







# Desk research report in the project "Preventing post-COVID Social Exclusion Together"

Partial report on education systems during the COVID-19 pandemic in Poland

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# 1. Purpose and methodology of the study - characteristics of existing sources, short information about the authors of the study

This document is one of four desk research reports (from all the V4 partner countries). It is the second output of the project "Preventing post-COVID Social Exclusion Together" (Strategic Grant No. 22110213). The project is co-financed by the Governments of Czechia, Hungary, Poland and Slovakia through Visegrad Grants from the International Visegrad Fund. The mission of the fund is to advance ideas for sustainable regional cooperation in Central Europe. It is implemented by a transnational Research Team composed of:

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- Dr. Vít Šťastný Reports Author, Czechia
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The main goal of this project is to support social integration of young people, and their families, residing in rural areas and small towns in less developed regions of Central and Eastern Europe during periods of epidemic threats. This goal is to be achieved through the development of recommendations for civil society on how to successfully create Local Support Groups - Rapid Response Teams in the local environment. This project aims to help reduce the scale of educational and social inequalities in peripheral areas where the introduction of remote education had far more negative effects than in urbanized areas and metropolises.

Each of the project partners developed a separate diagnostic document for the country they represent. The development of a partial analysis is a necessary stage for the implementation of further research activities undertaken in this project.

The documents have a similar structure, however, due to the specificity of the countries some chapters of the partial analysis may differ from each other (e.g. in terms of the statistical indicators or sources used).

This document concerns the situation in Poland.

#### 1.1 Purpose of the research and research issues

In connection with this project, diagnostic research was undertaken in the countries of the Visegrad Group.

The main part of the research will be carried out using the survey method (the technique of the auditorium survey). The survey research is preceded by the so-called "from behind the desk" analysis (desk research analysis). The analysis aims to provide answers to the following questions:

- 1) What is the structure of the education system in Poland?
- 2) How did the the SARS-CoV-2 pandemic evolve in Poland in 2020-2021?
- 3) What impact did the pandemic have on formal education?
- 4) What impact did the pandemic have on the social inclusion of young people and their families in the context of social, educational and digital exclusion?
- 5) Which of the regions of Poland should be considered peripheral regions and accepted as the location for the survey research?
- 6) What are the examples of good practices implemented to counteract the phenomenon of exclusion (social, educational and digital) during the pandemic?

The structure of this document is determined by the questions listed above.

The purpose of the analysis carried out in chapter two is to present the education system in Poland. The analysis takes into account the structure of education, stages of formal education, compulsory education, and legal acts regulating formal education at the central and regional level.

The aim of the third chapter is to outline the course of the SARS-CoV-2 pandemic in Poland in 2020 and 2021, and to present its impact on formal education. Particular attention was paid to the implementation and continued use of remote and hybrid education, and the impact of the pandemic on the social inclusion of young people, and their families, in the context of social, educational and digital exclusion.

The fourth chapter deals with the selection of the region in which the research will be conducted: a region that meets the criteria of a peripheral region. The results of the analysis presented here indicate that the Podkarpackie Voivodeship meets the criteria. The analysis included in the fourth part of the study allowed for the characterization of the Podkarpackie Voivodeship in the context of economic development taking into account such indicators as: unemployment rate, GDP per capita, percentage of long-term unemployment, average salary, and indicators characterizing access to infrastructure. This part also presents the "peripheral areas" of the studied region.

The fifth chapter presents recommendations on how to support regional institutions in counteracting the phenomenon of exclusion during a pandemic. The description of

good practices during the SARS-COV-2 pandemic was preceded by the characteristics of potential regional institutional recipients. Then, the legal regulations related to the epidemic situation and the most important recommendations regarding the amendment of legal acts in the context of implementing remote education requirements during a pandemic were indicated. Recommendations on the implementation of good practices aimed at counteracting social and educational exclusion of students (and their families) without or with limited access to the Internet and digital equipment were also presented.

#### 1.2 Qualitative data analysis - desk research

This study uses the desk research method by reviewing domestic and foreign literature on the subject at hand. The basis of the applied method were documents of official statistics, reports, analyses, and scientific publications. The data which was used, inter alia, was collected in the databases of the Central Statistical Office and Statista, information available on the government portal: www.gov.pl and on the portal EURYDICE (Education Information Networks in Europe), data from the Ministry of Education and Science, the Central Educational Commission, the Consumer Federation and the Centrum Cyfrowe Foundation, legal acts issued by Polish government bodies, and scientific articles on the issues raised.

While reviewing the existing sources, it was established:

- 1) The course of the pandemic in Poland:
- In 2020, two waves of the pandemic were observed in Poland: the first wave lasting from the introduction of an epidemic emergency in March until the 24<sup>th</sup> of July, when an increase in the allowable number of people in stands, swimming pools, fairs and conferences was announced. The second wave, which began in October, when the sanitary regime announced the division of the country into yellow and red zones.
- The third wave took place in the spring of 2021. Some Polish specialists believe that calling this spring peak the third wave is unfounded. In their opinion, it is difficult to define the second wave in Poland. The onset of the pandemic was mild, and the first substantial outbreak of cases took place at the turn of October and November of 2020 (Medomet, 2021). Thus, in reality, there were two waves recorded in Poland, but in order to standardize the terminology with other countries, they are commonly referred to as three waves.
- In August 2021, there was a renewed increase in the number of cases in Western Europe, as well as in Poland, therefore the Polish government encouraged vaccination, which in its opinion is the most effective weapon in the fight against COVID-19 (Website of the Republic of Poland, 2021i).
- 2) Regarding the impact of the pandemic on the area of formal education:
- In order to reduce the danger associated with the spread of the pandemic, in March 2020, the Ministry of National Education decided to suspend traditional teaching and educational activities and introduced the obligation of distance education.

- The Ministry of National Education has prepared appropriate legal regulations enabling the implementation of distance learning methods and techniques for the purpose of didactic and educational tasks. The Ministry of National Education also released the Integrated Educational Platform ZPE, epodreczniki.pl, and implemented digital projects aimed at disseminating information and communication technologies in the teaching process. Particular attention has been paid to exams, for which students and teachers were bound by detailed sanitary guidelines developed by the Ministry of National Education, CKE and GIS. As a result, the matriculation examination due to the need to limit physical contact was carried out only in writing.
- In the 2020/2021 school year, most of the education was conducted remotely, which was caused by the continuation of the pandemic.
- School principals had the option to suspend traditional classes depending on the
  degree of epidemic risk and organizational possibilities. Moreover, they were
  obliged to organize stationary education at the request of the students' parents or
  use distance learning methods and techniques on the premises of the school.
- According to the information available at the time of the writing of this study, from September 1<sup>st</sup>, 2021 onwards all students will be studying at school on a prepandemic basis.
- In the 2021/2022 academic year, universities are to return to stationary learning. University rectors will be able to make decisions about distance learning, but only when the pandemic situation worsens.
- 3) Regarding the review of existing sources in terms of the impact of the pandemic on the social integration of young people and their families:
  - The COVID-19 pandemic has affected young people, their mental and physical health, and the functioning of entire families very clearly and in many areas.
  - As shown by the results of research carried out in Poland, among students there were a number of problems in the areas of health and social life, for example: depression, psychosomatic symptoms, anti-health lifestyle changes (lack of exercise and other activities), and lack of digital hygiene (Pyżalski, 2021, pp. 95-99).
  - The impact of the pandemic on different types of young people varies. A portion of young people (more than ten percent according to conservative estimates) have experienced very serious harm, often involving many spheres of life. There is also a very large group of young people who have avoided negative consequences pertaining to the pandemic. Finally, there is a small, although significant (approx. 5%) group of young people who, for various reasons, saw improvements in their lives during the school closure (Pyżalski, 2021, pp. 106-107).
  - The pandemic has had a major impact on the social integration, physical and mental well-being of young people, and their families, and has in many situations contributed to the emergence or worsening of social, digital, and educational exclusion.

- The pandemic clearly contributed to the deepening of social exclusion of some young people. The pandemic exacerbated the risk factors "... that may influence the course of the maturation process and define the important cultural context of social adolescence. These include, inter alia: improper functioning of the family, deterioration of the psychophysical condition, e.g. as a result of illness, significant limitation of fitness or even short-term disorders, deficit of emotional self-control" (Piotrowski, Wojciechowska, Ziółkowska, 2014, p. 5).
- During the pandemic, this catalog of risk factors was joined by the stress resulting from the need to learn remotely and the associated accumulation of feelings and thoughts resulting from a feeling of isolation and the lack of real contact with peers.
- The second type of exclusion that is caused (or exacerbated by) a pandemic is digital exclusion. Among the groups whose situation has worsened the most in this respect are seniors, rural residents, the disabled, as well as school and university students. The digital exclusion took the following forms: lack of appropriate equipment, lack or limitations of Internet access, lack of adequate (housing) conditions for learning, limited availability of educational services and resources (especially for students with disabilities: visually impaired, blind, hard of hearing and deaf) (Digital Center, 2020, pp. 4-6).

#### 1.3 Note about the author

Dr Paweł Walawender is an assistant professor at the Institute of Philosophy and Sociology of the Pedagogical University of KEN in Krakow. He is an expert and trainer in international research and consulting projects. In the past, he was an employee of the research and analysis department in the local government administration. He is also a labor market researcher. He specializes in conducting training in the field of Industry 4.0 and work-life balance (W-LB). He is an active participant of foreign study visits and training seminars. He is an author of several dozen scientific articles as well as research reports and analyses on the labor market and socio-economic development. He is a member of Polish and foreign industry organizations.

# 2. Polish education system in a nutshell (primary, secondary, higher education)

#### 2.1 Structure of education

Educational system – structure

The education system in Poland consists of (in accordance with the Act of the 7<sup>th</sup> of September, 1991 on the education system and subsequent changes introduced within it) kindergartens and other forms of pre-school education, primary schools, secondary schools (according to the new system - previously: upper secondary schools) and art schools. On the other hand, universities constitute a separate system of higher education and are not part of the education system. In addition, this system includes teacher training establishments, teacher training colleges, foreign language teacher colleges (successively closed) and colleges for social service workers.

Figure 1 shows the structure of education in Poland.

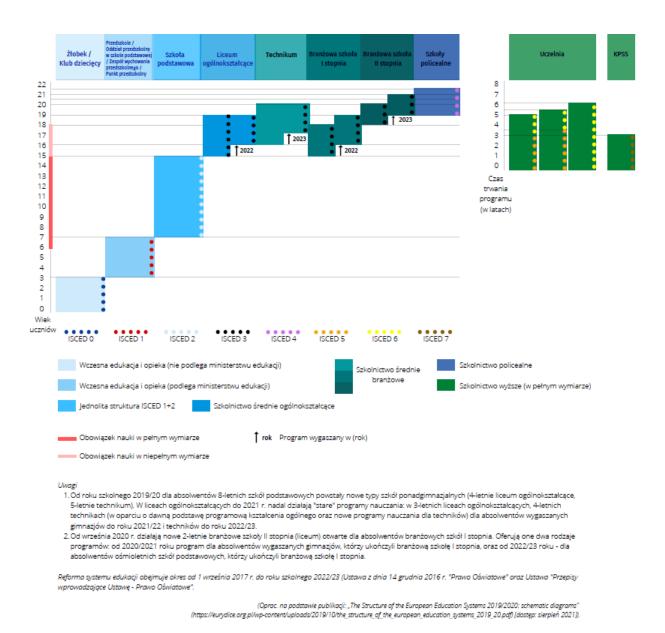


Figure 1. The structure of education in Poland (Source: Eurydice (2021b). The Structure of the European Education Systems 2019/2020: Schematic diagrams. Retrieved from: https://eurydice.org.pl/wp-

content/uploads/2019/10/the\_structure\_of\_the\_european\_education\_systems\_2019\_20.pdf)

Early childhood education and care for children up to the age of 3 is not the responsibility of the Ministry of Education. Early childhood education and care become the responsibility of the ministry from the age of 3 onwards starting with pre-school education. Children from 6 years of age (from 2004/05 onwards) compulsorily attended kindergartens or pre-school classes organized in primary schools, as the law introduced compulsory one-year pre-school preparation. From September 2011, this obligation applied to 5-year-olds; since 2015, it again applies to 6-year-old children.

The previously existing 8-grade primary school was reintroduced on September 1<sup>st</sup>, 2017. The primary school is divided into two stages: the first stage - grades I to III (integrated early childhood education), the second stage - grades IV to VIII.

From the 2018/2019 school year onwards, 8th grade students of primary school attend an external, universal eighth grade exam.

Therefore, the following types of schools are distinguished in the structure of the Polish education system:

- 1) 8-year primary school (compulsory for all students);
- 2) Secondary schools (secondary and post-secondary):
  - a. 4-year secondary school,
  - b. 5-year technical school,
  - c. 3-year branch school of the 1st degree,
  - d. 3-year special school preparing for work,
  - e. 2-year *branch school of the second degree* (continuation of education in a 3-year 1st degree industry school),
  - f. up to 2.5 years *post-secondary school* (for people with secondary education or industry secondary education).

In the new school system, there are two external exams: the eighth-grade exam and the matriculation exam. The functions of these exams do not change compared to the lower secondary school examination and the matriculation examination, respectively, in the previous system (CKE, 2021).

#### Higher education system - structure

Higher education provided by universities concludes with the acquisition of the professional title of bachelor, engineer, masters or an equivalent title. Specialist education is provided at ISCED 5, and tertiary education is classified at ISCED 6-8. Colleges of Social Workers (KPSS) are classified at ISCED level 5 and are not part of the higher education system in Poland, but belong to the education system.

Taking into account the diversity of both the level and form of education, the following elements are distinguished in the higher education system.

- First-cycle studies-bachelor's or engineering studies. Candidates with a secondary school examination certificate are admitted, enabling them to acquire knowledge and skills in a specific scope of education, which prepares them for work in a specific profession. Upon completion, students acquire a bachelor's or engineering degree.
- Second-degree studies- Masters. Candidates with a bachelor's or engineer's degree are admitted, enabling them to obtain specialist knowledge in a specific area of education, and prepare them for creative work in a specific profession. Candidates

- obtain a master's degree or an equivalent title. It is possible to apply for admission to third-cycle studies upon completion of second-degree studies.
- Uniform Master's Degree-Masters. Candidates with a secondary school examination certificate are admitted, enabling them to obtain specialist knowledge in a specific scope of education, and prepare them for creative professional work. Candidates obtain a master's degree or an equivalent title. It is possible to apply for admission to third-cycle studies upon completion of uniform master's degree.
- *Third-cycle studies* doctoral studies. Candidates with a master's degree or an equivalent degree are admitted, enabling them to obtain advanced knowledge in a specific field or discipline of science, prepare them for independent research and creative activity, and allow them to acquire a doctoral degree.
- *Postgraduate studies* a form of education intended for people with a university degree.
- *Specialized education* paid for and ran by public and private universities, and lasts at least three semesters. These programs include classes that develop practical skills. The specialist education program defines the learning outcomes and takes into account the universal characteristics of the first cycle as defined in the Integrated Qualifications System (Eurydice, 2021a).

The education system also includes the following institutions:

- Psychological and pedagogical counseling centers, including specialist counseling centers that provide psychological and pedagogical assistance to children, adolescents, parents, and teachers, and which also provide career and educational counseling,
- Youth educational centers, youth sociotherapy centers, special educational centers, and special educational centers for children and adolescents who require special learning, work and upbringing methods, as well as centers enabling severely mentally disabled children and adolescents, and children and adolescents with mental disabilities to complete compulsory education,
- Institutions providing care and education for students outside their place of permanent residence,
- Educational institutions enabling the development of interests and talents and management of free time,
- Lifelong learning establishments, practical education establishments, and training and professional development centers that enable the acquisition and supplementation of general knowledge, skills, and professional qualifications,
- Pedagogical libraries.
- Art institutions; artistic centers enabling the development of artistic interests and talents,
- Teacher training institutions (Eurydice, 2021a).

#### 2.2 Stages of formal learning and compulsory schooling

Compulsory education in the form of 8-years of primary school was the norm until the 1990s. Compulsory education was formally introduced in 1997 (Constitution of the Republic of Poland). The reform of the education system, implemented in September 1999, extended compulsory education by one year as part of the structure introducing a 6-year primary school and a 3-year lower secondary school, or middle school. Compulsory one-year pre-school preparation for children 6 years of age was introduced in September 2004. This obligation was later extended to children at 5 years of age (from September 2011). The age for starting compulsory education has also been temporarily lowered. As of September 2014, this obligation applied to the 6-year-olds born in the first half of the year, and from September 2015 to all 6-year-olds, however, from December 2015, the school age was increased again to 7 years. The changes that followed (after the adoption and execution of the Education Law Act (from September 1st, 2017) introduced compulsory education as 8-grades of primary school. Compulsory education is fulfilled in accordance with this act by attending public or non-public schools, post-primary school or carrying out an apprenticeship with an employer. The school system reform is implemented in accordance with the provisions of the Act of December 14th, 2017 -Regulations introducing the Act - Education Law. Students' education requirement to study in lower secondary schools ended on August 31st, 2019, and the obligation to study is fulfilled in accordance with this act by attending a public or non-public secondary school or by carrying out an apprenticeship with an employer.

Compulsory education is broken down into (Eurydice, 2021a):

- Compulsory one-year pre-school preparation,
- *Compulsory schooling,* which begins with the beginning of the school year in the calendar year in which the child reaches the age of 7 and lasts until the end of primary school, but no longer than until the age of 18,
- *Duty to study* until the age of 18, which may be met mainly by attending a secondary school (in the transitional period: until graduating from post-gymnasium school) or by completing apprenticeships with an employer.

The above-mentioned forms of compulsory education may also be fulfilled by attending a kindergarten or school abroad and at a diplomatic mission of another country in Poland. A person who graduated from post-primary school (formerly: post-gymnasium) before the age of 18, may also fulfill the obligation to study by attending classes at a university.

The child may also fulfill the compulsory one year of pre-school preparation outside a learning facility, i.e. at home, where the compulsory education is taught by the child's parents (on the basis of the Educational Law Act of December 14<sup>th</sup>, 2016 (Article 37)).

#### 2.3 Legal acts regulating formal education at the central and regional level

The Constitution of the Republic of Poland is the main legal basis for the education system. It states (some on the fundamental freedoms and rights of citizens) that (Eurydice, 2021c):

- Everyone has the right to education, and education up to the age of 18 is compulsory,
- Parents have the freedom to choose schools other than public for their children, citizens and institutions have the right to establish schools and universities,
- Education in public schools is free, the act may allow for paid provision of certain educational services by public universities,
- Public authorities provide citizens with universal and equal access to education to this end, they create and support systems of individual financial and
  organizational assistance for pupils and students,
- The autonomy of higher education institutions is ensured under the terms of the Act.

The education system is divided into the education system and the higher education system. The education system (as of November 2018) is regulated by the following legal acts:

- Act of September 7<sup>th</sup>, 1991 on the education system (as amended)
- Act of January 26<sup>th</sup>, 1982 Teacher's Charter (as amended)
- Act of December 14th, 2016 Regulations introducing the Act Education Law (amended by the Acts of April 21st, 2017 and October 27th, 2017)
- The Act of December 14<sup>th</sup>, 2016 Education Law (amended by the Acts of April 21<sup>st</sup>, 2017 and May 10<sup>th</sup>, 2018)
- Act of 27<sup>th</sup> of October, 2017 on financing educational tasks (as amended)

In the act on the education system, the applicable provisions are:

- System of external examinations (eighth grade, "matura" and vocational),
- Assessing, classifying and promoting students in public and, respectively, private schools,
- Providing students with material assistance,
- Use of school curricula and pre-school education programs, as well as the approval
  of textbooks for school use and the use of educational materials and exercise
  materials.

The Act on financing educational tasks contains provisions specifying the system of public financial support for schools and non-public institutions and the principles of subsidizing other public educational tasks and reimbursing expenditures for these purposes between the interested local government units.

The Act - Education Law constitutes these main principles:

- Fulfillment of compulsory schooling and education,
- · Recruitment to schools and public institutions,
- · Establishment and running of public and non-public schools and institutions,
- Division of competences in the management of schools and public institutions at the central, regional, and local levels and the powers of school heads, teachers, students and parents,
- Organization of education and upbringing in schools and public institutions,
- Exercising of pedagogical supervision,
- Establishment of teacher training institutions and in-service training centers,
- Educating children and adolescents with special educational needs,
- Lifelong learning for adults.

There is no single act that would comprehensively regulate the entire adult education and training system. Provisions relating to this issue can be found in the Act on the Education System and in the Act on Higher Education. The right to award the academic degrees of doctor and habilitated doctor and to apply for the academic title of professor on the terms specified in the Act is vested in the authorized university bodies.

The higher education system in Poland is regulated by the following legal acts (Eurydice, 2021c):

- Act of April 30<sup>th</sup>, 2010 on the National Center for Research and Development (Journal of Laws of 2010, No. 96, item 616)
- Act of April 30<sup>th</sup>, 2010 on the National Science Center (Journal of Laws of 2010, No. 96, item 617)
- Act of December 22<sup>nd</sup>, 2015 on the principles of recognition of professional qualifications acquired in the Member States of the European Union (Journal of Laws of 2016, item 65)
- Act of July 7<sup>th</sup>, 2017 on the Polish National Agency for Academic Exchange (Journal of Laws 2017, item 1530)
- Act of December 22<sup>nd</sup>, 2015 on the Integrated Qualifications System (Journal of Laws of 2016, item 64)
- $\bullet$  The Act of July  $3^{\rm rd},\ 2018$  Regulations introducing the Act Law on Higher Education and Science
- Act of July 20<sup>th</sup>, 2018 Law on Higher Education and Science (Journal of Laws 2018, item 1668)

## 3. The course of the SARS-CoV-2 pandemic in Poland and its impact on formal education

#### 3.1 The course of the pandemic in the country [in 2020-2021]

In December 2019, an atypical form of severe pneumonia appeared in the city of Wuhan in the Chinese province of Hubei, which has become a huge challenge for the whole world, especially for the health service. The disease was named COVID-19, and the pathogen causing it was named the SARS-CoV-2 virus. In March 2020, the World Health Organization (WHO) declared a pandemic state. COVID-19 cases have occurred in all the countries of the world. The first case of coronavirus infection in Europe was reported in France. In the following days, infections also appeared in Germany, Great Britain, but also in Italy. In Poland, the first case of this disease was recorded on March 4<sup>th</sup>, 2020 (Duszyński et al., 2020, p. 7), and from the second half of January, the Chief Sanitary Inspector advised Poles not to travel to China.

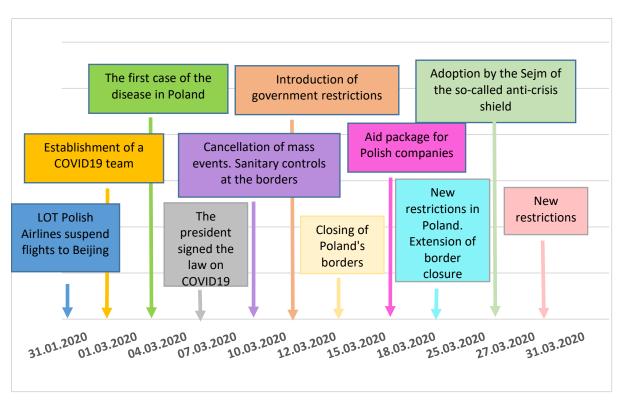


Figure 2. The beginning of the pandemic in Poland - calendar of events: Q1 2020 (Source: own study)

At the end of January, the then Ministry of Science and Higher Education decided to create a coronavirus team to coordinate activities at Polish universities. The Polish economy, especially the hotel and aviation industries, began to feel the first economic effects of the epidemic quite quickly. As mentioned above, on March 4<sup>th</sup>, 2020, the first case of the disease was recorded in Poland. The patient "zero" was a 66-year-old man who came to Poland from Germany. A few days later, on March 7<sup>th</sup>, the President of Poland

signed the law on the coronavirus, regarding special solutions related to the prevention and combating of Covid-19, and other infectious diseases and the emergencies caused by them. A day later, on March 8<sup>th</sup>, GIS recommended avoiding mass events and not traveling, especially to countries with a high risk of contracting the disease (LOT Polish Airlines suspended flights to Italy). On March 9<sup>th</sup>, sanitary controls were implemented at the main border crossings with Germany and the Czech Republic, as well as in trains and ports. From March 10<sup>th</sup>, mass events in Poland were canceled (all sports and artistic events of over 1,000 people, and in indoors with over 500 people). Sanitary controls at the Polish borders were also extended. On March 12<sup>th</sup>, the Polish government introduced restrictions, including the following measures:

- 1) Suspension of classes in public and private educational institutions, universities and art colleges for the period: March 12<sup>th</sup>, 2020 March 25<sup>th</sup>, 2020;
- 2) Complete closure of both primary (from March 16<sup>th</sup>) and secondary schools (from March 19<sup>th</sup>);
- 3) guaranteeing parents of children under 8 the benefit of an additional 14 days of care allowance in the amount of 80% of remuneration;
- 4) Suspending of the activities of cultural institutions (theaters, cinemas, philharmonics, museums), including the organization of cultural events (e.g. concerts, performances, etc.) with the participation of the public, taking place in closed rooms;
- 5) Cancellation of all mass events;
- 6) Places where larger groups of people gathered (e.g. swimming pools, ice rinks) were closed.

On March 15th, the borders of Poland were closed and could not be crossed by foreigners. Polish citizens were allowed to return to the country, but after their return they were subject to an obligatory 14-day home quarantine. International passenger air and rail connections were suspended. The transportations of goods still proceeded smoothly. Three days later, on March 18th, the Polish government introduced an aid package for Polish companies. From March 25th, new restrictions were introduced in Poland, including restrictions on movement, restrictions on the number of people in mass transit and during religious services, prohibition not only of mass events, but also of any meetings or gatherings, stricter checking procedures for people crossing the border, restrictions on the operation of shopping malls, bars, restaurants, pubs, casinos and other entertainment venues were closed. The border closure was extended until April 13th. On the last day of March, the Polish government announced new restrictions introduced in connection with the fight against the pandemic, which concerned, among others, restrictions on shopping, closure of hotels and service outlets, quarantine, prohibition on leaving home for people under the age of 18 without adult supervision, prohibition on using parks, beaches, boulevards, promenades and city bikes.

The following events should be mentioned among the most important facts and undertakings regarding the course of the pandemic in Poland in the period from the second quarter to the end of 2020:

At the end of December of 2020, vaccinations against Covid-19 began in Poland, and in January 2021, the process of universal vaccination against COVID-19 began (Website of the Republic of Poland, 2021a), which accelerated in the spring of last year (Website of the Republic of Poland, 2021b).

From February 1st, shops in shopping centers and malls as well as museums and art galleries were reopened - under strict sanitary regime. Restaurants and food outlets in shopping centers and malls remained closed (Website of the Republic of Poland, 2021c). With the mutation of the coronavirus, the epidemic in Poland has worsened again, which is why extended safety rules have been introduced throughout Poland. The government made a recommendation to work remotely wherever possible. These rules also applied to the Easter period (Website of the Republic of Poland, 2021d). At the end of April 2021, gradual and slow changes in sanitary restrictions began. From April 26th, some restrictions were loosened in provinces with the lowest average daily number of infections. Hairdressing and beauty salons were opened, and children from grades 1 through 3 of primary school switched to hybrid education. Other restrictions were extended (Website of the Republic of Poland, 2021e). In May, due to the decline in the number of COVID-19 infections and decrease in the number of people staying in hospitals, a slow defrosting of the economy and a return to normalcy began (e.g. hotels, galleries, museums, restaurant gardens began to operate) (Website of the Republic of Poland, 2021f). June brought about the easing of further restrictions (e.g. organizing weddings and gatherings up to 150 people, as well as fairs and conferences while maintaining the limit of 1 person per 15 m2) (Website of the Republic of Poland, 2021g). A number of restrictions were also relaxed due to the vacation period (Website of the Republic of Poland, 2021h).

In summary, in 2020 two waves of the pandemic were observed in Poland: the first wave lasting from the introduction of an epidemic emergency in March until July 24<sup>th</sup>, when an increase in the number of people in stands, swimming pools, fairs and conferences was announced. The second wave, which began in October, when the sanitary regime divided the country into yellow and red zones.

It has been accepted that in 2020-2021 the SARS-CoV-2 virus pandemic had three waves. As already mentioned, the first two took place in 2020. The third took place in the spring of 2021, and some Polish specialists believe that calling this spring peak the third wave is unfounded. In their opinion, it is difficult to define the second wave in Poland. The onset of the pandemic was mild, and the first outbreak of cases took place at the turn of October and November of 2020 (Medomet, 2021). Thus, two waves were recorded in Poland, and in order to standardize the terminology with other countries, it is customary to speak of three waves. The analysis of the data presented in Figure 3, presenting the

number of cases in Poland in 2020-2021, shows how the waves of the pandemic developed in our country.

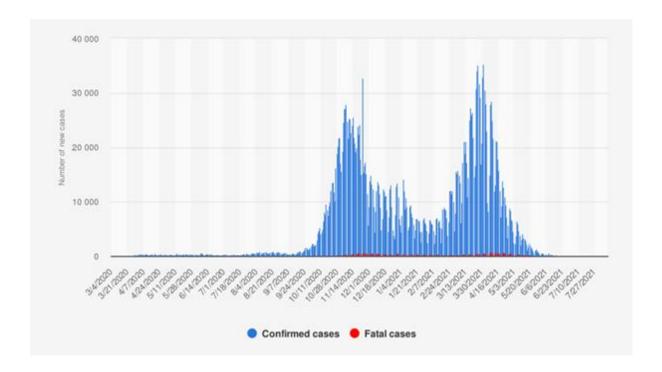


Figure 3. Number of new cases of coronavirus (COVID-19) confirmed in Poland in the years 2020-2021 (Source: Statista (2021). Retrieved from: https://www.statista.com/statistics/1102374/poland-coronavirus-covid-19-new-cases-by-report)

In August of 2021, there was a renewed increase in the number of cases in Western Europe, as well as in Poland, therefore the Polish government encouraged vaccination, which in its opinion is the most effective weapon in the fight against COVID-19 (Website of the Republic of Poland, 2021i).

# 3.2 Impact of the pandemic on the area of formal education [introduction of remote or hybrid education and its course (duration, age groups of pupils and students, etc.)]

In chapter 3.1, the remote or hybrid learning system in Poland, which was introduced during the pandemic, was mentioned. This system covered both part of the 2019/2020 school year and the entire 2020/2021 school year.

The 2019/2020 school year was very different from the previous ones. The didactic and educational activities were completed in June 2020 by 4.9 million students from 24 360 schools for children, adolescents and adults (Website of the Republic of Poland, 2021j). In order to reduce the danger associated with the spread of the pandemic, in March 2020, the Ministry of National Education decided to suspend traditional teaching

and educational activities and introduced the obligation of distance education. The most important changes introduced in primary and secondary education in the 2019/2020 school year are summarized in Table 1.

Table 1. Calendar of selected changes in the education system resulting from the pandemic in 2020 - primary and secondary schools

Date of introduction	Type of change
12.03.	temporary suspension of teaching, educational and care activities of the units of the education system
25.03.	the units of the education system carry out tasks using the methods and techniques of distance education (or otherwise)
04.05.	return of psychological and pedagogical counseling centers to work in a stationary system
06.05.	kindergartens, pre-school classes in primary schools and other forms of pre-school education may decide to continue their activity
25.05.	return of: care and educational classes with the possibility of conducting classes for students in grades 1-3 of primary schools; consultations with teachers in schools for 8th grade students and high school graduates; apprenticeships with employers for students of the 3rd grade of technical secondary school; student internships for 3rd grade students of the 1st degree industry school and technical school
01.06.	return of: consultation with teachers in schools for all students; practical classes for students of the 3rd grade of 1st level trade schools; practical classes in the field of driving motor vehicles for students in 3rd grade of technical secondary school; apprenticeships for all students of technical secondary schools;

Source: own study based on data of the Ministry of Education and Science: MEiN (2020). Downloaded fromhttps://www.gov.pl/web/edukacja-i-nauka/podsumowanie-roku-szkolnego-20192020.

In addition to the data summarized in Table 1, it is worth adding that the Ministry of National Education has prepared appropriate legal regulations that enable the implementation of didactic and educational tasks with the use of distance learning methods and techniques. The Ministry of National Education also released the Integrated Educational Platform ZPE epodreczniki.pl, and implemented digital projects aimed at disseminating information and communication technologies in the teaching process. Particular attention has been paid to the exams. Students and teachers were bound by

detailed sanitary guidelines developed by the Ministry of National Education, CKE and GIS, and the matriculation examination - due to the need to limit physical contact - was carried out only in writing.

In the 2020/2021 school year, most of the education was conducted remotely, which was caused by the continuation of the pandemic. That year, didactic and educational activities were completed by 4,920,498 students from 24,376 schools for children, adolescents and adults (Website of the Republic of Poland, 2021k). Table 2 summarizes the most important changes introduced in primary and secondary education in the 2020/2021 school year.

Table 2. Calendar of selected changes in the education system resulting from the pandemic in the 2020/2021 school year - primary and secondary schools

Effective Date	Type of change
from 01/09.	beginning of lessons being conducted in a stationary mode
October 24th, 2020 - May 16th, 2021	students in grades IV-VIII of primary school and students of secondary schools (from October 19th, 2020, students of secondary schools (in the yellow and red zones) begin distance learning
November 9th, 2020 - January 17th, 2021	grades 1-3 of primary school were transferred to distance education
01/18/2021 - 02/28/2021	grades 1-3 of primary schools returned to full-time teaching
from 1.03.2021	differentiation of the forms of education in grades 1-3 of primary school in particular regions; applied forms of teaching: hybrid, distance learning
from 03/05/2021	grades 1-3 of primary schools throughout the country returned to full-time education
May 17, 2021 - May 30, 2021	grades IV-VIII of primary school and students of secondary schools begun learning in a hybrid mode
from May 31, 2021	students returned to regular classroom studies

Source: own study based on data of the Ministry of Education and Science: MEiN (2021). Retrieved from: <a href="https://www.gov.pl/web/edukacja-i-nauka/podsumowanie-roku-szkolnego-20202021">https://www.gov.pl/web/edukacja-i-nauka/podsumowanie-roku-szkolnego-20202021</a>.

In addition to the information presented in Table 2, it should be added that principals could suspend traditional classes depending on the degree of epidemic threat, and the

related needs and organizational possibilities. Moreover, they were obliged, at the request of the students' parents, to organize classroom teaching or learning with the use of distance education methods and techniques on the premises of the school. As in the previous year, detailed sanitary guidelines developed by MEiN, CKE, and GIS were also in force in 2021 during the eighth-grade exam, and the matriculation examination, for both students and teachers. With the aim of limiting physical contact, and thus minimizing the risk of the threat of infection, the matriculation examination in 2021 was conducted only in writing.

According to the information available at the time of writing of this study, from September 1, 2021, all students will be studying at school on a pre-pandemic basis.

Also, in universities, teaching activities were carried out in compliance with the applicable sanitary safety requirements. The way in which universities organized education depended on the university authorities, who had the best understanding of the possibilities of organizing remote education and the specificity of courses in which education must be conducted in a traditional form. The method of organizing education that was recommended and at the same time used by universities was the mixed model. It consisted in the fact that a large part of the lectures, conversations, seminars, as well as some exercises and design activities were carried out remotely (synchronously or asynchronously). The rest of the classes that required direct contact with the students (practical, in particular, laboratory, or field) took place on a stationary basis, in compliance with the full sanitary regime (Website of the Republic of Poland, 2021). In the 2021/2022 academic year, universities are to return to stationary study. University rectors will be able to make decisions about returning to distance learning, but only when the pandemic situation worsens.

# 3.3 Impact of the pandemic on the social inclusion of young people and their families (social, educational and digital exclusion)

The COVID-19 pandemic has affected young people, their mental and physical health, and the functioning of entire families very clearly and in many areas. The period immediately following the closure of schools was extremely difficult and stressful, causing many young people to experience a strong emotional, psychological and social crisis. As shown by the results of research carried out in Poland, a number of problems in the area of health and social life appeared among students, for example: depression, psychosomatic symptoms, unhealthy lifestyle changes (lack of exercise and other activities), and lack of digital hygiene (Pyżalski, 2021, pp. 95-99). It is worth mentioning that, in the opinion of J. Pyżalski, "the impact of the pandemic on individual groups of young people is different. There is a group (more than ten percent according to conservative estimates) that has experienced very serious harm, often spanning many spheres of life. There is also a very large group of young people who have avoided the negative consequences. Finally, there is a small, though significant (approx. 5%) group of

young people who, for various reasons, gained during the school closure" (Pyżalski, 2021, pp. 106-107).

The pandemic has had a major impact on the social integration, physical, and mental well-being of young people and their families, and has in many situations contributed to the emergence or worsening of social, digital, and educational exclusion.

The pandemic clearly contributed to the deepening of social exclusion of some young people. The maturation process is marked by strong emotions of all kinds. The states of lability and over-expression of emotions are characteristic of young people. In this context, "potential risk factors that may influence the course of the maturation process and define an important cultural context of social adolescence are particularly important. These include, among others: improper functioning of the family, deterioration of the psychophysical condition, e.g. as a result of illness, significant limitation of fitness or even short-term disorders, deficit of emotional self-control "(Piotrowski, Wojciechowska, Ziółkowska, 2014, p. 5). During the pandemic, this catalog of risk factors was joined by the stress resulting from the need to learn remotely and the associated accumulation of feelings and thoughts, resulting from the feeling of isolation and the lack of real contact with peers. This had a negative impact on the well-being of young people and often resulted in emotional overload, both among adolescents and among older learning youth, i.e. students. It should be emphasized that in the teaching process it is important not only to transfer / acquire knowledge, but also to educate and meet the needs of young people, including the needs of forming relationships with peers, contact with other people, playing roles in a social group, etc. Due to the need for distance learning, these needs were not met during the pandemic. The impact of the isolation that resulted from remote learning on the social relations of children and adolescents was very visible.

It must be noted that the stationary learning mode gives the lives of children and adolescents a specific rhythm, creates a logical structure and clearly indicates what and when to do something, how to proceed, etc. Alongside youth there are teachers who provide guidance in activities, and students have a basis to build their own lifestyle. Distance learning has disrupted this school rhythm and the structure of everyday life. Young people, spending a lot of time at home, in front of the computer, lost direct contact with other people and began to have problems with maintaining existing social relationships and creating new ones. Both the relationships with the teaching staff and with peers were loosened. Children who studied in the first grade in 2020-2021 were in a particularly difficult situation.

As part of counteracting social exclusion in the period when schools were closed, it was very important to meet the basic psychological needs (including the need for safety) of young people and to maintain relationships in the home and school environment. The support provided by teachers and the methods and solutions used to support cooperation and communication between students, as well as the teacher-student relationship were

of great importance in this respect (Pyżalski, 2021, p. 107). However, in many cases the so-called social proximity has been severely limited.

The second type of exclusion that is caused (or exacerbated by) a pandemic is digital exclusion. According to the report of the Consumer Federation entitled Digital exclusion during a pandemic, limited access to and use of the Internet and computers in selected social groups, the lockdown, and a number of limitations in social and economic life, have deepened digital exclusion. Among the groups whose situation worsened the most were, in addition to seniors, rural residents, the disabled, and school and university students. According to the data of the Central Statistical Office for 2019, Poland has one of the highest rates of people who never use the Internet (15%), which places it in sixth place among the European Union countries. Slightly over 4.5 million Poles have never used the Internet. Additionally, the rate of people who have never used a computer is also high (19%),

Digital exclusion took the following forms: lack of appropriate equipment, lack or limitations of Internet access, lack of adequate (housing) conditions for learning, limited availability of educational services and resources (especially for students with disabilities: visually impaired, blind, hard of hearing and deaf) (Digital Center, 2020, pp. 4-6).

Although children and adolescents in Poland are considered to be the least excluded group among people affected by digital exclusion, remote learning forced by the pandemic has shown that students' access to information and communication technologies (ICT) was (and is) often difficult or impossible. A group of students who did not participate in the remote education system at all, and a group whose participation in on-line lessons was not systematic were observed. In the report, the main reasons for this state of affairs were identified precisely as digital exclusion, as well as family dysfunction. Estimates made on the basis of international PISA surveys (Program for International Student Assessment) show that 1-1.5% of students in Poland (approx. 50-70 thousand) have neither a computer nor a tablet at home (these are the most excluded people: disabled children, children living in extreme poverty (Digital Center, 2020, p. 7)), while approx. ¼ (slightly over a million students) do not have their own ICT equipment and have to share devices with remotely learning siblings or remotely working parents (Consumer Federation, 2021, p. 22). In addition, many families (especially in rural areas) do not have adequate broadband internet access. Some young people (50% of people who have prepaid phones) have problems with data limits in their mobile access to the Internet (Digital Center, 2020, p. 6).

It is also worth mentioning the problems of young people who are addicted to the Internet / computer / smartphone, in the case of which remote education has exacerbated such problems.

Digital exclusion translates into exclusion in remote education. Among the reasons for educational inequality and exclusion, specialists mention shortcomings and technical / digital deficiencies (e.g. lack of or limited access to ICT devices or broadband Internet). It is also worth mentioning here other reasons for digital exclusion, such as, for example: health (chronic illness, disability), competence (lack of independent learning skills, insufficient digital competences of students, parents), environmental / family (domestic violence, addiction, mental illnesses) or economic (lack of funds to finance additional activities developing young people's interests, poor learning conditions) (Kozański, 2021, p. 15). During the pandemic, this group of closely related technical and digital reasons were significant for the emergence or deepening of educational exclusion. The authors of the report entitled How to counteract exclusion in education? (PowerED, 2021) indicated several recommendations aimed at improving the educational opportunities of students and mitigating inequalities in this area, for example: rebuilding the teacher-student relationship, multi-faceted support and help for teachers; introducing permanent hybrid teaching dictated by the adaptation to the individual needs of the student, and using group work and project-based work as a permanent form of educational activities.

## 4. Characteristics of a selected region, including an overview of the economic situation

One of the key analytical tasks carried out under this project is the selection of a region that would be an area for questionnaire research. According to the assumptions of the project, the region must bear the features of a peripheral region.

Defining a peripheral region is a difficult task, because "peripherality" can be understood in various ways (geographic, economic, educational, infrastructural, etc.). Other terms for the peripheral region are: problematic, marginal, economically underdeveloped, depressive, etc. (Proniewski, 2014, p. 79). Also, on the basis of scientific theories, the issue of peripherality can be approached through the prism of sociological theories of social development (especially the theories of modernization and dependent development - the opposition of "center-periphery") or economic theories (the concept of labor market segmentation and the concept of human capital).

Peripheral regions are usually characterized by low indicators in the socio-economic sphere, unfavorable development prospects, and poor communication accessibility. These characteristics result from: unfavorable geographical location, low-quality technical infrastructure, high transport costs, and long distance from economic centers and key growth centers (Proniewski, 2014, p. 79). Sometimes the border character of the region may be considered an aspect of peripheral nature [Miszczuk, 2010, p. 236].

For the purposes of this project, the Podkarpackie Voivodeship was selected as the research area. In many ways, this province deserves to be called a peripheral region. Generally, this peripherality is manifested in a weaker, less favorable position of the voivodeship, measured not only in relation to the economic center of the country, but also other regions in Poland.

Due to the aforementioned multi-faceted nature of the term "peripheral region" and the availability of statistical data, in this chapter of this study, the peripherality of the Podkarpackie Voivodeship has been demonstrated by referring to the following areas and indicators that characterize them:

- 1) Geographical aspect: location and distance from the cultural and economic center of the country;
- 2) Economic development (GDP per capita, participation in the creation of GDP);
- 3) Entrepreneurship development (number of entities per 10,000 inhabitants);
- 4) Labor market (unemployment rate, percentage of long-term unemployed);
- 5) Income of the population (salaries);
- 6) Living conditions and standard of living in households.

Due to the large diversity of the Podkarpackie Voivodeship in terms of socio-economic development and its relatively large area (in relation to administrative units in the project

partner countries), it has become necessary to select smaller administrative units (poviats) within the region itself. To do this, the method of multivariate comparative analysis (ranking and cluster analysis) was used.

#### 4.1 Economic situation in the region

Geographic conditions, administrative division, population

The Podkarpackie Voivodeship was established under the state self-government reform on January 1st, 1999. Its area includes the former voivodeships of Rzeszów, Przemyśl, Krosno and partly Tarnobrzeg and Tarnow. Almost all of these areas, with the exception of small fragments, in the years 1946-1975 formed the "old" Rzeszów Province. Although these areas have developed separately over the last quarter of a century, thanks to the previously formed bonds, it can be assumed that they have the features typical of an economic region. The lands that are part of the newly created Podkarpackie Voivodeship have the same agro-industrial profile, common problems, a sense of community, tradition, cultural identity, and above all - they function in the same social consciousness (Development Strategy, 2000, p. 7).

The voivodeship covers an area of 17.9 thousand square meters (5.7% of the territory of Poland), which places it in the 11th position in the country in terms of size. The eastern and southern borders of the voivodeship are at the same time the national borders with Ukraine and Slovakia, respectively. Despite its border location, the voivodeship has an almost uniform national structure. An important feature of this area, from the point of view of economic geography, is its location on an important international route connecting Western Europe and Poland with the East. It is also the southernmost voivodeship of Poland.

The voivodship's administrative system consists of 160 communes, 21 poviats, 4 townships and 53 urban centers, the most important of which are: Rzeszów, Stalowa Wola, Przemyśl, Mielec, Tarnobrzeg, Krosno, Dębica, Jarosław, Sanok and Jasło.

In terms of the number of inhabitants (about 2.13 million people), it ranks 9th in Poland (5.5% of Poland's population).

The voivodeship capital, Rzeszów (196,000 inhabitants, which constitutes 9.2% of the total population of the voivodship), is a significant industrial center both in the region and in the country. Rzeszów is known for the production of home appliances, and its food and machine industry, but the main industries in Rzeszów are the aviation industry, the pharmaceutical industry and the IT industry.

When assessing the location of the voivodeship, it should be noted that in relation to Poland's economic, political and cultural centers, the voivodeship should be considered peripheral.

#### Gross domestic product

It is worth using a synthetic indicator of economic activity when assessing the economic position of the Podkarpackie Voivodeship in relation to other regions of Poland, such as the value of gross domestic product.

In 2018, about 5.5 percent of the Polish population lived in the Podkarpackie Voivodeship, while the gross domestic product produced in this area at that time accounted for 3.9% of the total product produced in Poland.

In 2018 (GUS, 2019), the GDP per capita was PLN 38,872, which placed Podkarpackie before the Lubelskie and Warmińsko-Mazurskie voivodships.

Table 3. Gross domestic product per capita in selected years

Touritouial unit	Gross domestic product per capita, Poland = 100						
Territorial unit	2000	2003	2006	2009	2012	2015	2018
Poland	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Lower Silesia	102.8	102.1	107.1	108.9	113.4	111.5	109.7
Kuyavian- Pomeranian Voivodeship	89.6	88.9	86.4	83.5	81.3	81.6	81.2
Lublin Province	71.6	72.4	69.1	68.7	70.2	68.8	67.8
Lubuskie	89.4	86.6	89.7	85.2	83.3	83.6	82.3
Lodzkie	88.7	92.8	92.2	92.1	93.3	93.6	93.1
Lesser Poland	89.7	89.3	90.2	88.7	88.2	90.1	92.1
Masovian Voivodeship	152.8	151.5	155.2	156.5	159.3	159.2	160.5
Opole Province	83.3	79.6	81.4	83.8	80.8	80.8	79.4
Podkarpackie Province	72.7	74.7	71.4	70.5	70.0	71.0	70.6
Podlasie	73.5	75.4	72.7	73.3	72.0	71.6	71.7
Pomeranian	98.8	99.3	98.7	97.6	97.8	96.2	97.2
Silesian	106.2	108.3	106.0	107.5	105.9	103.9	103.9
Świętokrzyskie Province	78.0	80.1	78.1	78.7	75.0	72.5	72.3
Warmia-Masuria Province	77.5	76.8	74.5	72.9	71.8	71.1	69.0
Greater Poland	106.8	105.6	106.2	107.6	105.7	108.5	108.0
West Pomeranian	99.0	92.4	90.0	86.4	84.1	84.7	83.2

Source: GUS (2021). Downloaded from: www.stat.gov.pl.

Also per capita, the gross domestic product in the Podkarpackie Voivodeship is significantly lower than in other regions (14th place in Poland - only before Lubelskie and Warmińsko-Mazurskie voivodeships). In 2018, it accounted for 70.6 percent of the product attributable to an average Pole.

Due to the very low level of GDP per capita in 2004, the currently achieved level of national income limits Podkarpackie Voivodeship in the programming period of the financial perspective in 2021-2027. The Podkarpackie Voivodeship is still one of the regions that are particularly privileged beneficiaries of the European Cohesion Policy due to the low gross domestic product in Poland per inhabitant, according to the purchasing power parity, which does not exceed 75% of the EU average (Strategy, 2020, p. 43).

Four urban poviats are of key importance for generating GDP in Podkarpacie: Rzeszów, Tarnobrzeg, Krosno and Przemyśl, where about 40% of the voivodship's GDP is generated. These four centers are relatively evenly distributed throughout the voivodeship, which is beneficial for its socio-economic development.; however, there was a regression in the years 2004-2015 in the national system of poviats in the Podkarpackie voivodship related to medium-sized urban centers, such as: Dębica, Jarosław, Jasło, Sanok, Stalowa Wola.

#### Entities of the national economy

In terms of the development of entrepreneurship, the Podkarpackie Voivodeship ranks poorly compared to the rest of Poland. This is evident by indicators such as entities registered in the REGON register per 10 thousand residents or newly registered units in the REGON register per 10 thousand residents. According to data for 2005, the value of these indicators places Podkarpackie Voivodeship in the last place in Poland.

Table 4. Entrepreneurship in the Podkarpackie Voivodeship compared to other voivodeships as at the end of 2005

Territorial unit	Entities registered in the REGON register for 10,000 Population	Units newly registered in the REGON register per 10 thousand. Population	Units removed from the REGON register per 10,000 Population
Lower Silesia	1,048	81	83
Kuyavian- Pomeranian Voivodeship	905	67	55
Lublin Province	684	51	48
Lubuskie	1 011	79	48
Lodzkie	968	64	45

Territorial unit	Entities registered in the REGON register for 10,000 Population	Units newly registered in the REGON register per 10 thousand. Population	Units removed from the REGON register per 10,000 Population
Lesser Poland	887	63	58
Masovian Voivodeship	1 167	79	48
Opole Province	865	52	thirty
Podkarpackie Province	663	46	45
Podlasie	741	59	70
Pomeranian	1 030	85	68
Silesian	910	61	66
Świętokrzyskie Province	813	53	39
Warmia-Masuria Province	771	70	60
Greater Poland	1 012	75	53
West Pomeranian	1 221	94	65

Source: www.stat.gov.pl.

Registered unemployment rate and percentage of long-term unemployed

When assessing the level of economic development of a given area, it is customary to take into account the registered unemployment rate. In terms of this indicator, the Podkarpackie Voivodeship is among the voivodships with an average unemployment rate. The average annual unemployment rate, determined on the basis of BAEL, in the Podkarpackie voivodship was 16.6% and was lower than the national rate by 1.1 percentage points. Nonetheless, this is not an indicator that sufficiently (and in the case of the registered unemployment rate) characterizes the labor market.

Indicators relating to the structure of unemployment can also be a determinant of the level of economic development. One of them is the percentage of the unemployed who remain unemployed longer than 12 months from the date of their initial unemployment registration (long-term unemployment in a continuous form).

The analysis of the scale of long-term unemployment is important for inferring the features of the unemployment source. The occurrence of long-term unemployment may indicate the importance of structural factors in shaping the total unemployment rate (mismatch of supply and demand for labor in terms of spatial, qualification, and occupational conditions) (Socha & Sztanderska, 2000, p. 131).

At the end of 2020, 46.4% of the total number of unemployed people in the Podkarpackie Voivodeship had been unemployed for more than 12 months from the date of their initial unemployment registration. It was the highest percentage in Poland. At that time, the average rate in Poland was 39.7%.

Table 5. Unemployment rate and percentage of long-term unemployed (over 12 months) in Poland by voivodship at the end of 2020

Territorial unit	Unemployment rate (in%)	% of the long-term unemployed in total unemployed
Poland	6.2	39.7
Lower Silesia	5.6	37.0
Kuyavian-Pomeranian Voivodeship	8.9	43.8
Lublin Province	8.2	45.8
Lubuskie	6.2	29.7
Lodzkie	6.2	42.3
Lesser Poland	5.3	36.8
Masovian Voivodeship	5.2	43.4
Opole Province	6.9	38.9
Podkarpackie Province	9.1	46.4
Podlasie	7.8	44.8
Pomeranian	5.9	34.0
Silesian	4.9	32.1
Świętokrzyskie Province	8.5	43.6
Warmia-Masuria Province	10.1	37.2
Greater Poland	3.7	31.3
West Pomeranian	8.3	37.5

Source: www.stat.gov.pl.

#### *Income of the Podkarpacie population*

The indicator that shows the level of development of a given area is the level of income of the people living there. It is worth referring to indicators such as the average monthly gross salary, the average level of retirement and disability pensions and the size of household income.

The average wage in the Podkarpackie Voivodeship has been one of the lowest in the country for many years and in 2019 it accounted for 84.7% of the national average wage.

Lower salaries were recorded only in the Warmińsko-Mazurskie voivodship (83.4% of the national average salary).

Table 6. Average monthly gross wages and salaries in Poland in relation to the national average at the end of 2019

Name	Value in PLN	Average monthly gross remuneration in relation to the national average (Poland = 100)
Poland	5,181.63	100.0
Lower Silesia	5 323.55	102.7
Kuyavian-Pomeranian Voivodeship	4,494.37	86.7
Lublin Province	4,564.85	88.1
Lubuskie	4 559.96	88.0
Lodzkie	4 790.10	92.4
Lesser Poland	5,098.26	98.4
Masovian Voivodeship	6,248.47	120.6
Opole Province	4,712.47	90.9
Podkarpackie Province	4 388.16	84.7
Podlasie	4 575.88	88.3
Pomeranian	5,142.01	99.2
Silesian	5,177.86	99.9
Świętokrzyskie Province	4,490.41	86.7
Warmia-Masuria Province	4,319.51	83.4
Greater Poland	4,687.39	90.5
West Pomeranian	4,769.71	92.1

Source: www.stat.gov.pl.

Living conditions and standard of living in households (indicators characterizing access to infrastructure)

It is impossible to show the level of economic development of a voivodeship without taking into account the indicators describing the standard of living of the inhabitants. Determining the standard of living of the inhabitants of Podkarpackie mainly comes down to the analysis of two basic concepts, i.e. the standard of living and the quality of life. These issues are complicated phenomena, mainly because their assessment depends largely on the indicators adopted for the analysis (Dziemianowicz, 2000, p. 4). In this study,

indicators of the level of living conditions are compiled into the following categories: income of the population, housing situation of the population, intermediate consumption measures, commercial network, education and training opportunities, access to culture, health protection, and the condition of transport and telecommunication infrastructure.

Even a cursory analysis of the indicators concerning the standard of living conditions of the population shows that the Podkarpackie Voivodeship is in a weak position in Poland. Basically, in each group of indicators, Podkarpackie comes out poorly, usually occupying one of the last places in the hierarchy of voivodeships.

Table 7. Selected indicators of material and civilization living conditions in the Podkarpackie Voivodeship in 2020

Indicator categories	Detailed indicators	Poland	Voivode ship	Positi on
Income of the population	Average monthly available income per capita in households in 2019	1819.14	1471.49	16
II a sain a aite ati a a	Number of people per apartment	2.59	3.13	16
Housing situation of the population	Average usable floor space per 1 person (m2)	28.7	26.2	14
Intermediate measures of	The amount of electricity consumption in cities by a household per capita in kWh	714.9	564.6	15
consumption	Consumption of water from waterworks in households in cities per capita in m3	35.6	31.6	13
Commercial	Population per shop	99	105	5
network	Retail sale of goods per capita	23906	12988	14
	Students of higher education institutions per 10,000 population	292	204	12
Dogsibility of	Net enrollment rate of basic vocational school students in% of population aged 16-18	12.24	12.14	9
Possibility of education and training	Net enrollment rate of students of vocational and general vocational schools in% of population aged 16-18	35.07	39.33	2
	Net enrollment rate of post- secondary school students in% of population 19-21 years old	9.79	8.56	13

Indicator categories	Detailed indicators	Poland	Voivode ship	Positi on
Access to culture	Viewers and listeners in theaters and musical institutions per 1,000 population	252	91	16
	Borrowing books from public libraries per 1000 people	3701	3730	10
	Medical advice provided in outpatient health care per capita	6.1	5.6	16
Hoolkh gang	Population per bed in general hospitals	213	237	13
Healthcare	Population per outpatient health care facility	1921	1696	5
	Number of infant deaths per 1,000 births	6.4	7.3	14
	Passenger cars registered for 1000 people	323	299	10
State of transport and	Main telephone lines per 1,000 population	308.3	253.5	15
telecommunicatio n	Public roads with hard surface per 100 km2 in km	81.2	78.6	9
	Standard-gauge railway lines per 100 km2 in km	6.3	5.2	12
Safety of life	Offenses found in completed preparatory proceedings in 2005 per 10 thousand population	362	209	1
	Road accidents per 100,000 population	14	14	12

Source: Statistical yearbook of voivodeships, Place of publication: GUS, Warsaw 2020. Retrieved from: <a href="https://www.stat.gov.pl">www.stat.gov.pl</a>.

#### 4.2 Description of the peripheral areas of the region

Even cursory observations on indicators showing the socio-economic situation in individual poviats of the region allow for the conclusion that the Podkarpackie Voivodeship is internally strongly diversified. For the purposes of this project, based on 12 selected indicators, using the methods of multidimensional comparative analysis (ranking and cluster analysis), an initial verification of 25 poviats of the Podkarpackie Voivodeship was carried out, which allowed for the selection of the poviat for the study. The indicators included in the research are presented in Table 8.

Table 8. Basic characteristics of the indicators adopted for the research

	$\overline{x}$	Min	Max	σ	Vz
entities entered in the REGON register for 10,000 population	876.8	662	1566	234.7	26.8
business institutions per 10 thousand entities of the national economy	451.6	270.3	1202.2	205.9	45.6
foundations, associations and social organizations per 10,000 residents	39.2	28	76	11.7	29.8
share of foundations, associations and social organizations in the total number of entities of the national economy	4.5	3.4	6.8	0.8	17.5
culture centers, clubs and day-rooms for 10 thousand. population	1.7	0.4	4.9	1.2	68.7
Registered unemployed persons unemployed longer than 1 year in% of the total unemployed	44.5	29.3	54.7	8.2	18.4
registered unemployment rate	10.3	3.2	16.7	3.9	37.4
Polish - average result (%)	60.2	55	65	2.4	3.9
mathematics - average result (%)	47.0	41	58	3.7	7.8
English - average result (%)	51.8	46	67	4.7	9.1
public libraries for 10,000 population	3.4	1	6.4	1.2	36.6
incomes of communes and cities with poviat rights: incomes per capita	6075.0	5209.8	8920.1	1024.2	16.9

Source: own study.

In the first stage of the research, the poviats were divided into groups based on similar features. Cluster analysis was used for the analysis, and more precisely by Ward's method. It enables the division of poviats into groups that are internally consistent and those that differ from one another. The research shows that there are 5 groups of poviats:

Group A Bieszczady, Leski

Group B Lubaczowski, Tarnobrzeg, Przemyśl and Przeworsk

# Group C. Brzozowski, Strzyżowski, Leżajsk, Niski, Ropczycko-Sędziszowski, Łańcut, Rzeszów

Group D Dębicki, Mielecki, Krosno, Kolbuszowski, Stalowa Wola, Jarosław, Jasielski, Sanok, Tarnobrzeg poviat

#### Group E Krosno County, Rzeszów County and Przemyśl County.

The division into groups is shown in the tree diagram in Figure 1. The red line shows the cut-off level for division into groups.

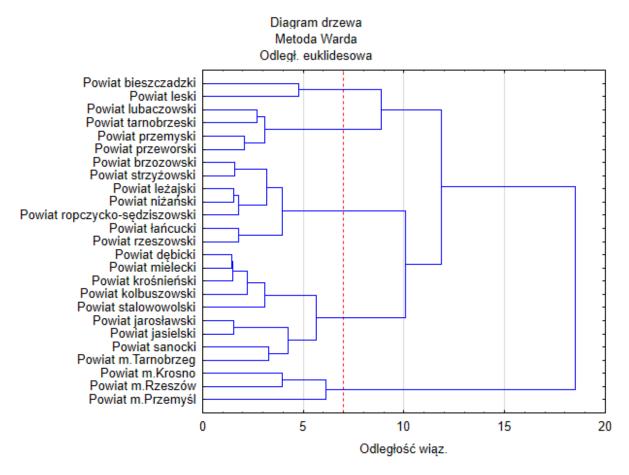


Figure 4. Tree diagram. Division of poviats into homogeneous groups in terms of selected features (Source: own study)

By means of group averages, groups with the highest level of the analyzed indicators and those in which the analyzed indicators have the worst values were identified.

Figure 2 - group averages show that the two clusters that can be considered weak in terms of the analyzed indicators are cluster C covering the following poviats: Brzozowski, Strzyżowski, Leżajski, Niski, Ropczycko-Sędziszowski, Łańcut, Rzeszów and D, covering the following poviats: Dębicki, Mielecki, Krośnieński, Kolbuszowski, Stalowa Wola, Jarosław, Jasielski, Sanok, Tarnobrzeg poviat

In cluster D almost all indicators take values below the average (global) level and some exceed it. In cluster C most indicators are below the average level. The two key indicators

pertaining to unemployment (registered unemployed persons unemployed for more than 1 year in % of total unemployed persons, and the registered unemployment rate) are much above the average level. So, after a thorough analysis of the indicators, cluster C includes poviats with the worst levels of the analyzed indicators. There are seven counties in total in cluster C.

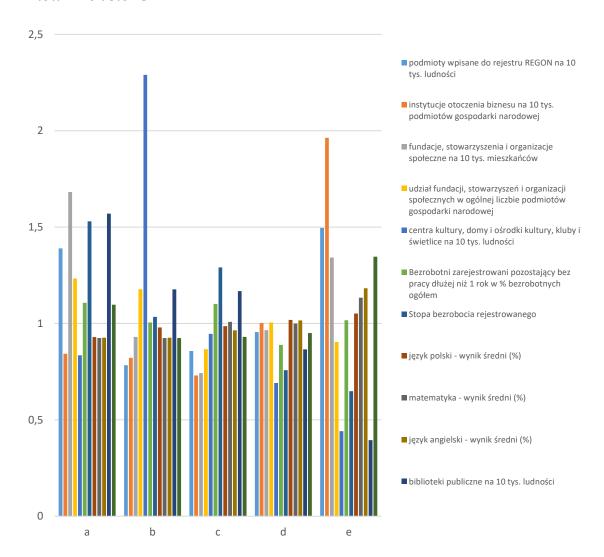


Figure 5. Group Means Chart (Source: own study)

A second taxonomic method was used, which allowed for the creation of a ranking of poviats in terms of the considered features and sorting them from the best to the worst level. The ranking shows that the last places are occupied by four poviats from the Podkarpackie Province: Strzyżowski, Brzozowski, Niski and Leżajski. They all belong to cluster C - which is marked in green above. The colors in table 9 indicate belonging to the appropriate group from the cluster analysis.

Table 9. Ranking of Podkarpackie Voivodeship poviats in terms of selected 12 indicators

District	Rank
district of the city of Krosno	1
Sanok poviat	2
district of the city of Rzeszów	3
district of the city of Tarnobrzeg	4
Stalowa Wola poviat	5
Mielec poviat	6
district of the city of Przemyśl	7
Lubaczów poviat	8
Bieszczady poviat	9
Rzeszów poviat	10
Dębica poviat	11
Krosno poviat	12
Kolbuszowa poviat	13
Łańcut poviat	14
Lesko poviat	15
Jarosław poviat	16
Przemyśl poviat	17
Tarnobrzeg poviat	18
Przeworsk poviat	19
Ropczyce-Sędziszów poviat	20
Jasło poviat	21
Leżajsk poviat	22
Nisko poviat	23
Brzozów poviat	24
Strzyżów poviat	25

Source: own study.

#### Summary:

- 1) As a result of the cluster analysis, a group of poviats with the worst level of the analyzed indicators was distinguished. It was cluster C which included poviats: Brzozowski, Strzyżowski, Leżajski, Niski, Ropczycko-Sędziszowski, Łańcut, and Rzeszów.
- 2) On the basis of the ranking, it was clarified which of the poviats have the worst situation in terms of the analyzed indicators -Strzyżów and Brzozów Poviat which occupy the last two places in the ranking.

# 5. Recommendations on supporting regional institutions in counteracting the phenomenon of exclusion during a pandemic

## **5.1 Characteristics of potential institutional recipients**

Table 10. Potential institutional recipients of the project results

Name and type of institution (public / NGO / commercial)	Registered office address, including region	Brief description of the institution (areas of activity, history, etc.)
Pedagogical University of National Education Commission in Krakow (public entity)	ul. Cadets 2, 30-084 Krakow, voiv. Lesser Poland	Pedagogical University of National Education Commission in Krakow - a public pedagogical university. It is a continuation of the State Pedagogical College in Krakow, founded on May 11st, 1946, which began operating on October 25th, 1946
Voivodship Labor Office in Rzeszów	Ul. Naruszewicza 11, 35- 055 Rzeszów, voiv. Podkarpackie Province	An institution which deals with research and analysis of the labor market, providing information to the unemployed, and dealing with job placement for jobseekers.
Education Office in Rzeszów	Ul. Grunwaldzka 15, 35- 959 Rzeszów, voiv. Podkarpackie Province	Performs on behalf of the voivode in the voivodeship in tasks and competences in the field of education specified in particular in the Act of December 14 <sup>th</sup> 2016 Educational Law (Journal of Laws of 2021, item 1082);
University of Rzeszow	Al. Rejtana 16C, 35-310 Rzeszów, voiv. Podkarpackie Province	Polish public university in Rzeszów, which is the largest academic university in south- eastern Poland.
Podkarpackie Teacher Education Center in Rzeszów	ul. R. Niedzielski 2 35-036 Rzeszów, voiv. Podkarpackie Province	The areas of activity of PCEN include:  • diagnosing educational needs of principals, pedagogical supervision employees and local government units in the field of education management;

Name and type of institution (public / NGO / commercial)	Registered office address, including region	Brief description of the institution (areas of activity, history, etc.)
		<ul> <li>improvement and training of educational managers, teachers and employees of schools and institutions;</li> <li>implementation of educational tasks commissioned by the Podkarpackie Education Superintendent;</li> <li>cooperation with universities, associations, organizations, etc. in order to exchange experiences and implement joint projects;</li> <li>cooperation with educational centers in Poland;</li> </ul>
Foundation Educare et Servire	ul. Rynek 21, 39-200 Dębica voiv. Podkarpackie Province	The goal of the foundation is to support the development of local civil society through broadly understood educational processes aimed at increasing social selfawareness and creating individual and collective active attitudes.
Societatis Foundation	Ul. Broniewskiego 1, 35- 222 Rzeszów, voiv. Podkarpackie Province	The Foundation offers help in counteracting the abuse of people who are in a difficult life situation. It also implements educational programs.
STAWIL Sp. z o. o	ul. Langiewicza 29, 35- 021 Rzeszów, voiv. Podkarpackie Province	A training company that implements, among others, education projects.
BD Center sp. Z oo	Aleja Armii Krajowej 80, 35-328 Rzeszów,	Training and research company. It implements,

Name and type of institution (public / NGO / commercial)	Registered office address, including region	Brief description of the institution (areas of activity, history, etc.)
	voiv. Podkarpackie Province	among others, educational innovative programs.
ABAKUS Konsulting Sp. z o. o. Sp. k.	Reformacka 8, 35-001 Rzeszów, voiv. Podkarpackie Province	A training company that implements, among others, education projects.
ALTUM Society, Socio- Economic Programs	ul. Warszawska 5 / 735- 205 Rzeszów, voiv. Podkarpackie Province	The ALTUM team has experience and qualifications for training work, implementing pilot projects, and working with the unemployed; it cooperates with local government units commune and poviat offices, labor offices, nongovernmental and training organizations in the implementation of programs financed by the PHARE Program, government, local government, foreign, including American (USAID).
Rzeszów Regional Development Agency SA	Ul. Szopena 51, 35-060 Rzeszów, voiv. Podkarpackie Province	The aim of RARR SA is to conduct activities aimed at the comprehensive development of the Podkarpacie region by concentrating and mobilizing the potential of local communities as well as advisory and service activities in the processes of restructuring, opening and supporting economic ventures, promoting the region and acquiring foreign aid funds.
THE FOUNDATION SUPPORTING EDUCATION AT THE "AIR VALLEY" ASSOCIATION	ul. Hetmańska 120, 35- 078 Rzeszów, voiv. Podkarpackie Province	The main task of the Foundation is to conduct educational and scientific activities, in particular in the field of: popularizing science and education, raising the level of education of children and youth from rural and urban

Name and type of institution (public / NGO / commercial)	Registered office address, including region	Brief description of the institution (areas of activity, history, etc.)
		areas and small towns, and popularizing the idea of lifelong learning.
Foundation Aid to School. Fr. St. Konarski in Rzeszów	35-030 Rzeszów, ul. 3 Maja 15, voiv. Podkarpackie Province	The goal of the foundation is "to undertake, conduct and support all initiatives and activities conducive to comprehensive education and upbringing of young people"
"PASIEKA" - Foundation for Development and Support	Pl. Kilińskiego 2 35-005 Rzeszów, voiv. Podkarpackie Province	The goal of the foundation is to support the development of both adults and children. The Foundation wants to create a place conducive to building relationships, bonding, and a place where parents can meet with their children and with others.
Danmar Computers	Ul. Hoffmanowa 19, 35- 016 Rzeszów, voiv. Podkarpackie Province	A company that carries out projects under European programs implementing innovative solutions to improve the education system.
Podkarpacie Academy of Entrepreneurship	Ul. Dąbrowskiego 20A, 35-036 Rzeszów	A consulting and training company supporting the development of the entrepreneurship sector in Poland.

Source: own study.

#### 5.2 Good practices during the SARS-COV-2 pandemic

During the SARS-COV-2 pandemic, a number of aid activities addressed to various social groups at the local, regional and national level could be observed. Examples of such activities are presented below.

#### Local example

Noteworthy are the aid activities of the Sławek Foundation, a public benefit organization founded in 1998 by the Łagodziński family. The Foundation provides comprehensive help and support for excluded people on their way to independence. It also works on reconciliation and bringing families together that are in isolation and at risk of social exclusion. It mainly supports prisoners returning to society, to their families, and to the labor market. It implements professional activities and social integration programs.

The Foundation's activities also include individual psychological consultations, advice and training for inmates, and the production of tactile books for blind children by prisoners (WCK, 2021, pp. 10-11). An important initiative of the Foundation is the so-called "Przystań", a center for social readaptation for people who are being released. The Sławek Foundation carries out its activities on a local scale. It is a place that is used by both the current beneficiaries of the Foundation, as well as the Warsaw local community of Wola / Muranów. The Sławek Foundation is a member of the local partnership "Recipe for Muranów", which during the pandemic was involved in the organization and sewing of protective masks. The Foundation also launched the Social Support Line helpline, intended for people struggling with a mental crisis caused by isolation. During the pandemic, the Foundation became even more anchored in the local community. The foundation has many partners of in the activities that they carry out. During the pandemic, their partners included, among others: scouts (they sewed masks at home), and DPS.

#### An example of regional activities

An interesting example of good regional practice is the free online psychological and therapeutic help provided by the Polish Mediators Association (Polish mediators, 2020). The main goal of the Association is to provide generally available mediation services. Since its inception, the Association has conducted dozens of mediations commissioned by courts as well as private individuals and institutions. The association tries to help all people in need. During the pandemic, in order to meet the needs of social anxieties related to the epidemic, the Association launched a mediation and psychological anti-crisis shield.

#### An example of nationwide activities

A good example of activities throughout the country can be: The Support for Seniors Program - Solidarity Corps of Support, implemented from October 20<sup>th</sup> to December 31<sup>st</sup>, 2020 (Ministry of Family and Social Policy, 2020). As part of the program, seniors received support during the pandemic in the form of delivery of basic necessities to their retirement homes. These activities were aimed at reducing the need for elderly people to go outside, which was dictated by the concern for their safety. As part of this nationwide program, local social welfare centers (as direct program implementers) undertook activities in local communes by providing the elderly with basic necessities. For the implementation of this support, municipalities could benefit from co-financing from the state budget (co-financing amount - PLN 100 million).

The program's aid delivery mechanism consisted of four steps:

- 1) Step 1: telephone notification by an older person aged 70 and over (in special cases, help could also be provided to younger seniors) about the decision to stay at home due to the epidemic (a phone call made to the nationwide hotline launched as part of the program).
- 2) Step 2: transfer (by the person receiving the notification) of the request of the senior for help to the social welfare center in the given commune, responsible for the senior (tool: Central Statistical Application system).

- 3) Step 3: telephone contact of an employee of the social welfare center with the senior, during which the employee confirmed the application and specified the support service (delivery of purchases in accordance with the specification provided by the senior: basic necessities, in particular food and personal care products).
- 4) Step 4: the senior paid for the purchases (the money was transferred before the purchases were made). The rules and method of settlement were determined by the center on an individual basis.

## 5.3 Recommendations for amending legislation to facilitate the implementation of remote education requirements in peripheral areas during a pandemic

The grounds for introducing changes in various areas of socio-economic life, resulting from the outbreak of the SARS-CoV-2 virus pandemic, were created by the Act adopted by the Sejm of the Republic of Poland on March 2<sup>nd</sup>, 2020 (Act, 2020), the so-called COVID act. The act also introduced two new articles to the Education Law, on the basis of which the minister responsible for education and upbringing could issue appropriate regulations. These were the following articles:

- 1) Art. 30b concerning the temporary limitation or suspension of the functioning of the education system units in emergency situations;
- 2) Art. 30c concerning the exclusion of the application of certain provisions in the event of a temporary limitation or suspension of the functioning of the education system units.

The need to combat and prevent the spread of the pandemic has resulted in the introduction of new solutions that enable educational institutions to function in the new organizational conditions created by the pandemic. Education with the use of distance learning methods and techniques plays a central role in these changes. In connection with these new organizational conditions, and based on the above-mentioned COVID act, the Minister of National Education issued the following regulations on March 20<sup>th</sup>, 2020:

- 1) The regulation amending the regulation on the temporary limitation of the functioning of the education system units in relation to the prevention, counteraction, and combating of COVID-19 (Journal of Laws of 2020, item 492);
- 2) Regulation on special solutions in the period of temporary limitation of the functioning of education system units in relation to the prevention, counteraction, and combating of COVID-19 (Journal of Laws of 2020, item 493).

In the above-mentioned regulations, solutions were adopted that enable "the organization and implementation of the education process with the use of distance learning methods and techniques. It was also possible, where necessary, to carry out didactic and educational tasks in a different way, determined by schools and institutions, in agreement with the governing body "(Ministry of Education and Science, 2020, p. 4). The above activities were aimed at creating opportunities for the implementation of the core curriculum while taking into account the conditions resulting from the specificity of

teaching activities conducted remotely. In addition, the Ministry of National Education has developed a guide for schools addressed to principals, teachers, students and their parents, containing information and tips helpful in the implementation of distance learning.

During the pandemic, in 2020-2021, the Minister of Education and Science amended or issued new regulations as part of the reform of school education. Among these was the regulation of the Minister of National Education of June 24<sup>th</sup>, 2020 amending the regulation on the core curriculum for general secondary education, technical secondary school, and branch school of the second degree; Regulation of the Council of Ministers of June 26<sup>th</sup>, 2020 on the detailed conditions for providing assistance to disabled students in the form of co-financing the purchase of textbooks, educational materials, and exercise materials in the years 2020-2022; regulation of the Minister of Education and Science of January 28<sup>th</sup>, 2021 amending the regulation on the temporary limitation of the functioning of education system units in connection with prevention, preventing, and combating COVID-19, etc. The full list of legal acts and guidelines issued by the Minister in 2020-2021 is available at: https://eacea.ec.europa.eu/national-policies/eurydice/content/national-reforms-school-education-50\_pl.

Taking into account the experience gained thus far and the plausible scenarios for the functioning of the education system in Poland in the coming years, it is worth recommending further amendments to legal acts, such as:

- Permanent introduction of hybrid teaching, taking into account the adaptation to the individual needs of the student (also students with disabilities),
- Continuing individual learning in a remote form,
- Recommendation to develop and improve the competences of students and teachers in the field of information and communication technologies.

# 5.4 Recommendations for the implementation of good practices aimed at counteracting social and educational exclusion of students (and their families) without or with limited access to the Internet and digital equipment

During the pandemic, many institutions conducted research aimed at diagnosing the phenomenon of exclusion. Their result were recommendations for public institutions and non-governmental organizations. Examples of such recommendations can be found in reports prepared by the Consumer Foundation and the Institute of Integrated Prevention.

In the report published by the Consumers Foundation (Federation of Consumers, 2021, pp. 8-14), we find a number of expert recommendations on reducing the digital divide in Poland, visible during the COVID-19 pandemic. The recommendations include:

• **Increasing the state's financial outlays**. The Remote School and Remote School + program can be a good practice here. In response to hardware deficiencies hindering remote education, the government decided to allocate PLN 186 million

(the Remote School program), and then an additional PLN 180 million (the Remote School + program) for the purchase of devices for students and teachers.

- Resign from extending the reprographic fee as it will increase the barrier to access to electronic equipment, deepen the digital divide and make it difficult to combat it. If devices such as smartphones, tablets or laptops will be covered by 3-6 percent reprographic fee, their prices will increase even by PLN 300. Increasing prices will limit the demand Poles will buy less of these tools. Even despite the fact that during the pandemic it turned out that these tools are necessary, inter alia, for remote learning or work.
- Strengthening the cooperation of many entities and environments. The cooperation of the state and local governments, the private sector, and NGOs is essential. Joint activities should focus in particular on increasing access to equipment and infrastructure (primarily among groups at risk of exclusion) and increasing the digital competences of Poles.
- **Initiating and strengthening joint actions across political parties** because the effective use of ICT will be crucial for Poland's economic development in the coming decades and for the quality of life of Poles during the pandemic. There are sections on ICT in the programs of political parties; however, the topic of digital exclusion is not popular among politicians.

In the report prepared by the Institute of Integrated Prevention (Grzelak, Żyro, 2021), we find a number of recommendations relating to the problem of the mental health of the population of children and adolescents resulting from the pandemic. It is worth quoting the following recommendations:

- A real priority of the education system should be educational and preventive measures as well as broadly understood help aimed at providing psychological support to children and adolescents, not only during, but also immediately after the pandemic is over. It is necessary to undertake intensive actions aimed at strengthening the mental condition of children and adolescents, because it is this group that is painfully affected by the psychological, emotional, and developmental consequences of the crisis caused by the pandemic. The mental condition of students weakens, they often lack energy, are depressed, irritable, full of anxiety and social anxiety, and this leads to situations in which they are unable to achieve educational progress. Therefore, educational and preventive measures aimed at helping children and adolescents become indispensable.
- Mental health support should cover not only those students who are already
  in a poor mental condition, but the entire population of children and
  adolescents. This will help prevent the increase of the group of students requiring
  specialist help. Otherwise, the current situation may lead to the collapse of the
  system of psychological, pedagogical and psychiatric assistance.
- During a pandemic, parents and teachers also face difficulties in coping with their own tasks and life roles. Therefore, many important issues pertaining to the upbringing and mental support of children and adolescents may be sidelined. It becomes necessary to introduce systemic solutions to facilitate the widest and most effective use of the potential of people responsible for educating and supporting children and youth (parents, teachers, educators, psychological and pedagogical counseling centers, effective preventive programs, etc.).

- In order to create conditions for parents and teachers to more readily facilitate
  mental support for children and adolescents, there is a need to adjust the
  requirements of the core curriculum to a lower effectiveness of teaching. This
  lower effectiveness of teaching has its source in the weaker mental condition of
  children and adolescents and in the lower effectiveness of remote education
  compared to stationary education.
- In the face of the basic task of the school, which is teaching and educating children and youth, a question arises about the legitimacy of some of the tasks faced by teachers and educators which are related to administrative work (keeping records and reporting). Therefore, it becomes necessary to carry out an analysis of the burden in this regard in order to verify the necessity of the tasks related to reporting and keeping documentation by teachers and educators. If the results of the analysis indicate the possibility of reducing certain formal requirements, it is recommended to introduce appropriate changes in this respect.
- It is essential to maintain a balance between activities aimed at limiting the
  development of the epidemic and caring for the optimal development and proper
  mental condition of students. Therefore, when implementing solutions in the
  education system, both sanitary requirements and the requirements related to the
  development and protection of students' mental health should be equally taken
  into account.
- It is recommended that all students return to full-time (hybrid) teaching as soon as possible. Especially high school and eighth grade students who face the greatest educational (or educational and vocational) challenges and are more concerned about their own future than their younger classmates. This re-entry should take into account a transitional / adaptation period during which there will be a gradual return to normal school requirements.
- It is necessary to use the potential of educators, appreciate their role, rebuild the educator's ethos, and at the same time make educators aware of their role and influence on the development and education of children and adolescents. It is also advisable to formulate recommendations on simple and effective ways of carrying for the mental condition of students.
- It is important to meet the need for horizontal collaboration and adult support for learners. Proper conditions should be created for the cooperation of teachers and educators, both with the pedagogue / school psychologist, as well as with employees of psychological and pedagogical counseling centers. Self-help within the teaching staff in individual educational institutions should be taken into account which will be supported by external specialists only in more problematic situations.
- The multifaceted and universal implementation of proven and effective preventive programs and activities is indispensable. They will be adapted to the living conditions present during the epidemic, and at the same time after the end of isolation and the return of children and adolescents to their peer groups they will prevent negative and harmful stress response from the pandemic period. In the case of failure to take effective preventive measures, there may be serious losses in public health in relation to children and adolescents.
- The previous recommendation is closely related to another recommendation, namely the need to intensify supportive and preventive activities during the first semester of the 2021/2022 school year, aimed at improving the mental condition

of students, rebuilding peer relationships, integrating students and supporting the process of adapting to the full-time / hybrid learning mode. (Possibly in adaptation to the next school closure period). For example: in the form of a formal admission to allocate up to 15 didactic hours for the implementation of preventive programs.

- It is also extremely important to take actions that effectively rebuild relationships: teachers-parents-students, and to base these relationships on kindness and trust.
- Of great importance is also noticing and collecting the so-called good practices
  pertaining to activities and methods of educational, preventive, and supportive
  support as they relate to distance learning, hybrid learning, and the return to
  stationary learning. This should then become the subject of exchange at the
  national, regional, and local level (similar to networking used in business). Good
  practices can be exchanged, for example, on internet portals, during webinars, or
  internet conferences.
- It becomes necessary to take into account the flexibility of decisions made by individual school principals regarding the introduction of specific forms and variants of system solutions aimed at the upbringing, prevention, and mental support of students. This flexibility is necessary because of the different number of students in individual schools, different socio-demographic characteristics of local communities, unequal degree of digital exclusion of students in the remote learning mode, or a different level of epidemic threat in different regions.
- In terms of system solutions, one should also be conscious of the students who experienced unusual problems, health, or family situations (e.g. students with disabilities, students with chronic diseases, students staying in quarantine, etc.) during the pandemic. Appropriately tailored solutions must be developed for these specific situations.

Among the recommendations aimed at reducing the scale of digital exclusion, intensified by compulsory distance learning during the pandemic, experts from the Digital Center Foundation in Warsaw mentioned the following recommendations in 2020:

- 1) Diagnosing the level of digital exclusion, and then determining the difficulties, limitations and barriers for remote education in a given school;
- 2) Gradual introduction of remote education allowing students to adapt to the new situation;
- 3) Minimizing formal requirements related to student assessment through distance learning;
- 4) Providing ICT devices primarily to a group of people who do not have any equipment or are in the most difficult conditions those especially excluded, e.g. from poor, pathological families;
- 5) In the case of excluded people, the use of alternative learning channels, e.g. using only voice connections, educational television;
- 6) Recommendation of models based on encouraging students to work on their own developing their own interests, reading books, watching movies, developing a presentation / poster / pantomime depending on the age and abilities of the student, with topics consistent with the student's interests;
- 7) Teacher's availability as an adviser (Digital Center, 2020, pp. 7-9).

#### Glossary of abbreviations and terms used

**CKE - Central Examination Board** 

GIS - Chief Sanitary Inspector

ICT - information and communication technologies

KPSS - colleges of social workers

MEiN - Ministry of Education and Science

WHO - World Health Organization

W-LB - work-life balance

#### **Bibliography**

CKE (2021). Retrieved from: http://www.cke.edu.pl.

- Consumer Federation (2022). Raport: Wykluczenie cyfrowe podczas pandemii. Dostęp oraz korzystanie z Internetu i komputera w wybranych grupach społecznych [Report: Digital Exclusion During the Pandemic. Access and use of the Internet and computers in selected social groups]. Retrieved from: <a href="http://www.federacja-konsumentow.org.pl/s,1479,wykluczenie-cyfrowe-podczas-pandemii.html">http://www.federacja-konsumentow.org.pl/s,1479,wykluczenie-cyfrowe-podczas-pandemii.html</a>.
- Consumer Federation (2021). Wykluczenie cyfrowe podczas pandemii. Dostęp oraz korzystanie z Internetu i komputera w wybranych grupach społecznych [Digital exclusion during a pandemic. Access and use of the Internet and computers in selected social groups]. Retrieved from: <a href="http://www.federacja-konsumentow.org.pl/p,1689,dad1c,raport-fk--wykluczenie-cyfrowe.pdf">http://www.federacja-konsumentow.org.pl/p,1689,dad1c,raport-fk--wykluczenie-cyfrowe.pdf</a>.
- Development Strategy of the Podkarpackie Voivodeship 2030 (2020). Place of publication: Board of the Podkarpackie Voivodeship, Rzeszów.
- Development Strategy of the Podkarpackie Voivodeship for the years 2000 2006 (2000). Place of publication: Board of the Podkarpackie Voivodeship, Rzeszów.
- Digital Center (2020). Problemy wykluczenia cyfrowego w edukacji zdalnej. Ekspertyza 3. [Digital exclusion problems in remote education. Expertise 3]. Retrieved from: https://oees.pl/wp-content/uploads/2020/04/Ekspertyza-3.pdf.
- Duszyński, J., Afelt, A., Ochab-Marcinek, A., Owczuk, R., Pyrć, K., Rosińska, M., Rychard, A., Smiatacz, T. (2020). Zrozumieć COVID-19 [Understanding COVID-19]. Place of publication: PAN Warszawa.
- Dziemianowicz, W. (eds.). (2000). Regiony Polski. Województwo podkarpackie [Regions of Poland. Podkarpackie Voivodeship]. Place of publication: Instytut Badań nad Gospodarki Rynkowa, Gdańsk-Warsaw.
- Eurydice (2021a). Organizacja i struktura systemu edukacji [Organization of the Education System and its structure]. Retrieved from:

- https://eacea.ec.europa.eu/national-policies/eurydice/content/organisation-education-system-and-its-structure-56\_pl.
- Eurydice (2021b). The Structure of the European Education Systems 2019/2020: Schematic diagrams. Retrieved from: https://eurydice.org.pl/wp-content/uploads/2019/10/the\_structure\_of\_the\_european\_education\_systems\_2019\_20.pdf
- Eurydice (2021c). Zasady i podstawy prawne systemu edukacji [Principles and legal foundation of the education system]. Retrieved from: https://eacea.ec.europa.eu/national-policies/eurydice/content/fundamental-principles-and-national-policies-56\_pl.
- Grzelak, S., Żyro, D. (2021). Jak wspierać uczniów po roku epidemii? Wyzwania i rekomendacje dla wychowania, profilaktyki i zdrowia psychicznego. Raport oparty na wynikach badań, przeprowadzonych wśród uczniów, rodziców i nauczycieli w okresie 04.2020-01.2021 [How to support students after an epidemic year? Challenges and recommendations for education, prevention and mental health. The report is based on the results of research conducted among students, parents and teachers in the period 04.2020-01.2021]. Place of publication: IPZIN Warszawa. Retrieved from: <a href="https://www.gov.pl/attachment/436a7159-9814-4e9c-a578-afd585faf81d">https://www.gov.pl/attachment/436a7159-9814-4e9c-a578-afd585faf81d</a>.
- Kozański, Z. (2021). Problemy dzieci i młodzieży w czasie pandemii, izolacji społecznej i nauki zdalnej [Problems of children and youth during a pandemic, social isolation and distance learning]. Place of publication: Łódź. Retrieved from: http://pppdm.edu.lodz.pl/wp-content/uploads/2021/04/Problemy-dzieci-i-mlodziezy-w-czasie-pandemii..-materialy-na-konferencje-Razem-prawy exclusion ... Z. Kozanski.pdf.
- Medicover (2020). Pandemia koronawirusa na świecie i w Polsce kalendarium [Coronavirus pandemic in the world and in Poland calendar]. Retrieved from: https://www.medicover.pl/o-zdrowiu/pandemia-koronawirusa-na-swiecie-iw-polsce-kalendarium,7252,n,192.
- Medomet (2021). Trzecia, czwarta, piąta fala pandemii. Skąd rozbieżność w numeracji? [Third, fourth, fifth wave of the pandemic. Why the discrepancy in the numbering?]. Retrieved from: https://www.medonet.pl/koronawirus/koronawirus-naswiecie,trzecia-fala-koronawirusa--a-moze-jednak-tylko-druga-,artykul,09637669.html
- MEiN (2020). Podsumowanie roku szkolnego 2019/2020 [Summary of the 2019/2020 school year]. Retrieved from https://www.gov.pl/web/edukacja-i-nauka/podsumowanie-roku-szkolnego-20192020.

- MEiN (2021). Podsumowanie roku szkolnego 2020/2021 [Summary of the 2020/2021 school year]. Retrieved from https://www.gov.pl/web/edukacja-i-nauka/podsumowanie-roku-szkolnego-20202021.
- Ministry of Education and Science (2020). Kształcenie na odległość: Poradnik dla szkół [Distance learning: A guide for schools], Place of publication: MEiN, Warsaw. Retrieved from: https://dokumenty.men.gov.pl/Ksztalcenie\_na\_odleglosc\_%E2%80%93\_poradnik\_dl a szkol.pdf.
- Ministry of Family and Social Policy (2020). Ministerialny Program Wspieraj Seniora [Ministerial Program Supporting Seniors]. Retrieved from: https://www.gov.pl/web/rodzina/program-wspieraj-seniora---solidarnosciowy-korpus-wsparcia-seniorow-w-pytaniem-i-odpowiedziach.
- Piotrowski, K., Wojciechowska, J., Ziółkowska, B. (2014). Niezbędnik Dobrego Nauczyciela. Rozwój nastolatka. Późna faza dorastania [A must-have of a Good Teacher. Teenage development. Late adolescence]. Place of publication: Warszawa.
- Polish mediators (2020). Bezpłatna pomoc psychologiczno-terapeutyczna online w dobie koronawirusa [Free online psychological and therapeutic help in the era of the Coronavirus]. Retrieved from: https://mediatorzy-polscy.eu/news/bezplatna-pomoc-psychologiczno-terapeutyczna-online.
- PowerED (2021). Jak przeciwdziałać wykluczeniom w edukacji? [How to counteract exclusion in education?]. Retrieved from: https://powered.pl/dokumenty/Rekomendacje\_PowerED\_2021.pdf.
- Preliminary estimates of Gross Domestic Product by region in 2018 (2019). Place of publication: Central Statistical Office, Warsaw.
- Pyżalski, J. (2021). Zdrowie psychiczne i dobrostan młodych ludzi w czasie pandemii COVID-19 przegląd najistotniejszych problemów, Dziecko krzywdzone. Teoria, badania, praktyka [Mental health and well-being of young people during the COVID-19 pandemic an overview of the most significant issues, Abused child. Theory, Research, Practice], Vol 20, No 2, 92-115
- Regulation of the Council of Ministers of August 7, 2020 on the establishment of certain restrictions, orders and bans in connection with the occurrence of an epidemic. Retrieved from: <a href="https://sip.lex.pl/akty-prawne/dzu-dziennik-ustaw/ustanowanie-okreslonych-raniczen-nakazow-i-zakazow-w-zwiazku-z-19015733">https://sip.lex.pl/akty-prawne/dzu-dziennik-ustaw/ustanowanie-okreslonych-raniczen-nakazow-i-zakazow-w-zwiazku-z-19015733</a>.
- RMF24 (2020). Kalendarium pandemii koronawirusa [Coronavirus pandemic calendar]. Retrieved from: https://www.rmf24.pl/raporty/raport-koronawirus-z-chin/najnowsze-fakty/news-kalendarium-pandemii-koronawirusa,nld,4883378#crp state=1.

- Socha, M., Sztanderska U. (2000), Strukturalne podstawy bezrobocia w Polsce [Structural foundations of unemployment in Poland], Place of publication: PWN, Warsaw.
- Statista (2021). Number of new Coronavirus (COVID-19) cases confirmed in Poland from 2020 to 2021, by date of report. Retrieved from: https://www.statista.com/statistics/1102374/poland-coronavirus-covid-19-new-cases-by-report.
- Statistical yearbook of voivodships, Place of publication: GUS, Warsaw 2006. Retrieved from: www.stat.gov.pl.
- TVN24 (2020). Puste ulice, maseczki i mycie rąk. Tak wyglądał ostatni rok [Empty streets, face masks and washing of hands. This is what the last year looked like]. Retrieved from: https://tvn24.pl/premium/koronawirus-w-polsce-rok-pandemii-covid-19-co-sie-wydarzylo-kalendarium-5052672.
- WCK (2021). Wsparcie osób, które w związku z epidemią COVID-19 znalazły się w trudnej sytuacji, realizowane przez inicjatywy pomocowe na Woli raport z badań [Support for people who found themselves in a difficult situation in connection with the COVID-19 epidemic, implemented by aid initiatives in Wola research report]. Retrieved from: https://wck-wola.pl/wp-content/uploads/2021/05/raport\_DK\_dzia%C5%82ania-pomocowe.pdf.
- Website of the Republic of Poland (2021a). Kolejny etap Narodowego Programu Szczepień: 15 stycznia rusza rejestracja seniorów 80+ i formularz zgłoszeń dla pozostałych [The next stage of the National Vaccination Program: on January 15, the registration of seniors 80+ and the application form for the others starts]. Retrieved from: <a href="https://www.gov.pl/web/szczepimysie/kolejny-etap-narodowego-programu-szczepien-15-stycznia-rusza-rejestracja-seniorow-i-formularz-zgloszen-dla-pozostalych">https://www.gov.pl/web/szczepimysie/kolejny-etap-narodowego-programu-szczepien-15-stycznia-rusza-rejestracja-seniorow-i-formularz-zgloszen-dla-pozostalych</a>.
- Website of the Republic of Poland (2021b). Przyspieszenie procesu szczepień. Wyjaśniamy, kiedy rusza rejestracja dla osób 40+ [Acceleration of the vaccination process. Explanation of when registration for people 40+ starts]. Retrieved from: https://www.gov.pl/web/szczepimysie/przyspieszenie-procesu-szczepien-wyjasniamy-kiedy-rusza-rejestracja-dla-osob-40.
- Website of the Republic of Poland (2021c). Od 1 lutego otwieramy galerie handlowe i muzea. Przedłużamy pozostałe zasady bezpieczeństwa [From February 1st, shopping malls and museums open. Remaining safety rules remain in effect]. Retrieved from: https://www.gov.pl/web/koronawirus/od-1-lutego-otwieramy-galerie-handlowe-i-muzea-przedluzamy-pozostale-zasady-bezpieczenstwa.
- Website of the Republic of Poland (2021d). Od 20 marca w całej Polsce obowiązują rozszerzone zasady bezpieczeństwa [From March 20th, extended safety rules apply throughout Poland]. Retrieved from: https://www.gov.pl/web/koronawirus/od-20-marca-w-calej-polsce-obowiazuja-rozszerzone-zasady-bezpieczenstwa.

- Website of the Republic of Poland (2021e). Od 26 kwietnia łagodzimy obostrzenia w 11 województwach otwarte salony fryzjerskie i kosmetyczne oraz częściowy powrót dzieci do szkół [From April 26th, restrictions are eased in 11 provinces hairdressing and beauty salons are open and a partial return of children to school begins]. Retrieved from: <a href="https://www.gov.pl/web/koronawirus/od-26-kwietnia-lagodzimy-obostrzenia-w-11-wojewodztwach-otwarte-salony-fryzjerskie-i-czesciowy-powrot-dzieci-do-szkol">https://www.gov.pl/web/koronawirus/od-26-kwietnia-lagodzimy-obostrzenia-w-11-wojewodztwach-otwarte-salony-fryzjerskie-i-czesciowy-powrot-dzieci-do-szkol</a>.
- Website of the Republic of Poland (2021f). Przypominamy majowy harmonogram łagodzenia obostrzeń [Reminder of the May schedule for restriction easements]. Retrieved from: https://www.gov.pl/web/koronawirus/przypominamy-majowy-harmonogram-lagodzenia-obostrzen.
- Website of the Republic of Poland (2021g). Czerwcowy harmonogram luzowania obostrzeń: więcej osób na weselach i powrót do targów oraz konferencji [June schedule of restriction easements: more people at weddings and return to fairs and conferences]. Retrieved from: <a href="https://www.gov.pl/web/koronawirus/czerwcowy-harmonogram-luzowania-obostrzen">https://www.gov.pl/web/koronawirus/czerwcowy-harmonogram-luzowania-obostrzen</a>.
- Website of the Republic of Poland (2021h). Łagodzenie obostrzeń na wakacje otwarcie stref gastronomicznych m.in. w kinach, teatrach, na koncertach oraz zwiększenie limitów [Relaxation of restrictions for the summer vacation period opening of gastronomic zones, incl. in cinemas, theaters, concerts and increase of capacity limits]. Retrieved from: <a href="https://www.gov.pl/web/koronawirus/lagodzenie-obostrzen-na-wakacje">https://www.gov.pl/web/koronawirus/lagodzenie-obostrzen-na-wakacje</a>.
- Website of the Republic of Poland (2021i). Polska gotowa na IV falę pandemii. Zaszczep się i pomóż zatrzymać wzrost zakażeń! [Poland ready for the fourth wave of the pandemic. Get vaccinated and help stop the growth of infections!]. Retrieved from: https://www.gov.pl/web/szczepimysie/polska-gotowa-na-iv-fale-pandemii-zasz single-sie-i-pomoz-zatrzymac-wzrost-zakazen.
- Website of the Republic of Poland (2021j). Podsumowanie roku szkolnego 2019/2020 [Summary of the 2019/2020 school year]. Retrieved from: https://www.gov.pl/web/edukacja-i-nauka/podsumowanie-roku-szkolnego-20192020.
- Website of the Republic of Poland (2021k). Podsumowanie roku szkolnego 2020/2021 [Summary of the 2020/2021 school year]. Retrieved from: https://www.gov.pl/web/edukacja-i-nauka/podsumowanie-roku-szkolnego-20202021.
- Website of the Republic of Poland (2021l). Retrieved from: Organizacja kształcenia w nowym roku akademickim. Rekomendacje dla władz uczelni [Organization of education in the new academic year. Recommendations for university authorities].

https://www.gov.pl/web/edukacja-i-nauka/organizacja-ksztaloszenia-w-nowym-roku-akademickim-rekomendacje-dla-wladz-uczelni.

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