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**Integrating education with human behaviour relevant to influence of
coronavirus and negative emotions in a built environment
(MICROBE)**

**Partner country report on current state of higher
education and its relationship with humans' behaviour
on influence of coronavirus and negative emotions in a
built environment**

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1 INTRODUCTION

The purpose of this series of country reports is to obtain general philosophical, pedagogical and practical understanding on the status of higher education and its impact on minimizing the influence of coronavirus and negative emotions in a built environment by applying behavior change in partner countries. It will also provide a basis for understanding and evaluating the capabilities of partner institutions on integrated education for influence of coronavirus and negative emotions in a built environment. The results of these reports will inform a capacity building framework, which will form the basis for development of modules on influence of coronavirus and negative emotions in a built environment during the MICROBE project. The reporting approach is based on the Capacity Needs Assessment Methodology (CAPNAM) proposed by the United Nations (2013).

The report includes chapters on the following:

- Context. Provides an overview of the regulatory, socio-political, and cultural factors that shape policy on the human behaviour relevant to influence of coronavirus and negative emotions in a built environment in the country in general, and education in particular.
- Scope and coverage of education policies on influence of coronavirus and negative emotions in a built environment by the Higher Education Institution (HEI). Examines the illustrative policy and planning issues relevant to integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment.
- Description of capacity types. Evaluates the existing state of capacities of HEI in the field of integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment. As defined by the CAPNAM analytical framework, the four types of categories are institutional, organisational, individual, and the knowledge base.

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2 CONTEXT

This section provides an overview of the regulatory, socio-political, and cultural factors that shape policy on the human behaviour relevant to influence of coronavirus and negative emotions in a built environment in the country in general, and the education in particular. Please answer following questions.

2.1 Socio-political and cultural context

What are the socio-political and cultural contexts providing the framework for educational policy planning in the field of human behaviour relevant to influence of coronavirus and negative emotions in a built environment in the country? Are there any regulations, plans, etc.?

COVID-19 showed us from the beginning of the pandemic that it does not understand ideologies, gender or borders. The Emergency's State was approved on 14 March 2020 and on 21 June 2020, once the Emergency's State ends the orders derived from it lapse, the whole country entered into what was called "new normality". From that moment on, a series of urgent prevention, containment and coordination measures had to be adopted to continue controlling the pandemic and to be prepared for an upsurge in cases.

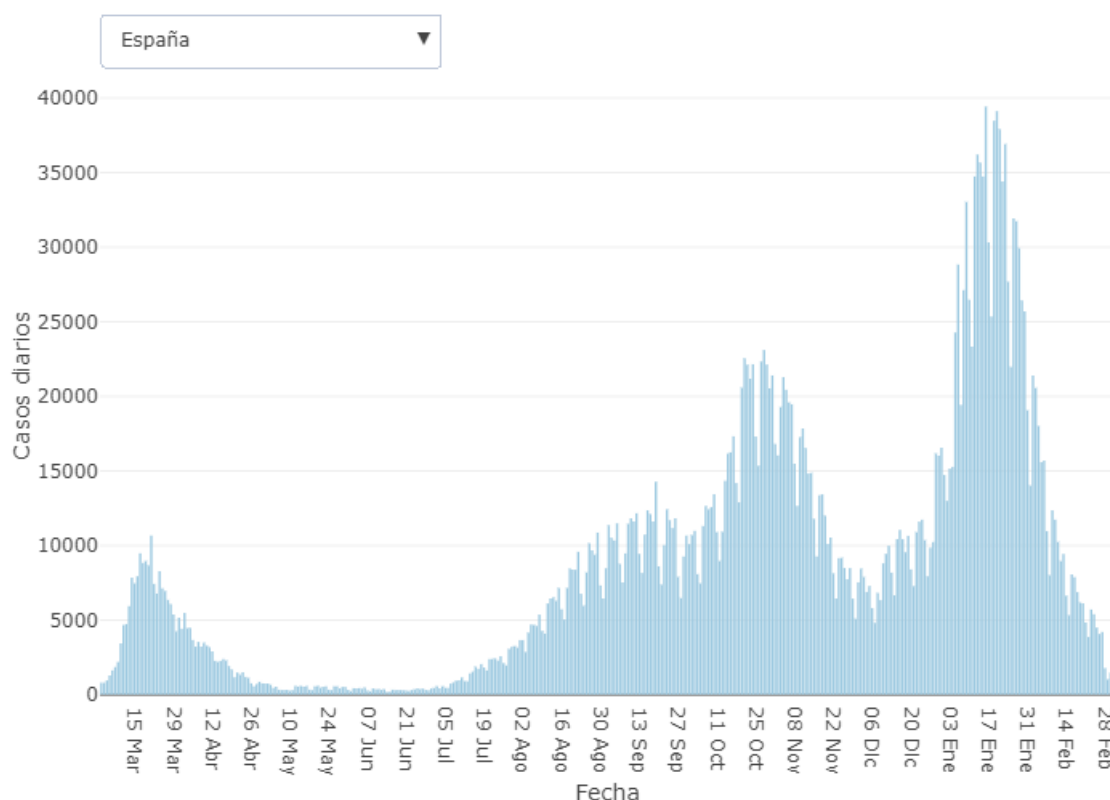


Fig 1: Daily reported cases of COVID-19 from the Ministry of Health

The State Strategy against the second wave describes the criteria, instruments, indicators and actions shared by all public administrations. It is the framework for action; the Spain's Government and its Regions make decisions jointly. This Strategy is developed on three bases:



- a) Common criteria and indicators, through the methodology proposed in the document on Coordinated Response Actions.
- b) Coordinated actions to bend the curve and keep the pandemic under control. The main ones are those in the field of public health approved by the Interterritorial Council of the National Health System and the declaration of the Emergency's State in force.
- c) Shared monitoring and evaluation of results, both bilaterally between the Ministry of Health and each of the Region, and jointly within the Interterritorial Council of the National Health System.

First, the Government approved the Royal Decree-Law on "new normality" on 9 June, agreed with the Region and supported by a majority in the Plenary of Congress on 26 June. The main measures, it contains and which are in force are related:

- Prevention and hygiene in different areas.
- Early detection of cases and contacts for clinical follow-up, isolation and quarantine.
- Guidelines to ensure the supply of medicines and medical devices.
- The protection of residential centres for the elderly or disabled.
- The obligation of the Regions to continue providing epidemiological information to the Ministry of Health.

To organise this response in an effective and coordinated manner, the Ministry of Health designed the Early Response Plan in a COVID-19 pandemic control scenario, which technically makes up the National Pandemic Control Plan, with contributions from several ministries, as well as from all the Regions and Cities. It was approved on 16 July by the plenary session of the Interterritorial Council of the National Health System. The fundamental objectives of the Plan are threefold:

1. To design the bases for preparedness and response in the current scenario and possible future scenarios for the control of the disease.
2. To establish a risk assessment framework associated with the available information.
3. Recommend public health interventions commensurate with the level of risk. This Plan includes the following elements:
 - The setting up of a strategic stockpile of protective equipment and medicines.
 - The reinforcement of influenza vaccination, which is currently underway.
 - Contingency plans to strengthen the healthcare and public health capacities of the Regions.
 - The definition of epidemiological and healthcare indicators to raise the level of risk in a territory and propose, when necessary, additional measures in coordination with the Regions.

Measures adopted by the Regions, the epidemiological context shows, that very different transmission scenario have coexisted and continue to coexist in the different territories, which may require different control measures. Therefore, each Region has adopted different actions based on these different scenarios, by the Early Response Plan and with the support of the Ministry of Health. Despite this, all of them coincide in limiting the number of people at meetings and in a limited capacity. Moreover, almost 95% have opted for the limitation of movement at night, while almost 74% have determined the perimeter closure of the Region. Concerning the hotel and catering industry, we generally find a greater diversity in the measures, although all of the Regions have opted to reduce opening hours and some of them (30%) have decided to close the hotel and catering industry. The main measures implemented in each Region are:



- Perimeter closure of the Regions.
- Perimeter closures are smaller than those of the Regions are.
- Limitation of night-time movement.
- Limitation of people at meetings.
- Limitation of capacity.
- Total closure of the hotel and catering trade.
- Reduction of night-time opening hours for the hotel and catering trade.

Since August, five packages of Coordinated Public Health Actions have been approved:

1. The first was agreed on 14 August by the Plenary of the Interterritorial Council of the National Health System. It contains eleven control measures in seven different areas, three recommendations and an indication of compliance with the points included in the Early Response Plan, with aspects related to the closure of nightlife, the ban on smoking in outdoor spaces and the reinforcement of the protection of homes for the elderly. The first region to apply the eleven measures was *La Rioja*, where they came into force the following day.
2. The second was approved on 27 August, with a view to the start of the school year, following the joint meeting of the Interterritorial Council and the Sectoral Conference on Education. It includes a total of twenty-nine measures and five recommendations for implementation by the competent administrations.
3. The third was agreed on 9 September and consists of measures in four areas: COVID's vaccination, screening, coordination with Local Entities and the implementation of new rounds of the national seroprevalence study.
4. The fourth package of these measures was adopted on 30 September, with coordinated public health actions aimed at municipalities with incidences of the disease well above nationally and internationally acceptable risk thresholds, with increasing pressure on the health care system and populations of more than 100,000 inhabitants. When the epidemiological situation has so required, the Ministry of Health has exercised its coordinating role, proposing the adoption of coordinated public health actions based on the shared work being carried out with the Regions.
5. The fifth package of coordinated actions was approved on 28 October to respond to the special risk situation arising from public attendance at international professional sporting events.

Two measures were adopted in the State Strategy against the second wave in the event of a risk situation. On the one hand, on 22 October, the Plenary of the Interterritorial Council of the National Health System agreed by a very large majority, and without any votes against, on the document on Coordinated Response Actions, developed and agreed upon by the technical heads of all the Regions and the Ministry of Health. On the other hand, and since this was also requested by several Regions, on 25 October the Government approved the Royal Decree declaring an Emergency's State to contain the spread of infections caused by SARS-CoV-2, the extension of which was supported by a large majority in the Plenary Session of the Congress of Deputies on 29 October.

The Coordinated Response actions document for the control of the transmission of COVID-19 technically extends the Early Response Plan, which establishes a framework of common criteria, based on scientific evidence, for the interpretation of the combined epidemiological indicators and the adoption of pandemic containment measures according to four alert levels, from one to four, with four being an extreme level. The common framework of actions aims to ensure sufficient coordination between territories, without preventing the Regions from taking the complementary



measures they deem appropriate. Since the coordinated response, process is adaptable to the situation and the demographic, mobility or social vulnerability context of each territory (Regions, province, island, municipality, department, health area, basic health area or equivalent), both in scenarios of increased or reduced risk of transmission. In other words, the Regions have a wide margin to apply the measures they consider most appropriate in their territories. However, it should be noted that 74.9% of the Regions agree on the application of the same measures mentioned above. The document is based on technical-scientific foundations, taking into account the available evidence, national and international experience in pandemic management. The opinion of experts and technicians from all the territories, that of the Scientific's Committee, and the international recommendations of the World Health Organisation, the European Centre for Disease Prevention and Control, and the Member States of the European Union through multilateral meetings coordinated by the European Commission. This document is intended as an evolving guide, which will be adjusted as more information becomes available or as new national and international scientific evidence is generated. It establishes thresholds for main indicators and complementary indicators that classify the outcome of each of them as low, medium, high or very high risk: epidemiological indicators on the level of transmission (cumulative incidence, positivity and traceability) and indicators of health service utilisation (hospital occupancy), as well as complementary indicators that help to assess and characterise the situation.

Despite the measures adopted, Spain is suffering the third wave. Broadly speaking, the third wave of the pandemic in our country has been stronger than, the second and the peak of infections occurred sometime between 20 and 24 January, depending on the evolution of each territory. However, 18 provinces have had a lower peak incidence than in November.

The number of deaths in this third wave is 19,200 people have lost their lives to COVID-19 between December and February, according to data provided by the National Epidemiological Surveillance Network (RENAVE), through the Ministry of Health. In two months, almost the same number of citizens died in around six months of the second one.

Three events have been the driving forces behind the third wave: *Black Friday*, the long weekend in December and Christmas. These events were directly related to the social and travel spheres, which served to facilitate the nationwide spread.

The December holiday period served as fuel for the coronavirus: crowds in shops and hotels, increased gatherings in homes, illegal parties and travel between Regions and provinces. Furthermore, Christmas celebrations and gatherings were the latest triggers.

The hope, in this third wave transition, has been the arrival of vaccines. The current challenge is to vaccinate more than 30 million Spaniards (70% of the population) by summer, while the country gradually increases the pace of inoculations.

2.2 Status of education

What is the current state in education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment? Is it important at your country? Please specify.

The global pandemic derived from COVID-19, declared by the World Health Organisation on 11 March 2020, and has had a special impact on the education system, which began with the suspension of face-to-face educational activity in all cycles, degrees, courses and levels of education, established in general by Royal Decree 463/2020, of 14 March, which declared an Emergency's State. Since then, the Government, through the Ministry of Education and Vocational Training, in coordination with the Ministry of Health and all educational administrations, has developed an intense activity. Initially, when in-person teaching was suspended, there was a rapid mobilisation to



provide access to online educational materials, create platforms, set up an educational television programme with RTVE for 5 hours of broadcasts per day, and provide devices donated by companies.

At the same time, the necessary orders were published to make the duration and conditions of the vocational module of workplace training more flexible, as well as the dual vocational training projects that conditioned the qualifications of vocational training students. The Ministry of Education and Vocational Training strengthened coordination with the Regions, as administrations with educational competences, with which 21 meetings have been held (including 7 Sectorial Conferences with all the ministers of all the Regions), moreover to maintaining permanent contact.

The Government took the initiative to propose measures such as the continuity of the academic year. The commitment to distance education, the adjustment of programmes, as well as assessment, promotion and qualification mechanisms to adapt them to the situation of teachers and students, as well as the partial reopening of schools in May and the face-to-face sitting of university entrance exams and vocational training courses. All these measures became binding agreements for the Regions that adopted them, and which at no time saw their competences in education modified. In June, the Government proposed, and the Regions agreed on, the educational measures for the organisation of the 2020-2021 school year, set out in a 14-point agreement of 11 June 2020. Likewise, the Guide of prevention and hygiene measures drawn up jointly with the Ministry of Health, for the development of the region's protocols, was transferred to the educational administrations. These measures were adjusted and detailed at the joint Education and Health conference on 27 August.

At the same time, the Government has mobilised resources of more than 3,000 million between the COVID's Fund, the significant increase in credits for scholarships, the "*Educa en digital*" programme for investment in digitalisation, educational reinforcement plans such as PROA+, ReactivaFP, and the Vocational Training Modernisation Plan. At this time, education and the safe functioning of educational centres have become priority social concerns, which also deserve priority attention from the public authorities, who must respond to this situation with rigour, moderation, responsibility and commitment, with the need to develop new exceptional and temporary measures in each case.

The measures adopted for a safe start and development of the 2020-2021 academic year made it necessary to reinforce the teaching staff, which has been covered, in many cases, by interim civil servants. In this situation, to facilitate the effective filling of the necessary posts, it has been necessary to revise, on a limited and temporary basis, certain qualification requirements for the teaching profession, specifically the master's degree that accredits postgraduate pedagogical and didactic training.

The opening of the centres at the beginning of the academic year 2020-2021 implied the preparation of an Annual General Programme for the centre and teaching programmes open to the foreseeable changes and adjustments that could result from the evolution of the pandemic. The impact of this exceptional health situation on the teaching and learning processes was logically not the same in all schools in the country, due to numerous factors, such as the type of teaching and level(s) they provide, the volume and composition of their student enrolment and teaching staff, the socio-economic context, etc.

The organisation of teaching in models with a greater or lesser degree of face-to-face teaching of pupils in educational centres in Spain is distributed as follows during the current school year:



- Fully face-to-face teaching has occurred in a generalised manner in the Infant and Primary Education stages, wherein 73.68 % of the centres the option has been taken to reduce groups, but not in the rest of the educational levels. In Secondary Education, only 26.31 % of the schools have face-to-face teaching, although with flexible timetables. The organisation of timetables in different shifts is very insignificant and, if anything, it should be pointed out that it has been a system used in 42.10 % of High School and Intermediate and Higher Level Vocational Training Cycles. Finally, in Universities it was decided to divide the classes into two groups and half of the students can see the classes online and the other half face-to-face.
- Blended learning is unevenly followed; for example, 47.36% of students attend on alternate days or weeks at their centre in the Universities.
- The option of coming to the centre every day to follow teaching activities in different time slots has hardly been used as an option by the centres and authorised by the territorial education administrations.
- The simultaneous classroom and virtual version have not been widely used either.
- The highest attendance at the centre in a blended model is found in Vocational Training, especially in subjects or modules with practical content (36.8 % student attendance).

The majority of students say that they have coped well with distance learning, 75% prefer face-to-face teaching and 54% believe that they learn more at the educational centre than by studying at home.

The different administrations together with the educational centres have tried to create healthy and safe school environments through prevention, hygiene and health promotion measures adapted to each educational stage, enabling the early detection of cases and their appropriate management through clear protocols for action and coordination of the agents involved.

The measures for the operation of educational centres are guided by the following basic principles of prevention against COVID-19: Limitation of contacts; Personal prevention measures; Cleaning and ventilation; Case management and all the transversal actions necessary to impart the measures.



Principios básicos de prevención frente al COVID-19

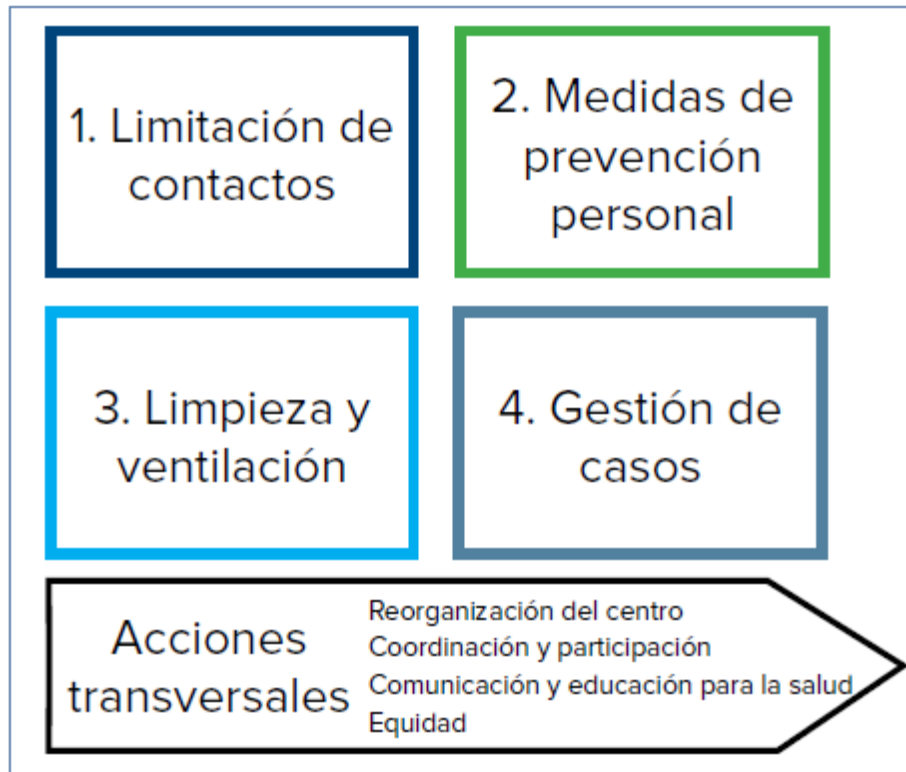


Figure 2: Actions to be carried out for the prevention of the spread of COVID-19 belonging to the Ministry of Health

2.3 Funding

Is funding sufficient for integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment at your country? Please specify.

The pandemic caused by the COVID-19 coronavirus is causing unprecedented health, economic and social emergency worldwide. Since the World Health Organisation elevated it to an international pandemic on 11 March 2020, the Spanish Government, making use of the powers granted by Organic Law 4/1981, of 1 June, on Emergency's States, exception and siege, by Royal Decree 463/2020. The 14 March, declared an Emergency's State to manage the health crisis caused by this virus, which includes, among other issues, restrictions on freedom of movement, with the effects this entails for workers, companies and citizens.

The pandemic is having severe health, social and economic impact and its stabilisation and possible eradication will involve a long and costly process, especially in the health field. Faced with this situation, the Government is responding by adopting measures aimed at reinforcing the health system and counteracting the effects that the paralysis of economic activity is causing in many areas, with the resulting loss of income for families and workers, as well as for the different companies and sectors of the spanish economy.

The main action of the Government, in order to allocate extraordinary funds to alleviate the consequences of the pandemic, has been the aforementioned Royal Decree-Law 22/2020, of 16 June, which regulates the creation of a COVID-19 Fund and establishes the rules for its distribution and disbursement. This fund, endowed with 16,000 million euros, allocates 2,000 million euros to education. Of this amount, 80% (1.6 billion) is earmarked for non-university education and is distributed among the Regions according to the population aged 0 to 16 (according to census figures



as of 1 January 2019), with each of the Ceuta and Melilla being allocated 7 million euros. From the COVID-19 Fund, the Andalucía's Government allocates an extra 61 million euros to the Universities.

A second immediate intervention to alleviate the effects of the pandemic is the measures to support families, approved in Royal Decree-Law 7/2020 of 12 March, which adopted urgent measures to respond to the economic impact of COVID-19, and which includes the basic right to food for children in vulnerable situations who are affected by the closure of educational centres. This aid was a redefinition of the existing aid and was intended to try to maintain the service for the families of children receiving a grant or canteen aid during the 2019-2020 school year who were affected by the closure of educational centres.

In the wake of the COVID-19's pandemic, the Ministry of Education and Vocational Training is developing a Digitalisation and Digital Skills Plan. The "*Educa en digital*" programme complements the Plan and aims to promote the digital transformation of education in Spain in several areas. Firstly, it aims to make connected computer equipment available to students who require it, an action designed to close the digital divide in access to technology that became more evident after the closure of educational centres. On the other hand, it envisages addressing the digital training of teaching staff in order to adapt teaching methodologies to a virtual context. It also involves the implementation of platforms to assist teachers, students and education authorities through the application of Artificial Intelligence. By 2020, up to 260 million euros will be allocated to equip schools with devices and connectivity. Of this, 190 million euros will come from Red.es (184 million from the European Regional Development Fund, ERDF) and 70 million from the Regions. The centres will make available to the most vulnerable students, by means of loans, devices that facilitate digital education both in person at the centre and at home. This emergency action aims to reach 500,000 devices.

The Ministry of Education and Vocational Training allocates 2,090 million euros for scholarships and study grants and another 58 million euros for the "Investments in educational centres and other educational activities" programme of an ordinary nature.

2.4 Educational needs

What are the needs in integrated education on human behaviour relevant to the influence of coronavirus and negative emotions in a built environment (please list up to 5 major needs at country level).

Educational needs are based on all those actions that are necessary to achieve the objectives that the Education Centres have set themselves. In specifying the actions, the agents involved, the procedures are foreseen and the necessary resources will be taken into account. All these needs and actions should be grouped around the elements of the European Framework for Digitally Competent Organisations or Infrastructure, such as technological equipment, connectivity, digital services and the necessary maintenance, among others. We must analyse the technological means and resources that schools can count on to plan teaching and learning processes, incorporating not only those of the institution itself, but also a situational analysis of the resources of families/pupils for learning at home, and their real availability for the learning process (devices and connectivity). In general, the educational needs of most of the Centres share the following shortcomings:



- Reinforcement programmes to address those pupils who are disadvantaged by the digital divide: Lack of infrastructure (particularly in rural areas), lack of accessibility of platforms, content and teaching processes themselves, lack computer literacy and skills needed to participate in the information society, as well as the ability to use this technology for learning and content production. All of these difficulties are exacerbated in the case of the most vulnerable students for social, cultural and economic reasons, furthermore to digital reasons, as well as personal circumstances arising from disability.
- Social guarantee programmes that ensure educational continuity for all students living at risk of poverty and vulnerability. In this circumstance, the so-called digital divide is a major handicap, which must not be allowed to exclude pupils. In order to overcome the initial differences between families and regions, there must be a crash plan in which the different administrations - central, regional and local - coordinate their efforts, and in which NGOs with proven experience in the use of technologies can join in. This plan should include investments that promote the necessary social protection policies so that families in situations of precariousness and poverty have future prospects for their children.
- Specific Information and Communication Technologies (ICT) training plans, in line with the professional competence model for teachers, which is currently being adapted to the Common Framework for Digital Competence in Teaching MCCDD developed by the Ministry of Education and Vocational Training and the Regions.
- Administrations should improve and increase educational resources on free digital platforms, as well as promote and encourage teachers to contribute and exchange experiences, good practices, resources, content and materials for the use of the entire educational community.
- The implementation of a "digital scholarship" for pupils so that they can incorporate devices (tablets, laptops) in their homes to carry out their homework and follow the teaching at the same time as the pupils who attend classes, as well as the provision of "social Wi-Fi" for particularly disadvantaged areas.
- The creation of a free and open software platform that is simple to use, allowing its use by the entire educational community, guaranteeing training for its use by teachers, students and families. This will require the development of appropriate materials for distance learning and corresponding reliable assessment tools for such online learning.
- Coherent measures should be provided that do not replicate the school model (timetables, textbooks and homework) that do not take into account either the limitations of confinement or online digital opportunities or students' own capacity to construct knowledge. Likewise, a transitional system should be guaranteed that consolidates good practices, understood as successful experiences in specific contexts and circumstances, and later generates the foundations for a change in a more personalised and digital educational model. Always in the knowledge that face-to-face teaching, socialisation and group learning in educational centres are essential for the development of girls and boys.
- It is considered especially important that all teachers receive all the technological means and materials. As well as, the necessary training to be able to carry out their work, in the conditions that an education system based on the principles of quality, equity and inclusiveness requires, in the exceptional situation of no return in digital education in which we find ourselves while maintaining their working conditions and remuneration. Similarly, in order to carry out their work, teachers must have the support and trust of society, as well as a high degree of autonomy and freedom in the exercise of their profession.



In Spain, the Ministry of Education and Vocational Training (MEFP) will provide 20,000 Movistar mobile lines by sending SIM cards of 40 GB per month per line to students with difficulties to continue their education telematically during the Emergency's State, thanks to the collaboration of Telefonica, Cisco and IBM.

The MEFP, based on the number of students weighted by income levels, has proposed that the Regions distribute the cards to the students with the greatest difficulties in accessing technological resources, according to the criteria established by the Regional Ministries of Education and, where appropriate, Social Welfare. In this way, their impact in terms of equity is guaranteed. At these educational levels, moreover, students can take greater advantage of tools that facilitate access to videoconferencing, multimedia or interactive material.

Furthermore, Cisco is contributing to this project with Cisco Webex, which opens in a new window, a collaboration tool that connects teachers and students in real-time, including features to create a virtual classroom: videoconferencing and desktop sharing, among others. The Cisco Webex Teams version, which opens in a new window, facilitates collaboration between teachers and students.

IBM, for its part, provides the teaching community with support for the process of adopting and using the technological platform. Nearly 600 professionals have signed up as volunteers to advise teachers on how to get the most out of their interaction with students. They will also provide real-time telematics support to resolve any queries.

Among the proposals related to the completion of the course with guarantees of sufficiency is the avoidance of the digital and social divide for vulnerable students. To this end, the Andalucía's Government instructed the schools to develop a reliable register of the most socially vulnerable families and pupils, and the administration provided them with the technical means to enable them to carry out the activities or classes online (Wi-Fi, computers, mobile devices, etc.).

2.5 Educational gaps

What are the gaps in integrated education on human behaviour relevant to the influence of coronavirus and negative emotions in a built environment (please list up to 5 major gaps at country level).

The closure of education and training institutions due to the pandemic, which may take its toll socially and economically in the future. This is the finding of the report Education at a Glance. OECD Indicators of 2020.

Every week that Spanish schools have been closed means the loss of 20 hours of university education per week, according to the organisation. Although face-to-face education was replaced by online education, not all students were able to access it, thus increasing existing educational inequalities.

The OECD, based on evidence from a study by US economists, says in its report that "the loss of learning will lead to the loss of skills, and the skills that people have are related to their productivity, so countries' Gross Domestic Product (GDP) could be 1.5% lower on average over the rest of the century". To prevent this from happening, it is essential to strengthening the education system, "to recover from this crisis and provide young people with the skills and competencies they need to succeed", said the OECD Secretary-General, Angel Gurría, at the presentation of the report in Paris.

The study highlights some aspects in which the Spanish education system has been most affected by COVID-19 and in which it needs to improve. These include the following, some of which are more related to the educational crisis generated by the pandemic and others to the education system in general:



Allocating more public funds to education

The report acknowledges that there is uncertainty about the impact of the pandemic on education spending, but recommends that Spain allocate more resources to the education system, as it needs it to function better and, at the moment, most of the government's investment is being made in the economy and the health sector.

In fact, the country has invested less in education than the OECD average in 2017: the country spent 4.3% of its GDP on primary to higher education institutions, which is 0.6 percentage points less than the rest of the countries analysed in the study.

Improving the digital literacy of teachers

A pending task for teachers in the Spanish education system is to improve their digital training, according to the OECD.

In general, since before the pandemic, teachers in all the countries analysed have recognised the need to improve their digital skills: 60% received training on ICT applied to education and 18% said they lacked training in this area.

Reinventing and digitising schools, universities and training centres

The COVID-19 crisis has reduced international student enrolment at universities and training centres in OECD countries, including Spain, which may affect their educational services and the financial support they provide to domestic students, as well as research and development activities, according to the report.

The organisation, therefore, urges universities and training institutions to reinvent their learning environments to expand the digitisation of their academic offerings and for online education to "complement, but not replace, the relationships between students themselves and between students and faculty". EU member states (769).



3 POLICIES RELEVANT TO HIGHER EDUCATION, AND THEIR RELATIONSHIP WITH HUMAN BEHAVIOUR ON INFLUENCE OF CORONAVIRUS AND NEGATIVE EMOTIONS IN A BUILT ENVIRONMENT

This section examines the illustrative policy and planning issues relevant to integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment. Please answer following questions.

3.1 Policy and planning

Please describe policy and planning issues currently being addressed by the HEI in the field of integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment.

The health crisis caused by the SARS-CoV-2 virus has altered the development of traditional university academic activity since Royal Decree 463/2020, published on the day the Emergency's State was established in Spain, on 14 March 2020. This Royal Decree provided for the suspension of face-to-face university teaching and the immediate implementation of extraordinary measures, intending to develop non-face-to-face teaching activity for the duration of the Emergency's State.

On 2 April 2020, all the Rectors of AUPA and the Regional Minister of Economy, Knowledge, Business and Universities of the Andalucía's Government issued a communiqué. In this communiqué, it is agreed to maintain online teaching until the end of the course 2019-2020. Furthermore, it is agreed to create a General Contingency Plan that can be applied for the duration of the Emergency's State.

The General Contingency Plan is designed with the main objectives of maintaining the academic quality provided by the University of Granada and without endangering the health of the university community. To achieve the

The joint communiqué of the Rectors of AUPA and the Regional Minister of Economy, Knowledge, Business and Universities of Andalucía's Government of 2 April 2020, agrees to maintain online teaching for the remainder of the academic year 2019-2020. As well as to prepare a General Contingency Plan, defined with a broad perspective in time, not only in what remains until the end of the academic year, but also to take into account the evaluation methods that could be applied if this exceptional situation continues until the final evaluation period.

This exceptional situation entails temporary changes not only in teaching, but also in the university guidelines and regulations that guide the development of teaching. To this end, the necessary adjustments are made so that each degree programme has registered and incorporated the specific regulations to maintain the quality of the degrees. This proposed challenge has been achieved employing vertical and horizontal coordination of all those who have some responsibility in each of the degree programmes.

With the help of the entire university community, the University of Granada was able to draw up a Contingency Plan consisting of six fundamental bases:

- **Teaching Activity: Adaptation of the Teaching Guides:** The teaching guides of the subjects are adapted to the distance learning modality so that classes can be taught online. The adaptation must be carried out by the teams responsible for the subjects, supervised by the corresponding department and besides, communicated to the degree coordinator in the case of university degrees and by a quality committee in the case of master's degrees. The



change from face-to-face to non-face teaching activity requires the adaptation of the Teaching Guides.

- **External Curricular and Extracurricular Internships:** External curricular and extracurricular internships are adapted to the situation of each student. The possibilities may be:
 - Curricular and extracurricular academic placements initiated and interrupted by the Emergency's State may be carried out telematically, whenever possible.
 - No new extracurricular placements can be initiated.
 - International placements initiated and interrupted by the Emergency's State may be carried out telematically.
 - In the case that it is not possible to carry out the internship telematically, the University of Granada provides the possibility of postponing it, altering the enrolment or carrying out training activities to compensate for the internship.
- **Development of the Final Degree Project (TFG), Final Master's Project (TFM) and Doctoral Thesis:** Initially, the tutorials of the Final Master's and Final Degree projects will be carried out telematically. This also applies to the defence of the aforementioned projects. Concerning doctoral theses, their deposit and defence will be done in a non-presential manner following the protocol established in the Resolution of the Vice-Rector for Teaching of the University of Granada, dated 26 March 2020, (<https://covid19.ugr.es/noticias/resolucion-deposito-y-defensa-tesisdoctorales>).
- **Assessment of learning:** Assessment of learning is encouraged in a non-attendance-based manner, using telematics tools. For this assessment, the teaching staff will propose written and oral exams, presentations of work and seminars and the completion of practical to their students. Moreover, the teacher can assess class participation and observation of students' interest in class.
- **Teacher training:** The Emergency's State has forced teachers to make a transition from face-to-face teaching to online teaching. To maintain the quality of teaching and to speed up the process, some initiatives have been put in place to support and train teachers in virtual teaching and teleworking. Furthermore, a website <https://covid19.ugr.es> has been set up to provide detailed information on virtual teaching. Online training courses, resources for classes, seminars, tutorials, etc. have also been created.
- **Attention and support for students:** To support students, the University of Granada has taken economic and social measures so that all students can attend classes and no one leaves the University due to problems. The measures are:
 - Suspension of the deadlines for the payment of public prices and their effects (<https://covid19.ugr.es/noticias/suspension-plazos-precios-publicos-y-efectos>).
 - Extension of the application period for the University of Granada's social financial aid (<https://covid19.ugr.es/noticias/ampliado-plazo-ayudas-caracter-social-ugr>).
 - Creation of a new scholarship and aid plan with new conditions taking into account the Emergency's State.
 - Loan of computer equipment and internet connection cards so that all students can attend classes and solve technological poverty.
 - A mental health strategy has been created in the Psychopedagogical Office to provide help to the educational community through the creation of tutorials, virtual workshops on study techniques, anxiety or fear of public speaking.
 - In the PRADO system, a collaborative virtual space has been created with the assistance of computer volunteers so that students can resolve any doubts generated by the system.



- To make administrative procedures more flexible for students wishing to undertake international mobility programmes, both incoming and outgoing.

Moreover, the measures shown in the Contingency Plan, the University of Granada has taken measures within each faculty to prevent the spread of the virus. Some of the measures are:

- **Mandatory use of masks within the faculties:** This use can be extended to the rest of the city and failure to wear a mask will result in a financial penalty.
- **Creation of circuits to prevent people from crossing paths:** Each faculty has drawn up a circuit to prevent the university community from meeting face to face and thus prevent the transmission of the virus.
- **Closing university canteens:** University canteens have been closed to prevent the transmission of the virus, as these are closed areas, which increase the spread of COVID-19.
- **Alternative face-to-face attendance of students:** Student groups are created in face-to-face attendance to create safe environments within the classroom.
- **Intensified classroom cleaning:** Classroom disinfection has been intensified to prevent the spread of the SARS-CoV-2 virus.
- **Encourage online teaching:** Where possible, online teaching is encouraged to avoid the risk of exposure. In some cases, such as laboratory practice, cleaning and disinfection of utensils are intensified.

These measures, together with those provided by the Contingency Plan, make the University of Granada a safe place for the university community. This affirmation is demonstrated by the contagion data, where the infected persons have not been infected inside the university facilities, but have been infected outside them.

3.2 Gaps in policy and planning

Please describe other, if any, policy issues that are not currently being handled by the HEI but should be considered.

The gaps in policy and planning are not considered to exist in this case because the University of Granada has proven to be a safe site for the prevention of the spread of COVID-19. These policies and planning are adapted according to the needs of the University, but always to have a safe and quality University. For this reason, every anomaly that occurs in the University is carefully analysed, such as an overcrowding of students in one place at one time.

When a disturbance occurs, prevention and security measures are automatically taken in the university community. Finally, the data obtained demonstrate how the measures provided in the previous section are useful to meet the main objective, the health of the university community.

N.B. The responses to these questions do NOT require describing each policy and planning issue but only the identification of the type of issues being addressed and those not being addressed. The questions are only meant to understand the scope of coverage of important issues by the HEI.



4 CAPACITY TYPES (UNIVERSITIES ANSWER ALL POINTS. ITALY AND BULGARIA GIVE ANSWERS OPTIONALLY)

This section aims at assessment of the existing state of capacities in the HEI for integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment. As defined by the CAPNAM analytical framework, the four types of categories are institutional, organizational, individual, and the knowledge base.

4.1 Institutional capacities

This part describes the institutional capacities at HEI level. Please answer following questions.

1. Please provide brief presentation of the HEI.

The University of Granada, founded in 1531, is a university based on the quality of its teaching and research. Thanks to this quality, the University of Granada is among the five most important universities in Spain, according to the Shanghai's Ranking. It is constituted, not only in the various city districts with the same name, but also has centres in the cities of Ceuta and Melilla. In this way, the University is integrated in all three cities and are a relevant part of Granada, Ceuta and Melilla. Finally, the University of Granada has a long tradition with the fusion of cultures, making the University of Granada the Spanish university that receives the most students from international mobility programmes.

2. Please describe general model of studies according to different levels (bachelor, master, PhD).

- Bachelor studies – 4 years (240 ECTS), 5 years (300 ECTS), 6 years (360 ECTS);
- Master studies – 1 year (60 ECTS) 1,5 years (90 ECTS), 2 years (120 ECTS);
- PhD – 4 years (240 ECTS)

3. Please provide key facts and figures about the HEI:

3.1. Number of students: 55981

3.2. Number of academic staff: 3720

3.3. Student/Academic staff ratio: 15:1

3.4. Number of Faculties (please specify): 22 (Faculty of Arts, Faculty of Communication and Documentation, Faculty of Dentistry, Faculty of Economics and Business, Faculty of Education, Faculty of Education and Sport Sciences (Melilla Campus), Faculty of Education, Economics and Technology (Ceuta Campus), Faculty of Fine Arts, Faculty of Health Sciences, Faculty of Health Sciences (Ceuta Campus), Faculty of Health Sciences (Melilla Campus), Faculty of Labour Relations and Human Resources, Faculty of Law, Faculty of Medicine, Faculty of Pharmacy, Faculty of Political Sciences and Sociology, Faculty of Psychology, Faculty of Science, Faculty of Social and Legal Sciences (Melilla Campus), Faculty of Social Work, Faculty of Sport Sciences, Faculty of Translation and Interpreting)



3.5. Number of graduates:

Bachelor studies:

- 2015/2016: 6.492
- 2016/2017: 6.907
- 2017/2018: 6.845
- 2018/2019: 6.678
- 2019/2020: 6.609

Master studies:

- 2015/2016: 3.683
- 2016/2017: 4.327
- 2017/2018: 4.653
- 2018/2019: 4.631
- 2019/2020: 4.024

PhD

- 2015/2016: 174
- 2016/2017: 221
- 2017/2018: 358
- 2018/2019: 350
- 2019/2020: 360

3.6. Number of study programmes: 232

3.7. Number of international academic partners: 1.108

3.8. International rankings of the HEI (if any): 201-300 Shanghai Ranking's Academic Ranking of World Universities 2020

4. Please describe main education and research areas of the HEI.

- 4349 scientific publications;
- 261 deposited PhD degrees (200 defended)

Research focus:

- Library & Information Science.
- Food Science & Technology.
- Mining & Mineral Engineering.
- Mathematics.
- Hospitality & Tourism Management.
- Computer Science & Engineering.
- Oceanography.
- Dentistry & Oral Sciences.
- Nursing.
- Statistics.
- Physics.
- Earth Sciences.
- Electrical & Electronic Engineering.



- Transportation Science & Technology.
- Management.
- Public Administration.
- Atmospheric Science.
- Psychology.
- Instruments Science & Technology.
- Biomedical Engineering.
- Civil Engineering.
- Pharmacy & Pharmaceutical Sciences.
- Environmental Science Engineering.
- Law.
- Ecology.
- Chemical Engineering.
- Biotechnology.
- Agricultural Sciences.
- Public Health.
- Education.
- Business & Administration.
- Political Sciences.
- Biological Sciences.
- Chemistry.
- Geography.
- Communication.
- Human Biological Sciences.
- Economics.
- Energy Science Engineering.

5. Is there any strategic priorities given to integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment at HEI level? Please specify.

The University of Granada has the following strategic priorities for education:

1. Strategy based on the use of Information and Communication Technologies (Application of tools based on artificial intelligence).
2. Strategy based on Equality (To teach university students about equality between people, regardless of their gender).
3. Strategy for the recovery of historic buildings (Reusing and adapting historic buildings to promote their conservation and reduce the environmental impact produced by the construction of new buildings).
4. Environmental strategy (Responsible use of energy resources and promotion of renewable energies).
5. Mental health strategy (Psychological support for people who need it to improve their mental health).
6. COVID-19's strategy (Contingency and Action Plan for SARS-CoV-2 virus).



While the latter strategy has been used to integrate education on human behaviour relevant to the influence of the coronavirus, the mental health strategy has been used to analyse and diminish negative emotions in a built environment at the HEI level.

6. What are the needs at HEI in integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment (please list up to five major needs):

The different needs at HEI in integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment are:

1. Increased funding for research.
2. Increased financing for teacher training on coronavirus and negative emotions in a built environment and the integration of these modules into existing programmes.
3. Creation of specific modules related to coronavirus and negative emotions in a built environment and integration of these modules into existing programmes.
4. Increased funding to develop the above-mentioned modules.
5. Increased financing for staff training.

7. What are the gaps at HEI in integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment (please list up to five major gaps):

The gaps at HEI in integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment:

1. Insufficient funding to carry out research and staff contracts.
2. Lack of staff.
3. Lack of modules related to coronavirus and negative emotions in a built environment and the integration of these modules into existing programmes.
4. Lack of financing for the creation of the aforementioned modules.
5. Insufficient funding for teacher training.

4.2 Organisational capacities

This part describes the organisational capacities pertinent to integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment at HEI. Please answer following questions.

1. Is integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment sufficiently included in the curricula of HEI? Please specify according to different levels (bachelor, master, PhD):



1.1. Study programme level (Please list relevant study programmes): No

1.2. Study subject level (Please list relevant study subjects/modules): No

1.3. Study topic level (Please list relevant study topics): No

Currently, there are no study programmes and modules related to the influence of coronavirus and negative emotions in a built environment.

2. Is funding sufficient for integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment at HEI? Please specify.

No. The University of Granada is working on different projects, both public and private. However, this project is the first one that is funded in order to obtain an integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment

3. What are the needs at HEI in integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment related to organisation of study process (please list up to five major needs):

The needs at HEI in integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment related to organisation of study process are:

- To train qualified teachers to carry out effective teaching in integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment.
- With trained staff, create modules so that they can be implemented in programmes of study.

6. Please list up to five major gaps in integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment related to organisation of study process:

The University of Granada has no programmes related to integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment In order to be able to do so; the following gaps need to be addressed:

- Funding to carry out research in this field.
- Financing to train teachers and staff.
- Time to be able to carry out teacher training.



4.3 Individual capacities: Staff skills

This part describes the individual staff capacities pertinent to integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment at HEI. Please answer following questions.

1. How many academic staff works at your unit? (which implements the project):

The number of people working in this unit is seven.

2. Is there sufficient number of teachers who specialise in integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment? How many?

2.1. At university level: six

2.2. At your unit/department: six

The six teachers and the PhD student have been trained by the University of Granada, specifically to be able to conduct studies in integrated education on human behaviour relevant to the influence of coronavirus and negative emotions in a built environment. This allows us to carry out a great work from the University, towards such an important topic as the project we are carrying out.

3. Is there sufficient number of researchers who specialise in human behaviour relevant to influence of coronavirus and negative emotions in a built environment? How many?

3.1. At university level: six

3.2. At your unit/department: six

The six teachers, who are members of the team, have been trained to analyse human behaviour relevant to the influence of the coronavirus and negative emotions in a built environment. This training is very relevant to realise a great project as the influence of the coronavirus has caused people to have more negative emotions, due to the situation.

4. Please describe the current state of the staff training in HEI. Is it sufficient?

The staff is composed of seven people, as mentioned above. Five members of the staff are professors at the University of Granada, one of the members is a Professor at the University of Granada and finally, the last member of the staff is a PhD student belonging to the same university like the rest of the staff.

5. Please describe the current state of the staff training on human behaviour relevant to influence of coronavirus and negative emotions in a built environment. Is it sufficient?



The staff is composed of the necessary number of components. The current situation of the components is that they are all working at the University of Granada. The whole team works and has different degrees of responsibility within the University.

6. Does the academic staff have flexibility in designing its own skill development plans or does it have to follow a centrally determined package?

Academic's staff have the necessary skills to design their plans. Moreover, academic staff have a long and successful experience in creating their plans in other respects. Nevertheless, these own plans are based on a set of standards and guidelines to which the completely educational community must adhere.

7. Is there staff stability, or does it suffer from high turnover among such professionals?

The team has been very stable since its creation. This team, usually when it undergoes a rotation, it is to add new components to create a larger, more stable and robust staff. This allows us to create quality and professional projects.

8. What staff skills are required for integrated education on human behaviour relevant to the influence of coronavirus and negative emotions in a built environment (please list up to five major needs).

Although the number of staff skills is much higher than five skills. In the following list, we will try to show the most important ones, which our team has, for integrated education on human behaviour relevant to the influence of coronavirus and negative emotions in a built environment:

- **Empathy:** You cannot analyse the influence of coronavirus and negative emotions without understanding how people feel.
- **Analysis:** In order to extract relevant information, it is necessary to know how to analyse and select in order to draw relevant conclusions.
- **Responsiveness:** Once the information has been extracted and conclusions have been drawn, the action is needed to anticipate a bad situation.
- **Resilience:** The process can be long and tiring, so you need to be resilient to work until you achieve your goal.



- **Continuous training:** All the other skills are useless if the staff does not have continuous training and excitement to do a good job.

9. Please list up to five major gaps in integrated education on human behaviour relevant to the influence of coronavirus and negative emotions in a built environment related to staff skills:

The only gap that can be included in this list is that due to the current global pandemic period it is not feasible to conduct face-to-face meetings. The solution to this is to hold them online.

4.4 Access to Information, Knowledge and Technology

Access to information, knowledge and technology is becoming increasingly critical for sustaining long-term growth and development of education. It relates to the capacity to enable academic staff and students to mobilize, access and use information and knowledge, including access to and effective use of internet. Please answer following questions.

1. Do students and teachers have access to the novel educational resources on human behaviour relevant to influence of coronavirus and negative emotions in a built environment? Please specify:

1.1. Printed learning materials in national language: Yes

1.2. Printed learning materials in English or other languages: Yes

1.3. Online learning materials (open-source videos, simulators (calculators and software), case studies, text material) in national language: Yes

1.4. Online learning materials (open-source videos, simulators (calculators and software), case studies, text material) in English or other language: Yes

2. Does HEI use MOODLE for educational purposes?

Yes, the University of Granada uses MOODLE for educational purposes. However, MOODLE is not the only system used by the University of Granada for educational purposes.

3. Does HEI use computer-based intelligent systems, MOOCs, computer learning systems, big data mining for educational purposes? Please specify:

Yes, the University of Granada has learning systems, such as PRADO. Moreover, the library has a database containing various documents that can be consulted by students.

4. Does HEI use software for integrated education on human behaviour relevant to the influence of coronavirus and negative emotions in a built environment? Please specify:



The university has different software, however, none of this software is related to for integrated education on human behaviour relevant to the influence of coronavirus and negative emotions in a built environment

5. What Information/Knowledge/Technology is required for integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment (please list up to five major needs):

The information/knowledge/technologies needed for integrated education on human behaviour relevant to the influence of coronavirus and negative emotions in a built environment are:

- Follow health guidelines and analyse how they affect the University of Granada.
- Adapt the University of Granada to the health guidelines by applying measures that favour the safe use of the facilities.
- Use technologies and resources that favour the safety and equitable learning of the student body.
- To provide continuous information on the measures taken by the University in accordance with regional and state health measures.
- To provide students with sufficient technology for those students who are technologically deficient at home.

6. Please list up to five major gaps in access to information, knowledge and technology pertinent to integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment:

The major gaps in access to information, knowledge and technology pertinent to integrated education on human behaviour relevant to influence of coronavirus and negative emotions in a built environment are:

- Lack of funding to improve the knowledge of the university community.
- Lack of financing to avoid technological poverty among the student body.
- Ensure that the entire university community has access to the Internet regardless of where they live.



5 REFERENCES

Situación actual de la educación en España a consecuencia de la pandemia. Link on the Internet:
<http://www.educacionyfp.gob.es/va/mc/cee/publicaciones/estudios/situacion-pandemia.html>

Website of the COVID page of the University of Granada. Link on the Internet:
<https://covid19.ugr.es/>

Plan de contingencia de la Universidad de Granada. Link on the Internet:
<https://covid19.ugr.es/informacion/plan-contingencia/docencia-evaluacion-no-presencial>

Resumen 19-20 Memoria Académica Anexo Estadístico. Link on the Internet:
https://secretariageneral.ugr.es/pages/memorias/academica/20192020/estadistica/_doc/resumenestadistico/%21

OECD, 2020. Cities Policy Responses. Link on the Internet:
https://read.oecd-ilibrary.org/view/?ref=126_126769-yen45847kf&title=Coronavirus-COVID-19-Cities-Policy-Responses.

Web of the University of Granada. Link on the Internet:
<https://www.ugr.es/universidad/organizacion/saludo-rectora>

Website of the Ministry of Health of the Spain's Government. Link on the Internet:
<https://www.mscbs.gob.es/>

Official notification of the detection of COVID cases in Spain. Link on the Internet:
<https://cnecovid.isciii.es/covid19/#caa>

Website of the Ministry of Universities of the Spain's Government. Link on the Internet:
<https://www.universidades.gob.es/portal/site/universidades/>



Website of Andalucía's Government. Link on the Internet:

<https://www.juntadeandalucia.es/>

Spanish Government epidemiological reports. Link on the Internet:

<https://www.isciii.es/QueHacemos/Servicios/VigilanciaSaludPublicaRENAVE/EnfermedadesTransmisibles/Paginas/InformesCOVID-19.aspx>

Royal Decree 463/2020. Link on the Internet:

<https://www.boe.es/boe/dias/2020/03/14/pdfs/BOE-A-2020-3692.pdf>

Royal Decree-Law 7/2020. Link on the Internet:

<https://www.boe.es/boe/dias/2020/03/13/pdfs/BOE-A-2020-3580.pdf>

Royal Decree-Law 22/2020. Link on the Internet:

<https://www.boe.es/eli/es/rdl/2020/06/16/22/con>

Royal Decree-Law 21/2020, "new normality". Link on the Internet:

<https://www.boe.es/eli/es/rdl/2020/06/09/21>