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Exploration of Policy and Practice: Learning and Teaching Space in Polish Higher Education

“National Report” by the Jagiellonian University about policy and practice of designing L&T spaces in Polish higher education including institutional levels

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Executive Summary

The system of higher education in Poland faced substantial changes at the beginning of the 1990s. Due to the political and economic transformation in Poland, higher education institutions had to respond to growing demand and far too rapid massification of higher education. During the last decade of the 21st century, Poland focused much more on access than quality, especially the quality of learning and teaching space: classrooms were overcrowded and poorly equipped, little attention was paid to the space students could use in-between classes to get some rest or to work during the breaks.

The lack of early interest in L&T space resulted in later problems in recognition of the importance of the well designed and organized space for the success of the learning-teaching process. Polish national regulations and policies as expressed in Law on higher education, Executive order on studies, and documents of Ministry of Science and Higher Education as well as Polish Accreditation Committee are vague in defining how L&T space should be arranged and organized by HEIs. The most common term used to describe desirable L&T space is “modern” without clarification, however, what “modern” in this context means.

The lack of serious, academic discussion on the role of L&T space for the effectiveness of programs of studies is even more astonishing. In the years 2016-2017, Poland witnessed a series of conferences and workshops on the directions of envisioned higher education reforms, but even these numerous events, along with the publications that surfaced at that time, did not address the issue of L&T space. This is also one of the reasons why this report is of utmost importance for Poland to start serious debate on how colleges and universities should look like and what they should provide to the students and academic teachers.

The report consists of 6 parts, including the introduction, theoretical part, methodology, national policy and practice, university strategy and practice, and conclusions. There are 56 photos, illustrating the current situation at the Jagiellonian University in Krakow. As the oldest Polish university and one of the most renowned HEIs in the country, the JU is often set as an example of good practices. It is based in old and new buildings, with various highlights, but also with a number of drawbacks as far as the L&T spaces are concerned. The photos show a wide range of indoor and outdoor spaces, many of which induce learning and encourage the academic community to spend more time there. However, they also illustrate a number of issues that need to be dealt with.
1. Introduction

Poland, being an active and founding member of European Higher Education Area, as well as the EU member state since 2004, represents the organization of higher education system quite typical for Central and Eastern Europe: Poland has a distinct higher education policy, managed by the Ministry of Science and Higher Education (MSHE). Although majority of higher education institutions in Poland are private (230 out of 392 in 2018), less numerous public schools educate three fourth of all students (ca. 900,000; out of total 1,230,300). The Ministry, along with some other governmental agencies (e.g. National Science Center, National Center for Research and Development, and National Agency for Academic Exchange), remains the main source of financing of Polish higher education system. In 2018 the budget of higher education system in Poland (both public and private) totaled 24,591,938,300 zlotys (roughly 5,786,338,400 Euros). Public expenditure on higher education amounted 16,093,900,000 zlotys, making it 65.4% of total income of Polish higher education institutions. Being the main and unrivalled player in higher education system, MSHE has the authority and power to implement its higher education policy, including MSHE’s vision of learning and teaching spaces available.

It is also important to remember that the present situation of Polish higher education system has been deeply influenced by political transformations in Central Europe that eventually led to the fall of the communist regimes in the region. In centrally planned and governed states the ideas of institutional autonomy, private higher education or student mobility were virtually non-existent. Political changes combined with educational aspirations led to the adoption in 1990 new Law on Higher Education. The most important provisions of the act was: granting academic freedom and institutional autonomy (with a degree of freedom in self-government and self-regulation); strengthening internal government (elected collegial bodies had to be included in the decision-making process); provision for the creation of non-public TEI sector; and provision for public institution to earn money for some educational services (offered mostly for extra-mural students). These provisions helped to increase enrollment radically: during last two decades the number of students jumped from 390,000 in 1990-91 to 1,928,000 in 2009-2010.

The radical growth of the number of students affected the quality of education because it was not accompanied by a similar growth of the number of teaching staff. It became obvious that it was necessary to introduce some measures to protect the quality of higher education. Poland, with its regulatory approach to higher education policy, decided to amend Law on Higher Education in 2001 and to establish the State Accreditation Committee as the legal body responsible for accrediting programs of studies and institutions offering higher education. After another wave of reforms implemented in 2011, the name was changed to Polish Accreditation Committee (PAC), which is the only statutory agency responsible for higher education quality assurance in Poland. PAC is very important in Polish national context because, unlike in many other European states, it has also the power to set the rules concerning the requirements higher education institutions must fulfill to be accredited positively and authorized to offer programs of studies.

PAC is not only responsible for quality assurance but also for setting the rules concerning quality of learning and teaching environment, including learning spaces (as it is explained later in the report). However, neither MSHE, nor PAC provided any guidebook explaining the rationale and the legal requirements pertaining to learning spaces and therefore a substantial overview of regulations, policies and implementations
is of great need for Polish higher education institutions (HEIs). This report aims at presenting the legal and organizational framework Polish HEIs must comply with (that would be useful for any college or university in Poland), as well as showing the Jagiellonian University as the example of good and bad practices of Polish HEIs in providing safe, inspiring and encouraging learning and teaching space for both students and academic teachers.
2. Theoretical issues

Unfortunately, the role of learning and teaching space was not the issue discussed in Polish publications on higher education and quality in higher education. There are but a few concerning the space HEIs manage, analyzed from the point of real estate management (e.g. Małgorzata Rymarzak and Alexi Marmot, *Higher education estate data accountability: the contrasting experience of UK and Poland* or Małgorzata Rymarzak, *Autonomia i rozliczalność uczelni w zakresie nieruchomości – przypadek Polski*)¹. These publications focus on the effectiveness of the use of the space in terms of economic not pedagogical efficiency.

Even the annual reports of Polish Accreditation Committee do not address the importance of learning and teaching spaces in securing quality of higher education. The very latest PAC’s report uses the term “space” and the term “classroom” but once, while describing the requirements to be met for “exceptional accreditation”: the accredited HEI must have “teaching-research infrastructure, complying with the intended teaching aims and results, including for example: special software, effective use of IT technology in teaching, up-to-date and well equipped classrooms; good eating options; adequate working space and resting space to be used during the breaks, sport facilities”².

The lack of any serious reflection on the role of learning and teaching space of good quality is yet another reason why this report seems to be urgently needed.


3. Methodology

Our team focused on academic literature, national regulations and policy documents, institutional strategy documents and other institutional information about learning and teaching space and pedagogical practice.

We have applied observations and personal communication with key informants. We have used micro interviews with teachers (3 persons) from different institutes, including interfaculty units. We have prepared a questionnaire consisting of 3 open-ended questions:

1. Do you feel that the space that you use supports the L&T process well? How does it support the process?
2. Do you feel that the head of your institute/ faculty supports innovative ideas in teaching? How?
3. Do you know whom to ask if you need a new teaching tool (e.g. software, database, equipment, etc.)? What are the chances of your obtaining it?

Thanks to previous activity of Radosław Rybkowski of our team as a member of Polish Accreditation Committee, we have had no problems in finding all relevant documents concerning quality assurance of higher education in Poland. Still being PAC’s expert, he has access to the updated regulations and documents of PAC. Although these documents are public, sometimes it is difficult to find them on-line. As Justyna Bugaj, another member of the team, is the Rector's Proxy for quality of education, she has access to the University's internal documents. She regularly talks to the university authorities at all levels and has insider knowledge of all the working processes and all the innovations that are introduced. Katarzyna Machała, in turn, is a language teacher working for an interfaculty unit (the Jagiellonian Language Centre). Working with students from different faculties and running classes in different university buildings, she has insight into the positive and negative sides of the university organization from the opposite perspective.

Due to the difference between Polish and English language the term “learning and teaching space” (przestrzeń uczenia się i nauki) is not used in Poland. More common is the use of “learning and teaching infrastructure” (infrastruktura dydaktyczna that directly translates as educational infrastructure). The term infrastructure is a bit broader because it conveys also library holdings and software used in learning and teaching.

As it is emphasized in the report further on, in Poland there is a lack of reliable information about L&T space used by Polish higher education institutions. Neither the Ministry of Science and Higher Education nor the Central Statistical Office have any updated information about L&T space (e.g. the area, number of classrooms and laboratories, average classroom size, etc.).

The part on national regulation and policies was influenced by qualitative approach in Social Sciences, with the use of CAQDAS (MaxQDA) software to categorize the documents to select the most relevant information.

It is important to notice, that at the university level there are no documents dedicated to L&T space. That sort of data must be inferred from a variety of reports, technical specifications and other interior documents.
4. National policy and practice for the design and implementation of L&T space in Polish higher education

As it was stated in the Introduction, Polish system of higher education is mostly centralized, with the Ministry of Science and Higher Education not only overseeing the system in general and all HEIs but also being the main source of funding for the majority of the institutions. Poland has built its policy and practice in designing and implementing L&T space is based on multilayer approach. It is not only founded on various layers of policy providers (from the Parliament to Minister of Science and Higher Education to Polish Accreditation Committee) but also on various types of authorities: from Ministry of Science and Higher Education (responsible for education) to Ministry of Investment and Economic Development (responsible for buildings’ general quality and safety) to Ministry of Internal Affairs (responsible for fire safety).

The complexity of Polish approach results in some of the aspects of L&T space overregulated and overcontrolled, while there are evident loopholes in addressing some other aspects. This is explained further in the report.

4.1 Legal framework of the national higher education system

The foundation of the Polish system of higher education is the act of Parliament Law on Higher Education and Science (LHES; signed into law August 1, 2018)\(^3\). LHES regulates all higher education institutions in Poland, both public and private, universities and universities of applied science. (It also regulates all public and private research institutions, which is not the subject of this report.)

The general provisions of LHES concerning requirements that HEI must meet before even launching programs of studies do not mention L&T space at all in any form. All the provisions (articles 53-54) are mostly related to the quality of research which is related to the authorization to provide undergraduate and graduate programs, as well as providing academic or applied programs of studies. The law also defines such details as the day academic year begins in Poland; the enrolment of the laureates of national high school competitions and mandatory stages of application procedures. But the only reference to L&T space is in the article defining the authority of Polish Accreditation Committee, which is required to assess “the infrastructure used in providing a program of studies” during the process of accreditation.

It is, however, necessary to notice that LHES authorizes the Minister of Science and Higher Education to issue executive order further defining mandatory requirements to be met by programs of studies and HEIs. The Executive order of the Minister of Higher Education and Science on the studies was published September 27, 2018\(^4\) (just three days before the new academic year). Similarly to LHES, this executive order covers broad array of issues: from the colour of students ID to the procedure of changing personal data after marriage. Fortunately, the executive order is more specific in addressing L&T space, although still in very general terms and referring only to programs of applied studies (par. 6): “The courses aiming at teaching practical skills as defined by the program of studies of applied profile shall be held: 1) in the environment typical for such professional activity; 2) in a way enabling students to perform practical tasks”. As it is obvious from this quotation referring to the existing programs of studies, there is no explanation of the role and importance of L&T space in any other context.

\(^3\) Prawo o szkolnictwie wyższym i nauce, Dziennik Ustaw 2018 no. 1668.
\(^4\) Rozporządzenie Ministra Nauki i Szkolnictwa Wyższego z dnia 26 września 2018 r. w sprawie studiów, Dziennik Ustaw 2018 no. 1861.
The other reference to learning and teaching space appears where the requirements for launching a new program of studies are defined. The applying HEI must provide (par. 9.6): “d) information about the infrastructure, including the description of laboratories, special classrooms, and equipment necessary for providing the studies, e) information about providing the access to the library and on-line databases, especially Virtual Library of Science and Digital Loan of Scientific Publications Academica.” (Virtual Library of Science and Digital Loan of Scientific Publications Academica are the projects sponsored by the MSHE.) It is worth to notice that HEI does not have to have its own library, it is only required to secure the access to the library, for example the library of other HEI. It is also necessary to understand that Ministry requires here only the information about the learning and teaching infrastructure but does not provide any suggestion what kind of space or what kind of approach to L&T space is recommended.

As it was mentioned earlier, L&T space in higher education is regulated not only by the law concerning higher education per se. All HEIs must comply with the Construction Code\(^5\) that regulates for example the number of toilets required in public institutions (such as HEIs), the minimal requirements concerning ventilation and access to natural light. Although all HEIs are bind by the Construction Code there is no special provision addressing the needs of higher education in learning and teaching process.

The case of Fire Protection Law\(^6\) is very similar: although all HEIs must comply with this law (e.g. defining maximum capacity of classrooms), there is no specific provision targeting the challenges institutions of higher education face.

### 4.2 Legal prescriptions for and autonomy of the higher education institutions

The absence of detailed regulations concerning L&T space seems to leave HEIs with substantial autonomy in addressing the issue. This is not the case, however, since Polish Accreditation Committee, the statutory body responsible for assurance of the quality of higher education, was granted the authority not only to accredit programs of studies but also to “define the criteria and procedures of program accreditation and institutional accreditation” (art. 256. 1. 3). It means that PAC is authorized to set the rules that all HEIs must follow since it is mandatory that all programs of studies are accredited.

PAC is the member of European Association for Quality Assurance in Higher Education (ENQA; grouping the agencies from the European Higher Education Area) and as such must be accredited every five years itself. During the last accreditation in 2018, it was strongly recommended that PAC in its criteria and procedures should firmly rely on Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) of 2015, adopted by ENQA. As a result, the criterion number 5 set by PAC, directly address the L&T infrastructure, including L&T space.

Thus, PAC requires that all HEI’s “infrastructure used for teaching and research purposes; classroom equipment, teaching aids, library holding, IT infrastructure, as well as the infrastructure of the of other entities in which the classes are taught are modern and enable proper delivery of the classes and secure the achievement if learning outcomes (...) and are adapted to the needs of persons with disabilities, in such a way as to ensure that they fully participate in education”. In case of so-called “regulated professions” (e.g.

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\(^5\) Prawo budowlane, Dziennik Ustaw, 1994 issue 89, no. 414.

\(^6\) Ustawa o ochronie przeciwpożarowej, Dziennik Ustaw 1991 issue 81, no. 351.
doctors of medicine, architects, psychologists, physiotherapists) HEIs are also required to be equipped with special infrastructure (such as a morgue in case medical studies). The longer description provided by PAC does not specify, however, what exactly is mandatory while offering programs of studies. The adjective “modern” is too vague and open to many different interpretations to be treated as legal prescription explaining what kind of L&T space should be desirable and recommended for future use in Polish HEIs.

The only clear requirement concerning L&T space is that all HEIs must carry a systematic overview of the L&T infrastructure, which is explained in some other PAC’s documents as happening at least once a year.

Last but not least, it also worth to notice that the governmental document prepared by the Ministry of Science and Higher Education – Science for Innovation. Strategy of the Ministry of Science and Higher Education (nota bene astonishingly short document) does not mention teaching at all. Thus, the key policy document completely ignores the importance of L&T space for innovative and competitive higher education.

### 4.3 Digitalisation in higher education

As it was emphasized earlier, Polish HEIs both public and private can get access to Virtual Library of Science sponsored by the government. The extent of the access provided depends on the fee an institution pays. Not surprisingly, large research universities (e.g. the Jagiellonian University, the University of Warsaw) enjoy almost unlimited access.

The access to on-line libraries is not the only face of digitalisation in Polish higher education. The MSHE’s *Executive order on studies* defines also the requirements concerning distance learning, which in 21\textsuperscript{st} century is mostly provided with new IT technologies. According to Polish regulations HEIs can provide on-line teaching, but unlike in many other countries the original *Executive order* has imposed one key limitation: program of studies cannot offer on-line more than 50% of ECTS credits. Moreover, the exams should be organized at the seat of an institution. On-line exams are accepted by law only as the rare exception (par. 12 and 13). Understanding these two limitations, one can easily notice that in Poland on-line programs of studies (such as offered by some top US universities) are not allowed at all.

On-line courses can be offered is a HEI can provide the access to IT infrastructure (for students and teachers alike) enabling synchronic and asynchronic communication between teacher/instructor and students. All the teaching materials for such course must be available in electronic version. It is also required that teachers engaged in on-line courses must be properly trained and the institution must constantly monitor on-line classes. Comparing these requirements with “normal” courses, it is astonishing but clearly visible that the Ministry treats on-line learning and teaching with unconcealed suspicion: there is no requirement of constant monitoring of regular, traditional classes.

The outbreak of coronavirus pandemics forced Polish Ministry of Science and Higher Education quick response. One of the very first solutions adopted by MSHE in

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8 Ministerstwo Nauki i Szkolnictwa Wyższego, Strategia dla innowacji. Strategia MNiSW na rok 2016, [https://www.archiwum.nauka.gov.pl/g2/oryginal/2016_03/e606b7103f7589b613a96ec7e0a5f9b2.pdf](https://www.archiwum.nauka.gov.pl/g2/oryginal/2016_03/e606b7103f7589b613a96ec7e0a5f9b2.pdf) [July 24, 2020].

9 Rozporządzenie Ministra Nauki i Szkolnictwa Wyższego z dnia 26 września 2018 r. w sprawie studiów, Dziennik Ustaw 2018 no. 1861.
the Executive order on temporary limitation of the entities of higher education and science system in relation with prevention and combating COVID-19. According to this Executive order all regular face-to-face classes were suspended and therefore each HEI having the necessary IT infrastructure was authorized to move all teaching on-line, no matter if on-line teaching was previously part of the program. Thus, the limitation of 50% of ECTS points was removed. The other important change was concerning the examinations: they could be organized on-line, with the only remaining requirement that the exams could be monitored and recorded. It is important to notice that the law obliged HEIs to have the ability to record the exams, but the recording was not mandatory.

So, it would be safe to say that more open and modern (to use the term of PAC) approach to on-line teaching and digitalization of L&T activities was forced by unpredicted, external factor: coronavirus pandemics.

4.4 Importance and status of didactics, pedagogy and curriculum design in higher education

The years 2016-18 Poland was facing a wave of higher education reforms. As the preparation for writing new Law on higher education and science MSHE commissioned three reports on the key issues that new regulation should address. The report Projekt założeń do ustawy Prawo o szkolnictwie wyższym (Project of the foundation for the act Law on higher education) focuses mostly on organizational and economic aspects of higher education system and institutions. In a 194-page document the term “teaching” (nauczanie in Polish) appears only three times. The role of infrastructure is limited only to research activities.

However, such “reticence” is visible not only in this report. Propozycja założeń do ustawy regulującej system szkolnictwa wyższego (Proposal of the foundations for the act pertaining to higher education system) refers to teaching infrastructure but only say that this should be one of the requirement to assess the quality of programs of studies offered (already existing and covered by Polish Accreditation Committee) and “teaching” is only mentioned in the context of “teaching staff”. The third report, Plus ratio quam vis consuetudinis. Reforma nauki i akademii w Ustawie 2.0 (Plus ratio quam vis consuetudinis. Reform of science and academia in Higher Education Act 2.0) observes that in Poland “there is no thorough mechanism for advancing the quality of teaching comprising a system of thorough evaluation in accordance with the concept of constant improvement - adjustment to the changing needs of social and economic environment - as presented in Deming circle (Total Quality Management)”.

Unfortunately, even this report does not provide any clearer and more applicable definition of the quality of teaching except for emphasizing the need of closer collaboration with external stakeholders. L&T space (hidden under the name of L&T infrastructure) is mentioned only in the context of activities of Polish Accreditation Committee: the obligatory evaluation of the infrastructure during the accreditation procedure.

Such reluctance in addressing and defining advisable L&T infrastructureSPACE should not be surprising, however, since PAC in its own publication Wybrane “dobre

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10 Rozporządzenie Ministra nauki i Szkolnictwa Wyższego w sprawie czasowego ograniczenia funkcjonowania niektórych podmiotów systemu szkolnictwa wyższego i nauki w związku z zapobieganiem, przeciwdziałaniem i zwalczaniem COVID-19, Dziennik Ustaw 2020 no. 511.


12 Propozycja założeń do ustawy regulującej system szkolnictwa wyższego, SWPS 2017.

“praktyki” zarządzania jakością kształcenia w polskich szkołach wyższych (Selected “good practices” in managing teaching quality in Polish institutions of higher education)\textsuperscript{14} uses the term “teaching infrastructure” only eight times! But out of these eight mentions, five are referring to the need of systematic evaluation of the infrastructure. PAC’s document does not even try to describe good practices in organizing learning and teaching space.

4.5 Importance and status of physical L&T space

As it was previously mentioned several times: in Poland the discussion on physical L&T space and its role in learning and teaching process in higher education is almost non-existent. This is the reason why this report and the whole Erasmus+ project “Learning and Teaching Space in Higher Education” is of utmost importance.

The approach to quality assurance in previous decades has focused mainly on procedural aspects: that HEIs should monitor and evaluate their L&T infrastructure and that PAC should evaluate the infrastructure as a part of the accreditation procedure. There is an alarming lack of academic publications analysing the importance of L&T space in educational practice of higher education in Poland, there are no publications assessing the impact L&T space has on students’ performance. But even more worrying is that national policy documents do not see the learning and teaching environment as a key to the success of students and the system of higher education in general.

\textsuperscript{14} Ł. Sułkowski (ed.), Wybrane “dobre praktyki” zarządzania jakością kształcenia w polskich szkołach wyższych, Polska Komisja Akredytacyjna 2015.
5. University strategy and practice for the design and implementation of L&T space in Polish higher education

Polish University market is varied. It consists of state and private universities. Official statistics for 20th March 2020 show that out of 392 HEI in Poland there were 133 state ones, 248 private ones and 14 HEI run by church (both Catholic and other denominations)15. In 2018 there were around 1,2 million students in Poland, out of whom around 73 % attended state universities, including over 73 thousand international ones.16 Over 50%17 of international students come from Ukraine, Belarus and Russia.

The study programmes are tailored to the needs of the labour market, but they are also shaped by the needs and expectations of foreign students. Therefore, more and more faculties offer programmes of studies in languages other than Polish: English, German and Ukrainian. Changes are introduced also on the level of different existential needs of foreign students, for example: dormitories upgraded to higher standards, canteens offering vegan menus, etc.

Illustration 1. The city of Krakow

![Illustration 1](http://www.madeinkrakow.pl/galeria.html)

Krakow is one of the oldest cities in Poland (illustration 1) and also one of the most prominent academic centres. With its 23 Higher Education Institutions18 and over 200,000 students coming to study here every year, it is easy to see why Krakow is such an attractive place for young people.19 Ever since the Jagiellonian University was founded in 1364 as one of the earliest HEIs in Europe, the city has been known as a leading academic centre. This centuries-long academic tradition goes hand in hand with modern

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15 Uczelnie kościelne, [https://www.gov.pl/web/nauka/uczelnie-koscielne](https://www.gov.pl/web/nauka/uczelnie-koscielne) [21.06.2020]
approach to education and state-of-the-art technology. After the new campus has been built in Ruczaj, in the outskirts of the city, a substantial part of student life has moved there (illustration 2). Thanks to its good connection to the city centre, though, it was possible to upkeep the close cooperation between all the university units on the scientific, cultural and private grounds.

As a city, Krakow has always been a melting pot of cultures and languages. People from all over the world come here to experience both history and modernity, to share knowledge, make new friends and create lifelong memories. Numerous cultural, musical and film festivals, many of which are organised by students, also liven up the city.

Illustration 2. JU – the New Campus

But Krakow is an important place for world business, with companies like Shell, Nokia or Google opening their branches here. The reason is simple – the graduates of Krakow’s universities are highly qualified specialists, willing to develop their careers with the biggest players on the market. Another reason is Krakow’s excellent location in terms of geography and transport - not very far from other European capitals, such as Prague and Vienna, close to the Tatra and Pieniny Mountains (with many ski resorts and trekking routes), and with excellent bus, train and plane connections. Balice Airport just outside the city and the A-4 motorway connecting the eastern and western borders of Poland, easy access to A-1 motorway going from the north to the south of the country, offer numerous opportunities both for keen travellers and for the business people.20

5.1 University policy, strategy and organisation

The university strategy is described in a separate document, stating the mission, vision, values and aims of the university and emphasizing the importance of science, didactics and research, openness and innovativeness21. The quality assurance strategy combines two basic activities, namely the quality of study and the quality of work. The quality of study focuses on giving the opportunity to the student to learn effectively, using

all the elements that he/she might need for the purpose (the right spaces, the necessary devices). The quality of work emphasizes the same aspect from the point of view of the academic staff: the right size of the classrooms, the equipment, the software, etc.  

All employees and students alike are by definition involved in shaping the space for work and study. Once a year, there is an evaluation of the internal education quality assurance systems. It is carried out by departmental quality assurance committees. Any suggestions on the changes in classroom arrangement, equipment, etc., should be addressed to them. Among the specialized equipment that has been purchased at such a special request there is an fMRI, a polygraph, specialized microscopes for chemists, biologists or physicists, special telescopes for astronomers, etc. There is no specialized document describing space arrangement at the university, but there are specific procedures designed to tackle such issues.

The Jagiellonian University comprises 16 Faculties, where nearly 4 thousand academic staff conduct research and provide education to over 36 thousand students, within the framework of more than 80 different fields of study (illustration 3). The eminent researchers and state-of-the-art infrastructure make the JU one of the leading Polish scientific institutions, collaborating with major academic centres from all over the world. The Jagiellonian University is also home to about 150 student societies, where young researchers pursue their academic interests and develop friendships with people who share their passion.

Illustration 3. The JU buildings

Source: Obiekty, https://www.uj.edu.pl/warto-zobaczyć/obiekty [05.06.2020]

Collegium Novum is the main building of the university (illustration 4). Apart from its undeniable representative function it also plays an important role as the site of the university authorities: the rector, the deans, the international office, etc.

22 Jakość kształcenia, https://jakosc.uj.edu.pl/ [05.06.2020]
Collegium Novum also comprises didactic spaces, both representative ones like the main hall (illustration 5) and regular ones, utilised mostly by the faculty of Law and History on a daily basis. The main hall is used for the most important university celebrations, including the official opening of the academic year.

The walls of the main hall are decorated with the painted portraits of the most famous previous rectors. The only woman portrayed here is Queen Jadwiga, who restored the university in 1400, using her crown jewels.

The Astronomical Observatory (illustration 6) is an Institute within the Faculty of Physics, Astronomy and Applied Computer Science. It is named after Nicolaus Copernicus and is based at Fort Skala, some 10 km west of the center of the city. It was founded in 1792\textsuperscript{24}.

\textsuperscript{24} Nicolaus Copernicus Astronomical Observatory, \url{https://fais.uj.edu.pl/en_GB/wydzial/obserwatorium-astronomiczne}, [04.06.2020]
Illustration 6. The Astronomical Observatory

Source: Galeria, http://www.oa.uj.edu.pl/gallery/oauj.jpg [05.06.2020]

Its scientific program has covered observations of the positions of the celestial bodies, celestial mechanics of the Solar System and binary stars, meteorological observations, etc. (illustration 7) There are about 40 scientists, actively carrying out research there, often in cooperation with a number of other institutions both in Poland and abroad. The Observatory is open to visitors and it organizes a number of cyclical events, e.g. “Evenings with the stars”.  

Illustration 7. The ‘big’ radio telescope

Source: Galeria, http://www.oa.uj.edu.pl/gallery/big1.jpg [05.06.2020]

Ibid.
The Institute of European Studies and the Centre for Holocaust Studies are located in an old residential castle in the outskirts of Krakow (illustration 8). The castle – or, rather, the pseudo-Romanesque villa - in Przegorzały was constructed in 1941 at the order of Otto von Wächter, the Nazi governor of the region.

Illustration 8. The Institute of European Studies and the Centre for Holocaust Studies

![Przegorzały Castle](http://www.polskiezabytki.pl/m/obiekt/9494/Krakow_-_Przegorzaly_-_Zamek/)

Source: Przegorzały, Wikipedia/Zygmunt Put Zetpe0202 [05.06.2020]

It was initially called Schloss Wartenberg (“the castle on the mountain”- illustration 9), as it is situated on a steep slope above the Vistula river, overlooking the city. The building was given over to the University in 1973, first to the Institute of Polish Diaspora and in the 1990s to the newly-established Institute of European Studies.

Illustration 9. Przegorzały Castle

![Przegorzały Castle](http://www.polskiezabytki.pl/m/obiekt/9494/Krakow_-_Przegorzaly_-_Zamek/)

Source: Zamek Przegorzały, [http://www.polskiezabytki.pl/m/obiekt/9494/Krakow_-_Przegorzaly_-_Zamek/](http://www.polskiezabytki.pl/m/obiekt/9494/Krakow_-_Przegorzaly_-_Zamek/) [05.06.2020]

In the 1990s the Institute of Polish Diaspora was moved to the nearby building (illustration 10) which is an important monument of late modernism in Polish architecture.26

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26 Kolegium Polonijne Uniwersytetu Jagiellońskiego w Krakowie; fot.: http://archibaza.pk.edu.pl/bazarch/files/15/DSC_0917.JPG, [05.06.2020]
Illustration 10. The Institute of Polish Diaspora

![Image of Institute of Polish Diaspora](http://archibaza.pk.edu.pl/bazarch/files/15/DSC_0917.JPG) [05.06.2020]

Source: Kolegium Polonijne Uniwersytetu Jagiellońskiego w Krakowie; fot.: http://archibaza.pk.edu.pl/bazarch/files/15/DSC_0917.JPG, [05.06.2020]

The Jagiellonian University Medical College (illustration 11) is an innovative medical education centre, with didactic base in medicine, dentistry, nursing and midwifery. It has 6000 students and over 1500 academic teachers and researchers, running over 1000 research projects every year. It is based in older buildings in the city centre (although including a new conference hall) but the main activities are carried out in Prokocim, in the outskirts of Krakow, where a new, state-of-the-art hospital was constructed (opened in 2020). The new seat of the University hospital has 31 clinical wards, 24 operating theatres, 28 outpatient clinics and a didactic base consisting of a large lecture hall, two large classrooms and a number of seminar rooms.

Illustration 11. The Jagiellonian University Medical College

![Image of Jagiellonian University Medical College](https://www.uj.edu.pl/wiadomosci/-/journal_content/56_INSTANCE_d82IKZvhit4m/10172/140587809) [05.06.2020]

Source: fot A. Koprowski, https://www.uj.edu.pl/wiadomosci/-/journal_content/56_INSTANCE_d82IKZvhit4m/10172/140587809 [05.06.2020]

27 Source: https://cm-uj.krakow.pl/index.php/collegium/historia/
In the foreground (illustration 11) there is the new University Hospital, with the older University Children’s Hospital (UCH) right behind it. In the background there is a residential area of Prokocim and Biezanow in the south of Krakow.

Illustration 12 shows the University Medical College with the remaining green spaces which also belong to the university. In the area there are the dormitories for the medical students – their location is very convenient both because of the distance to the university and the surrounding views (the mountains).

**Illustration 12. The Jagiellonian University Medical College 2**

Nowadays, the main part of the university is situated outside the strict city centre, though (illustration 2). The biggest number of faculties (7) are located in Ruczaj district. The campus here has been designed for this purpose from scratch.

Every faculty is designed to perform a double function: a didactic and leisure space for students and academic staff. All the buildings are located along a beautiful promenade with shaded benches, appreciated both by the academic and the local resident community. All the faculties can be easily accessed by various means of transport: public transport (trams and buses), cars, bicycles and on foot. There are extensive parking lots, separate for each building: underground ones mostly for the staff and the ones on the ground level, open for the staff and the students alike. Each building is also equipped in large bicycle racks - outdoors, some of them under a roof - thus promoting a healthy lifestyle among the academic community (illustration 13).
Illustration 13. Faculty of Mathematics and Computer Science and Faculty of Management and Social Communication

![Faculty of Mathematics and Computer Science and Faculty of Management and Social Communication](https://lovekrakow.pl/galerie/zdjecie/id/85127#photo) [05.06.2020]

Illustration 14 shows the beginning of the promenade between the Faculty of Management and Social Communication and the Faculty of Mathematics and Computer Science, with the characteristic amphitheatre.

Illustration 14. Faculty of Management and Social Communication

![Faculty of Management and Social Communication](https://lovekrakow.pl/galerie/zdjecie/id/85129#photo) [05.06.2020]

It also shows the main entrance to the Faculty of Management and Communication Science. The colourful letters (JU4U) just in front of it are one of the landmarks of the new campus (illustration 15).
The famous letters (illustration 14) were erected in 2016 to celebrate the World Youth Days held in Krakow – thus the colours (blue, red and yellow), symbolizing this event. Planned as a temporary monument, it has been one of the favourite photo spots of all the students ever since.

The promenade mainly has the communication function as it links the campus to the residential area of Ruczaj (illustration 16). However, it is sometimes used as a venue for some events, for example the University open days.

There is one main university library – Biblioteka Jagiellonska – in the city centre. Thanks to its extensive collection of Polish publications, it is known as a national library. All the Polish publications and valuable foreign items constitute a National Library Archive, and are therefore under extra protection. Currently, the Library processes and archives all Polish publications printed in Poland and abroad, including valuable old manuscripts, historical items and rare books. The Library also collects foreign scholarly literature in fields that relate to the University's areas of research and coursework. Additionally, each faculty has its own library, containing the most important books and journals in the field (illustration 17).
Moreover, the surrounding area of this library is pleasant for the eye, making the work in the library nicer and more efficient.

**Illustration 18. The Centre of Natural Sciences**

The Centre of Natural Sciences (CEP) is an inter-faculty department of the University whose aim is to promote the knowledge of natural sciences among students and the visitors (illustration 18). It is a large two-floor building that houses 10 permanent exhibitions (e.g. astronomy, anthropology, bio-geography, the history of life on Earth, evolution) and a number of temporary ones (e.g. on accelerators, on predators and their victims, or on the life of ants). It frequently organizes events and workshops either open to the public or restricted to groups of kindergarteners or schoolchildren. The youngest visitors are thrilled to see a large skeleton of a dinosaur (illustration 19).
Illustration 19. The dinosaur bones

![Dinosaur Bones Image]


All the new campuses have been designed to meet the needs of the disabled. Therefore, there are no architectonical barriers, there are elevators available in every building, all the corridors and passages are wide enough, etc.

Illustration 20. The Faculty of Law and Administration

![Faculty of Law and Administration Image]

Source: The Faculty of Law and Administration, [https://wpia.uj.edu.pl/budynki](https://wpia.uj.edu.pl/budynki) [05.05.2020]

However, some faculties (e.g. the Faculty of Law and Administration, the Faculty of Philosophy) are located in old historical buildings which are difficult to access for the disabled (illustration 20). In this case, the buildings have a special value as monuments and their architecture cannot be changed in any substantial way. The university authorities are working to find a satisfactory solution to this problem.

The university rents its premises (large auditoria, parts of buildings, outdoor spaces) to both the city/local government and individual entities for the purposes of organizing symposia, meetings, conferences, etc. When the city organizes events, it often invites the academic community to collaborate and co-organize them - for example, the Museum Night, the Night of Scientists in Malopolska Region. In this way, the university promotes its teaching offer, but also popularizes science among the inhabitants.

When designing new spaces or when planning new study programmes/courses, the academic staff are consulted and their suggestions are considered. Certain courses require very specific devices (e.g. the VCR for Film Studies to watch old films, or the electron microscopes for Physics or Biotechnology), which are purchased if they are deemed indispensable.
We regularly diagnose classes (using specialised questionnaires), and recently we also included remote work and virtual space in our research. The results of the survey for the last semester (mostly taught remotely because of the COVID-19 pandemic) will be known soon.

In 2019, the Jagiellonian University joined the Strategic Programme Excellence Initiative run by the Ministry of Higher Education. The participation in the programme is associated with higher funding (higher subsidies from the Ministry), but it also affects the ratio of the number of students per one teacher. Now there are 12 students per teacher but we aim to limit the number of students to achieve the ratio 10/1.28

The question of sustainability and internationalisation demands on design is be tackled in the sections 5.3 and 5.4.

5.2 University didactics, pedagogy and curriculum design

The university has a variety of L&T spaces, from large lecture halls like the one in Auditorium Maximum which can seat over 800 people (illustration 21), through smaller lecture halls, regular classrooms, to the smallest conference rooms, able to seat 5 people. The vast majority of the spaces are equipped with a computer with wi-fi access and an OHP.

The furnishing and the equipment of the individual rooms is up to each institute. The institute authorities analyse their department’s needs and they make such decisions accordingly.

Illustration 21. The biggest lecture hall - Auditorium Maximum

[Image of Auditorium Maximum]

Source: fot. Filip Radwański

Each lecture hall is equipped with OHPs and fixed computers with a wi-fi access. It is also possible to connect another device, e.g. a laptop, a tablet, or a traditional OHP for slides (multimedia). On the teacher’s desk (illustration 22) there is an OHP of this

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kind and it can be used to show various documents (photos, paper documents) as well as multimedia. The teacher’s desk is on a podium. The room is partially automated – the lighting, the blinds, the sound and the screen can be operated using the control panel in the desk. There are fully automated lecture rooms on other faculties, for example the Faculty of Mathematics and Computer Science or the Faculty of Biology, where additionally the doors are controlled from the panel in the desk, as well as centrally, from the central panel in the reception.

Illustration 22. A lecture hall at the Faculty of Management and Social Communication

Own source [07.07.2020]

This room is also equipped with a camera and there are extra rooms for technicians or interpreters, used during international conferences and meetings. The walls are decorated with students’ works, changed on a regular basis.
There is a high-resolution camera adapted for online transmissions of lectures (illustration 23). The room is equipped with comfortable chairs, covered with washable upholstery, as well as with movable chairs that are convenient for both right- and left-handed students. However, there is no aisle across the middle of the room, which makes it difficult for the teacher to move around during the lecture.

Lecture halls come in different sizes (illustration 24). This lecture hall can be separated with a movable wall and thus divided into two smaller rooms, making it possible to hold both large and middle-sized classes. There is natural light in the room and there is a direct entrance from outdoors. The teacher’s desk
is on the podium, but thanks to the aisle in the middle of the room, it is possible to run traditional lectures as well as more interactive classes, with the teacher moving around the room freely (illustration 25).

**Illustration 25. A lecture hall 2**

![A lecture hall 2](Own source [07.07.2020]

This perspective on the hall shows clearly how it can be divided and how two independent lectures can be held, using separate whiteboards, OHPs and sound systems (illustration 25).

On the Campus there are lecture halls with and without windows. The latter are very convenient for multimedia classes, as there is no risk of sunshine shining directly at the screen and blocking the view. This room is equipped with two whiteboards and a sliding screen, with an OHP suspended from the ceiling. There are escape route signs to be seen, as well. The same room seen from the opposite side (illustration 26).

**Illustration 26. A lecture hall 5**

![A lecture hall 5](Own source [07.07.2020]

Such rooms are equipped with an OHP and the teacher’s desk with a control panel, allowing the teacher to regulate the lighting and the sound (illustration 26).

Some rooms are dedicated for special-purpose classes, but they can be used by any teacher if they are available in a given time slot. The TV room is such an example, normally used for organizing debates and often rented out.
The mirror room (illustration 27) is another example of a special-purpose one, as in this case our creativity is the limit of what we can do there. It was primarily designed for psychology sessions but now it is used for various active and interactive classes. There are two walls coated with mirrors which are typically covered with blinds but can be used any time the teacher needs it. The chairs can be moved around freely and can be arranged in any shape, e.g. in a circle or in a horseshoe.

**Illustration 27. A mirror room**

The room is equipped with a computer, a whiteboard and an OHP and it is connected to wi-fi. It is also possible to connect another device, e.g. a laptop, or a tablet (illustration 27). There are large windows, which sometimes helps, but more often hinders classes, as the direct sunlight blocks the view on the screen (SE side of the building).

The room with a one-way mirror plays a similar role. It is designed for middle-sized groups. The ergonomic seats are arranged amphitheatrically (illustration 28).

**Illustration 28. The room with a one-way mirror 1**

This room is equipped like the others: a computer, a sliding screen, an OHP (illustration 28). It is connected with another (smaller) room from which the bigger one can be observed (illustration 29).
Illustration 29. The room with a one-way mirror 2

This room is furnished with comfortable chairs that can easily be arranged in any shape, thus enabling psychologists-to-be to learn how to run group sessions (illustration 30). All the chairs are typically moved to the side to make cleaning easier, but also to enable the teacher to arrange them any way he/she needs.

Illustration 30. A classroom for Applied Psychology

Among medium-sized and smaller rooms there are the ones to teach languages and classes (illustrations 31-34). This room can be used for traditional classes, using a blackboard and chalk, as well as for multimedia classes: there is a computer with all the hardware and software necessary for a language class (e.g. good quality speakers) and an
OHP with a sliding screen. The tables and the chairs are easy to move, so they can be arranged in any shape (illustration 31).

Illustration 31. A language classroom

Some rooms are additionally equipped with interactive whiteboards. Rooms come in different shapes and sizes. This one is dedicated for typical language groups of 16 people (illustration 31).

Illustration 32. A classroom 3

Own source [07.07.2020]
The tables and the chairs are easy to move, so they can be arranged in any shape. This room is additionally equipped with a movable interactive whiteboard as well as a standard whiteboard.

Being mainly dedicated for Film and New Media Studies, this room is also equipped with a wide assortment of technical devices to watch films: a TV set with a DVD, a Blu-ray and a VCR, as well as a computer with an OHP and a sliding screen. Dark blinds can block the sunlight completely (illustration 32).

Illustration 33. A classroom 4

This is another typical room for classes or language classes. There is a computer with an OHP facing a side wall, a big TV and a set of magnetic boards that can be used to display students’ works. Movable chairs and small tables can be arranged freely (illustration 33).

Curriculum design is based on the capabilities and the resources, which means it is mutually connected with the spaces that are available at each faculty of the university. The JU authorities take into consideration both the teachers' plans and projects and the students' needs. The planned changes into the curriculum should be submitted by March if they are to be introduced in the next academic year.

5.3 University digital structures

The Jagiellonian University aims to be an innovative institution, with new technologies and digitalization in mind. As it was stated in the previous part of this report, the vast majority of the rooms are equipped with computers with wi-fi access and other useful devices to run multimedia classes, including online streaming. There are digital spots available in every building (usually in the libraries) - both with fixed computers and with wires where students can connect their own devices. Students can use printers and scanners installed there. The easy access to wi-fi additionally facilitates the L&T process.

Moreover, students and teachers alike have online access to some publications (academic books and journals) using EBSCO host database. Such a solution has proved to be very convenient especially during the lockdown caused by the pandemic, when they could find the right sources to continue their research without leaving their homes.
Also, there are a number of programmes to support students in their learning and development, but also to help them in need (e.g. SOWA, Stacja Konstelacja - to tackle psychological issues; Syllabus and USOS - to support the L&T programmes).

There are places specially adapted for the disabled persons in every library (illustration 34). Also, the room number on every door is spelled in the Braille.

Illustration 34. The places for the visually impaired at one of the libraries

The needs of the disabled and physically impaired students are addressed, as well. There is a Disability Support Service (DON), aiming to provide equal opportunities for persons with disabilities through the development and implementation of reasonable adjustments aimed at ensuring their equal treatment in access to education\(^{29}\).

Illustration 35. Leisure space to support L&T process

\(^{29}\) Disability Support Service, \(\text{https://don.uj.edu.pl/en_GB/start}\), [04.06.2020]
On the campuses, you can also find a variety of vending machines with hot and cold drinks, as well as sweet and sour snacks (illustration 35). In addition, there are chargers for mobile phones and other electronic devices and multimedia boards displaying current information or the information about important events. The photo also shows a board to which students can hang printed information, as well as a set of the teachers’ pigeon holes where students can put their completed papers or homework. Behind the wall there is the faculty library, with places for quiet work and computer stations for students.

5.4 University physical L&T spaces

When designing new spaces for the university or renovating the existing ones, a number of essential factors must be considered. Aesthetic demands are an important issue when planning mass spaces like the new campus on Ruczaj, or the new buildings of the University Medical College. There are no specific guidelines in this respect that would be compiled in one document, but each time the general needs and requirements of the faculty are taken into account (e.g. the size of the rooms, the number of large lecture halls, the need for special spaces like laboratories, test rooms etc.), the general health and safety guidelines that apply to all public spaces (OHS), as well as the question of the accessibility of all the spaces for the disabled.

Several faculties are based in the Old Town, in old historical buildings that are the national monuments (e.g. Collegium Novum, Collegium Maius, Collegium Minus) and therefore their exterior and interior architecture is regulated by law. Should the university authorities want to renovate any of such objects, they first need to obtain a special permission from the Municipal Unit of Monument Protection and they have to follow all the recommendations. For this reason, in many cases the old buildings are difficult to access for the disabled (narrow staircases, steep stairs, additional steps in the corridors, etc.). A frequent solution introduced there is the assistance given by the staff from the reception desk, who can lead the visually impaired person, or can carry a person in a wheelchair up the stairs.

The student dormitories are located in the city centre, close to the Jagiellonian Library and with a convenient access to each part of the university by public transport or by bike. They have been renovated to upgrade the standard of the living conditions there.

The College of Physical Education and Sport of the Jagiellonian University has a hall and a sports hall, a grass football pitch, clay courts, two beach soccer fields and a gym (illustrations 36 and 37).

Illustration 36. Sport venues 1

Source: Obiekty sportowe, https://swfis.uj.edu.pl/baza-sportowa/obiekty-sportowe [02.06.2020]
The gym meets all the requirements and is adapted to run classes for disabled students. The room is divided into 3 segments with training machines with free weights, treadmills, bicycles as well as a room with rowing ergometers.

Illustration 37. Sport venues 2

Source: Obiekty sportowe, https://swfis.uj.edu.pl/baza-sportowa/obiekty-sportowe [02.06.2020]

The Center of Physical Education is situated in the vicinity of the dormitories. However, for the students attending classes at the new campus, the connection is not very convenient, as it takes too much time, especially in rush hours.

Each of the University buildings has a social room for the staff, equipped with all the necessary kitchen appliances (a fridge, a cooker, a dishwasher, a microwave, an electric kettle). Most faculties also have social rooms, or at least social corners in the hall, for the students, as well. Such places are typically equipped with a kettle, a microwave, a computer and some comfortable seats.

On every faculty there are some special places designed for studying before or after regular classes. For quiet learning, there are places mostly in the libraries – additionally equipped with computers, scanners and printers. For group discussions, there are some places designed in the halls – large or small tables with chairs, often with a coffee and soft drinks vending machine nearby.

The academic staff who commute to Krakow can use a hotel room – there are a number of such places in different buildings both in the new campus and in the Old Town.

Some buildings are used to produce electricity in an eco-friendly way. The Faculty of Management and Social Communication is a leading example in this field, as there are solar panels installed on the roof and on the front wall (illustration 38). The panels incidentally also obscure intense sunlight, giving a pleasant shade inside.
Illustration 38. The main hall with the solar panels – the Faculty of Management and Social Communication

Illustration 39 shows the arrangement of the corridor in the Faculty of Chemistry. This building was erected as the last stage of the construction of the new campus and it is an example of a completely different space design from the previous ones. When the Faculty staff travelled on business to different chemical campuses around the world, they collected good practices which they then communicated to architects who designed the building. Thus, it has separate zones for L&T, a separate one for laboratories, and a separate one for classes.

Illustration 39. The main hall at the Faculty of Chemistry
The photo also shows the entrance to the auditorium. The corridor is spacious indeed. It can be used for meetings, as there are soft poufs covered with leather-like material that is easy to clean and comfortable to sit. The stairs are wooden and are often used by students for meetings between classes. The plants make the atmosphere in the building more cozy, as does the glass ceiling through which sunlight enters. Further down the corridor there is a piano that can also be played during the breaks. Moreover, the photo shows coloured collection bins to sort rubbish that can be found in all university buildings.

However, there is a wide scope of possibilities – still not used - when it comes to arranging the space around the classrooms. Some of the corridors are well furnished and efficiently used, which can be seen in the few examples shown in the following photos.

Illustration 40. A corridor 1.

Illustration 40 shows the example of the Faculty of Management and Social Communication, where the wide corridors could be arranged in many efficient ways. Yet, the strict fire regulations must be taken into consideration, as they require specific quality of all the equipment, including chairs and tables, which must meet very high standards, and preferably be fireproof.

Here the wall was given over to students (the Institutes of Film and New Media, and of Culture Management), who could paint a large and colourful graffiti there. In smaller corners of the building there are small-sized chairs and tables, which still enable group work of students and are frequently used.
Illustration 41. A corridor 2

Illustration 41 shows high-quality ergonomic metal chairs, unfortunately connected with each other, so difficult to move around. There is also a photocopier. The photo also shows rubbish segregation and information boards for students. Most of the information is available on-line on a regular basis, but some students prefer to have all the important notifications given in more than one place, including on such a board, next to the secretary’s office. The notifications do not contain any personal data, but only some general information about internships for students, posters informing about scholarships and awards, as well as competitions and some interesting events.

Another example is how the space in the large bay windows is used (illustration 42). Apart from the table and chairs, there are cabinets for the staff. Outside the window, you can see a beautiful garden that blooms beautifully in spring.

Illustration 42. A corridor 3

Own source [07.07.2020]
Another example of how the bay window can be used. It looks different on each floor (illustration 43). Typically, either plants are to be found there or chairs/armchairs and tables for students or for the employees. The photo also shows the parking lot and the garden surrounding the campus.

Illustration 43. The Faculty of Management and Communication Science with the bay windows

![Illustration 43](image)

Own source [07.07.2020]

Most corridors are arranged in a similar way to the ones shown above.

Illustration 44. A corridor leading to the teachers’ rooms

![Illustration 44](image)

Own source [07.07.2020]
Next to the classrooms there are just a few chairs that meet the legal (fire) requirements (illustration 44 right side).

However, some spaces are not utilised properly, and their potential is lost (illustration 45). Spacious as they are, they are left empty, just with a few chairs here and there and an occasional information board.

**Illustration 45. A hall**

![Illustration 45. A hall](image)

Own source [07.07.2020]

New designs aesthetically refer to the culture that the institute represents. The Confucius Institute (illustration 46) is an outstanding example of such an approach, combining usefulness with aesthetics and didactic (cultural) value.

**Illustration 46. A corridor in the Confucius Institute**

![Illustration 46. A corridor in the Confucius Institute](image)


The menu is increasingly tailored to the tastes of students, including international tastes. Often you can also order your own dish from your favorite ingredients (illustration 47).
The organization of space around buildings is an important issue, and it is two-fold. The buildings situated in the Old Town are problematic in this respect, as the green spaces are limited (although well-designed) and there are no parking spaces available. The newly-designed buildings, like the ones in the new campus (illustration 48), take various aspects into consideration.

Illustration 47. The canteen at the Faculty of Chemistry

Own source [07.06.2020]

Most of the infrastructure is available for the academic staff, the students and the local residents alike. There are three open-air gyms in the area, as well as gravel paths and cycle lanes. The arrangement of the space around the buildings thematically relates to the research carried out by the faculty. For example, in illustration 48 (three faculties connected with the natural science) there is a sundial surrounded by some places to study and rest for students.

There are fountains and other small architecture objects next to each building, making such a reference, e.g. the fountain showing the spheres (symbolizing the construction of the atom) in front of the Faculty of Physics and Astronomy.

Illustration 48. The Campus of the 600th Anniversary of the Jagiellonian University Revival

Source: Fot. Swifteye, 
https://promocja.uj.edu.pl/documents/1417014/136883855/Kampus_UJ_KNB_fot.Swifteye.jpg/30d9160a-2c91-43fb-baf7-f43cf65ba3eb [05.06.2020]
Illustration 49. The parking lot next to the Faculty of Physics and Astronomy

The photo (illustration 49) shows the arrangement of the garden around the parking lot at the Faculty of Physics and Astronomy and the Faculty of Chemistry.

Illustration 50. The parking lot and the bicycle rack at the Faculty of Chemistry

On the right of the illustration 50 you can see a place for bicycles, partially indoors and monitored. Here you can also see the emergency exit from the Chemistry building, which is normally used as a side entrance for employees with a card.

Illustration 51. The Faculty of Chemistry

Own source [07.07.2020]
The green spaces around each faculty have been specially designed (illustration 51). They include various types of plants (trees, bushes, flowers) that are in bloom at different times of the year, from early spring to late autumn.

Illustration 52. The Confucius Institute surrounding

![Image](https://krakow.wyborcza.pl/krakow/51,44425,24788174.html?i=1)


The greenery surrounding the Confucius Institute (illustration 52) is an excellent example of a combination of aesthetics with culture. The garden is young (one year old), but its potential is already visible. It is planned to arrange more places to relax there, with benches where more people can meet. Also, the so-called "garden rooms" are planned, sheltered by trees and the building. They will encourage a quiet conversation in comfortable conditions.

Illustration 53. The insect hotel and the flower arrangement

![Image](own source [07.07.2020])

Illustration 53 shows an insect hotel, built of natural materials such as dry twigs and bark, wood and old tiles. It is supposed to provide shelter for various species of insects, especially pollinators.

Illustration 54. Examples of flowers/green spaces surrounding the buildings

![Image](own source [07.07.2020])

The flowers that grow nearby have been specifically chosen to attract pollinators, including colourful butterflies (illustration 54).
The insect hotel is situated in the natural science section of the campus but it is open for the public. It is a popular leisure for the academic staff and students (because of a few sunbeds from the Faculty of Geography and Spatial Management available there – illustration 55), but also an attractive walking destination for the local residents\textsuperscript{30}.

**Illustration 55. A leisure spot at the Faculty of Geography and Spatial Management**

![Illustration 55. A leisure spot at the Faculty of Geography and Spatial Management](https://geo.uj.edu.pl/inauguracja-sezonu-lezakowego-2018-przed-budykiem-igigp
[04.06.2020]

Recently, there also have been projects for arranging spaces that have not been considered so far, e.g. the roof. Illustration 56 shows a roof garden at the Faculty of Chemistry, intended for relaxation between classes, currently for employees only.

**Illustration 56. The roof garden at the Faculty of Chemistry**

![Illustration 56. The roof garden at the Faculty of Chemistry](https://lovekrakow.pl/galerie/zdjecie/id/85130#photo [12.06.2020]

[04.06.2020]
The authorities of JU have been working to make the new buildings more friendly for the academic staff and the students, and to meet the highest standards of L&T spaces. This gives us hope for continuous improvement.

6. Conclusions and recommendations

As far as Polish approach to L&T space on a national level is concerned, there is an astonishing lack of any serious discussion on the role of L&T space (or infrastructure) in students’ performance. The terms to describe national requirements concerning L&T are very vague. One of the terms most used most often is “modern”, but as such it does not have any clear, unquestionable meaning. Regulations and policy documents do not use such terms as “comfortable”, “spacious”, “student-oriented”, “flexible” or “quiet”. Fortunately, the obligation to provide facilities and support for disabled students so that they can attend program of studies on equal basis as regular students is clear and never challenged by Polish HEIs.

There is also another saddening conclusion: during the latest wave of higher education reforms in Poland teaching and teaching quality played far less important role that research quality. This is one of reasons why L&T space is still neglected.

The changes in the L&T space are gradually implemented; the University authorities are working on it. As the university is based in different kinds of buildings – both new and old ones (which, additionally, have been renovated and redesigned, or not). The new or renovated spaces are definitely more friendly for the academic community, since the space there is used much more efficiently. However, even in such buildings there still is some room for improvement, e.g. the extensive corridors and halls should be better arranged to induce better use of free time between classes for learning or group work and discussions.

Recommendations:

- The Ministry of Science and Higher Education should gather the information about the L&T space in use by Polish HEIs (in case of public institutions this is more than urgent).
- National regulations and policy documents should avoid using too broad and vague terms (e.g. “modern” which can have different meaning while applied to different types of infrastructure: “modern” building is not the same as “modern” computer).
- National documents (including documents of Polish Accreditation Committee) should provide more precise information about desirable L&T space to be used by HEIs.
- The university should provide more appropriate spaces for students to make use of their free time between classes, both for individual, silent learning and for discussions and group work.
- Such spaces should be designed both indoors (individual rooms, corners in the halls) and outdoors (special garden design conducive to quiet learning).
- We recommend that the Faculty Deans review the spaces available and, possibly, rearrange them to make them meet the needs of the teachers and the students, but also to reflect the field of study that the faculty represents.
- We strongly recommend furnishing all the classrooms with tables and chairs that are easy to move and can be arranged in any pattern that is necessary for the class.
• Also, the walls should be rearranged in such a way that would allow, or even encourage, the students to use them in their work (e.g. hanging more boards, using blackboard and/or magnetic paint on the walls, etc.).
• More hybrid structures should be created in the university L&T spaces.
Bibliography

5. Kolegium Polonijne Uniwersytetu Jagiellońskiego w Krakowie; fot.: http://archibaza.pk.edu.pl/bazarch/files/15/DSC_0917.JPG, [05.06.2020]
12. Prawo o szkolnictwie wyższym i nauce, Dziennik Ustaw 2018 no. 1668.
16. Rozporządzenie Ministra Nauki i Szkolnictwa Wyższego z dnia 26 września 2018 r. w sprawie studiów, Dziennik Ustaw 2018 no. 1861.
17. Rozporządzenie Ministra nauki i Szkolnictwa Wyższego w sprawie czasowego ograniczenia funkcjonowania niektórych podmiotów systemu szkolnictwa wyższego i nauki w związku z zapobieganiem, przeciwdziałaniem i zwalczaniem COVID-19, Dziennik Ustaw 2020 no. 511.

**Photo sources:**

1. Bochenek A., [https://krakow.wyborcza.pl/krakow/51,44425,24788174.html?i=1] [04.06.2020]
3. Czaja P., Galeria, [http://www.madeinkrakow.pl/galeria.html] [20.06.2020]
4. Galeria, [http://www.oa.uj.edu.pl/gallery/big1.jpg] [05.06.2020]
5. Galeria, [http://www.oa.uj.edu.pl/gallery/oaui.jpg] [05.06.2020]
6. Kolegium Polonijne Uniwersytetu Jagiellońskiego w Krakowie; fot.: [http://archibaza.pk.edu.pl/bazarz/files/15/DSC_0917.JPG] [05.06.2020]
7. Koprowski A., [https://www.uj.edu.pl/wiadomosci/-/journal_content/56_INSTANCE_d82IKZyht4m/10172/140587809] [05.06.2020]
8. Lovekrakow, [https://lovekrakow.pl/galerie/zdjecie/id/85121#photo] [05.06.2020]
9. Lovekrakow, [https://lovekrakow.pl/galerie/zdjecie/id/85122#photo] [12.06.2020]
10. Lovekrakow, [https://lovekrakow.pl/galerie/zdjecie/id/85123#photo] [05.06.2020]
11. Lovekrakow, [https://lovekrakow.pl/galerie/zdjecie/id/85130#photo] [12.06.2020]
12. Lovekrakow, [https://lovekrakow.pl/galerie/zdjecie/id/85134#photo] [05.06.2020]
13. Obiekty, [https://www.uj.edu.pl/warto-zobaczyc/obiekty] [05.06.2020]
14. Obiekty sportowe, [https://swfis.uj.edu.pl/baza-sportowa/obiekty-sportowe] [02.06.2020]
15. Okolicznościowe napisy przed budynkami UJ, [https://www.uj.edu.pl/kalendarz/-/journal_content/56_INSTANCE_5De61CKaqzOl/10172/129591186] [07.07.2020]
17. Przegorzały, Wikipedia/Zygmunt Put Zeitpe020 [05.06.2020]
19. Swifteye, Collegium Novum, [https://promocja.uj.edu.pl/filmy-zdjecia-prezentacje/zdjecia] [05.06.2020]
20. Swifteye, [https://promocja.uj.edu.pl/documents/1417014/136883855/Kampus_UJ_KNB_fot.Swift eye.jpg/30d9160a-2c91-431b-ba17-f43c0f65ba3eb] [05.06.2020]
22. The Dinosaur bones, [http://www.cep.uj.edu.pl/wystawy/biogeografia] [20.06.2020]
23. The Faculty of Law and Administration, [https://wpia.uj.edu.pl/budynki] [05.05.2020]
24. Wojnar A., [https://promocja.uj.edu.pl/filmy-zdjecia-prezentacje/zdjecia] [05.06.2020]
25. Zamek Przegorzały, [http://www.polskiezabytki.pl/m/obiekt/9494/Krakow_-_Przegorzały_-_Zamek] [05.06.2020]
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