic interests and knowledge 19.79%
- The opportunity to spend time with like-minded people 19.79%
- Meeting new friend 21.83%
- Gaining skills useful in the job mark 22.84%

Q15: What sources do you use MOST FREQUENTLY while studying for exams or completing your assignments?

- Notes from lectures 25.25%
- Textbooks 11.8%
- Books and academic articles 17.38%
- Notes provided by the teacher 14.1%
- Notes from seminars 14.1%
- Online resources provided by the teacher (including lecture capture) 16.07%
- Other (what?) 1.31%

Q16: How often do you see your professors during additional office hours? (including your personal tutor):

- Once a month 28.72%
- Once per term 23.4%
- Never 18.09%
- Two times a month 12.77%
- Three times a month 9.57%
- Every week or more 4.26%
- Once every academic year 3.19%

Q17: You're attending:

- LSE 85.11%
- UCL 14.89%

Q18: You're studying:

- Social Sciences 53.0%
- Business-related degree (including Accounting and Finance) 26.0%
- Natural Sciences 6.0%
- Mathematical/Computer Sciences 6.0%
- Humanities 9.0%

Q19: At what level are you studying?

- Undergraduate 77.66%
- Postgraduate 21.28%
- PhD 1.06%

Additionally, we have completed our surveys with personal interviews, to gain a broader outlook on career services in Poland and in the UK. We tried to contact a varied sample of individuals - studying different subjects, only in Poland, only in the UK, or those that have studied in both countries, or those that have studied at both universities in Poland or at both in the UK.

These were the questions related to careers that all the respondents were asked:

- 1. Which university are you attending and what are you studying?**
- 2. What help did you receive from the university in terms of professional development? Do you use careers services? Or do you maybe use the support of student societies or other projects?**
- 3. To what extent does the university environment support professional development? Are you informed and engaged? Or is it the case that there are lots of opportunities but you have to be already interested to find them? Or is there some system of effective communication about careers events? (eg. departments send emails to students or the students union is sharing information).**

The interviews gave us some more illustrative cases providing more nuanced information about professional development opportunities at different universities.

Survey 3: Survey for Employers

27 respondents

Q1: What do you usually mostly look at when you're considering a new candidate for a job?

- work experience - 27.66%
- particular degree specialism - 7.45%
- grades - 4.26%
- the university attended by the candidate - 14.89%
- extra-curricular activities (eg. societies, competitions, individual projects, volunteering) - 17.02%
- experience gained abroad - 10.64%
- motivational letter - 5.32%
- specific skills (co najbardziej?) - 12.77%
 - Answers included: knowledge of english, motivation, ambition, leadership, particular skills (SQL, VBA), experience among in a professional environment, foreign languages, openness, technological acumen)

Q2: What skills/qualities do most graduates lack?

- More work experience - 23.53%
- basic skills (eg. good writing skills in Polish, logical thinking) - 27.45%
- better education - 3.92%
- the right attitude (eg. motivation for work, professionals, the understanding of the work culture) - 33.33%
- specific skills (eg. Excel, foreign languages) - 11.76%
- Excel
- English
- The ability to practically apply their knowledge

Q3: If there was a possibility of interacting with students before their graduation, do you think that your company would be willing to undertake such cooperation?

- Yes - it would make application processes easier - 96.55%
- No - I don't find such solution beneficial - 3.45%

Q4: If yes, what kind of cooperation would that be? Which format would be in your opinion the most effective?

- Insight days at the office during which students can get to know the company's philosophy, the culture of work and the application process - 12.50%
- Visits of company's representatives at universities with presentations about the company and different professional opportunities at the firm - 16.67%
- Paid internship programme for students after which the best participants can get a job offer and sign a contract - 19.44%
- Competitions organised by the company on campus that could reveal some potential future employees or could bring new perspectives on specific projects (eg. a competition for the best marketing campaign for young people, Hackathon, Datathon, a competition for the best app etc.) - 15.28%
- Writing a dissertation/masters thesis in cooperation with the company that will result in a research that could be useful for the company/specific industry (eg. statistics, economics, marketing etc.) - 9.72%
- Other (What?) - 5.56%
 - Eg. we already have these schemes
 - workshops for students

Q5: What industry are you from?

- Consulting - 25.93%
 - Banking and Finance - 18.52%
 - IT - 7.41%
 - Legal - 3.70%
 - Pharmaceuticals - 25.93%
 - Media - 3.70%
 - Others - 14.81%
- Venture Capital/Private Equity, NGOs, Construction and Industrials

Additionally, we have completed our surveys with personal interviews, to gain a broader outlook on the opinions and needs of employers in Poland.

The questions asked were:

- 1. Do you have experience with employing graduates from the universities in the UK and in Poland?**
- 2. Did you notice any differences in skills between the graduates from Poland and the UK that start their career at your company? The differences could be in hard skills (eg. Excel, languages, graphic programmes, presentation making etc.), as well as soft skills (eg. communication with clients, presentation skills, attitude towards work, the willingness to work hard etc.)**
- 3. Do you think that students that studied in the UK for a long time find it difficult to adjust to the work in Poland?**
- 4. Does any group of students have more work experience? (eg. summer internships, placement years etc.)**
- 5. To what extent is it important for you whether a candidate has studied in Poland or in the UK? Does it have any importance and, if yes, why?**

All interviews are available upon request. We reserve the right to the anonymity of our respondents.

Comparison of methodology courses

Module	Introduction to Historical Research (UW)	Introduction to Academic Writing (UW)	Study Tour (UW)	Approaching History (UCL)	Making History (UCL)	Writing History (UCL)
Credits	4 ECTS	3 ECTS	2 ECTS	30 credits (15 ECTS equivalent) Non-condonable module (i.e. must be passed for the award of the degree)	15 credits (7.5 ECTS equivalent)	15 credits (7.5 ECTS equivalent)
Contact hours	22.5 hours (syllabus: 30 hours)	22.5 hours (syllabus: 30 hours)	3 day tour	40 hours	19 hours	15 hours
Form of classes	Tutorials	Tutorials	Fieldwork: lectures, discussions, group exercises	Lectures	Lectures, seminars, workshops (Fieldwork class - group project to be completed in groups of 5-8 people)	Large group workshops, small group tutorials
Course materials	Varies depending on tutor. Most common choices included: academic textbooks, essay collections	Varies - materials supplied by tutor	n/a	Books (monographs), book chapters, journals,	Digital media	Academic journals, essays; Online learning platform (moodle) with an aggregate of online
Assessment	<p>Varies depending on tutor. Most commonly mentioned assessment criteria include:</p> <ul style="list-style-type: none"> Attendance requirement (max 3 absences possible) Class participation In-class periodic tests Individual project submission - bibliography survey <p><i>The goal of the class is to prepare a bibliography for a research project.</i></p>	<p>Varies depending on tutor. Most commonly mentioned assessment criteria include:</p> <ul style="list-style-type: none"> Attendance requirement (max 3 absences possible) Homework hand-ins Class participation 	<p>Active participation NB The course is graded, and not assessed on a pass/fail basis.</p>	<ul style="list-style-type: none"> 3 hour unseen examination (100%), 1 question to be answered <p>Example questions:</p> <ul style="list-style-type: none"> “The nation-state is a modern invention.” Discuss. How do we know when political authority is legitimate? <p>Formative assessment:</p> <ul style="list-style-type: none"> Journal article review (500 words) Book review (1000 words) Essay plan (1 page) 	<ul style="list-style-type: none"> Individual learning journal - weekly submissions (10%; individual mark) Online group presentation: written submission (1500 words) and digital outputs (20 minutes of audio/video/text) (50%; group mark) Live group presentation (40%; group mark; the mark combines peer-assessment and assessment by staff) 	<ul style="list-style-type: none"> 2500 words essay related to another module (100%) <p>Throughout the semester, students prepare an essay related to a topic from a different module, and engage in review and polishing of their work.</p>

<p>Intended Learning Outcomes</p>	<ul style="list-style-type: none"> • To familiarize students with the basics of historical research • To prepare students for individual work in later studies • To make students aware of research procedures (and explicitly NOT problem-solving) • To learn to access, order and engage with historical sources • To navigate through secondary sources • To distinguish between popular and scientific sources • To learn how to create bibliographies • To acquaint students with basic principles of academic ethics 	<ul style="list-style-type: none"> • To endow students with writing competencies • To acquaint students with a variety of academic text types • To learn self-reflection in regards of logical errors, incoherencies and other pitfalls encountered in the practice of writing 	<ul style="list-style-type: none"> • To provide students with knowledge of architectonic forms and historical landmarks • To develop skills of estimating age of historical landmarks • To examine historical landmarks taking into account the geographic, economic, cultural and social contexts 	<ul style="list-style-type: none"> • To provide a bridge between A-levels and the requirements of the academic programme • To introduce students to most significant approaches in historical scholarship • To provide students with an overview of concepts and debates 	<ul style="list-style-type: none"> • To develop a wide range of transferable skills appropriate for subsequent employment, including the documented ability to work effectively in a team, make an oral presentation and deploy a range of web-based technologies; • To develop an appropriate awareness of audience in the presentation of research findings; • To develop close working links with other students, enhancing the integration of the first-year History cohort; • To develop an understanding of the range and complexity of primary sources available for historical analysis of a specific research question, and an appreciation of the skills required to undertake that analysis; • To nurture the ability to identify appropriate secondary sources for an historical research project and to engage with appropriate 	<ul style="list-style-type: none"> - To nurture students' confidence in writing academic texts - To acquaint students with the processes of review and editing - To familiarize students with techniques of argumentation
-----------------------------------	--	---	---	---	---	--