



International  
Journal of  
Sociology of  
Education



International Journal of Sociology of Education  
Volume 13, Issue 1, 23<sup>th</sup> February, 2024, Pages 20 – 42  
© The Author(s) 2024  
<http://dx.doi.org/10.17583/rise.12950>

# Studying in a Pandemic: Analysing the Effects of Online University Teaching Using Photovoice

María Luisa Jiménez-Rodrigo<sup>1</sup> & Patricia S. Sánchez-Muros Lozano<sup>1</sup>

1) *University of Granada, Spain*

## Abstract

The aim of this paper is to analyse the effects of online teaching in the context of a pandemic on the experiences of university students at the University of Granada (Spain). For this purpose, the photovoice method was applied, adapted to the online context, and performing a qualitative analysis of text and image material collected. Socioeconomic, gender and geographical origin differences were addressed. A total of 99 students from three undergraduate degree courses and two different academic years participated in the research. The main results indicate that the key effects of online teaching in a pandemic have fundamentally impacted three key aspects: the structural conditions of study and work organisation strategies, the teaching-learning process, and the emotional well-being of students. The greatest difficulties have resulted from the destructuring of learning times and spaces, the lack of places and resources to study, the isolation and depersonalisation of the teaching process, the intensification of their workload, and the lack of adaptation of teaching methodologies. However, positive aspects such as learning new resources, cost savings and flexibility in learning are also highlighted.

## Keywords

Online teaching, university students, photovoice, teaching-learning, COVID-19.

**To cite this article:** Jiménez Rodrigo, M.L. & Sánchez-Muros Lozano, S.P. (2024). Studying in a Pandemic: Analyzing the Effects of Online University Teaching Using Photovoice. *International Journal of Sociology of Education*, 13(1) pp. 20-42  
<http://dx.doi.org/10.17583/rise.12950>

**Corresponding author(s):** Patricia S. Sánchez-Muros Lozano

**Contact address:** [sonsoles@ugr.es](mailto:sonsoles@ugr.es)



International  
Journal of  
Sociology of  
Education



International Journal of Sociology of Education  
Volumen 13, Número 1, 23 de febrero de 2024, Páginas 20 – 42  
© Autor(s) 2024  
<http://dx.doi.org/10.17583/rise.12950>

# Estudiar en Pandemia: Analizando los Efectos de la Enseñanza Universitaria Online a Través de Fotovoz

María Luisa Jiménez Rodrigo<sup>1</sup> y Patricia S. Sánchez-Muros Lozano<sup>2</sup>

1) *Universidad de Granada*, España

## Resumen

El objetivo de este trabajo es analizar los efectos de la docencia en línea en el contexto de una pandemia en las experiencias de los estudiantes universitarios de la Universidad de Granada (España). Para ello se aplicó el método fotovoz, adaptado al contexto online, realizando un análisis cualitativo de material de texto e imagen recabado. En el estudio, participaron 99 estudiantes de tres carreras de grado y dos cursos académicos diferentes. Se atendió a las diferencias socioeconómicas, de género y por origen geográfico. Los principales resultados indican que la enseñanza en online en pandemia ha impactado fundamentalmente en tres aspectos clave: las condiciones estructurales de estudio y las estrategias de organización del trabajo, el proceso de enseñanza-aprendizaje y el bienestar emocional del estudiantado. Las mayores dificultades han resultado de la desestructuración de los tiempos y espacios de aprendizaje, la falta de lugares y recursos para estudiar, el aislamiento y despersonalización del proceso de enseñanza-aprendizaje, la intensificación de su carga de trabajo y la falta de adecuación de las metodologías docentes. No obstante, también se destacan aspectos positivos como el aprendizaje de nuevos recursos, el ahorro de costes y la flexibilidad en el aprendizaje

## Palabras clave

Enseñanza online, estudiantado universitario, fotovoz, teaching-learning, COVID-19.

**Cómo citar este artículo:** Jiménez Rodrigo, M.L. & Sánchez-Muros Lozano, S.P. (2023). Estudiar en Pandemia: Analizando los Efectos de la Enseñanza Universitaria Online a Través de Fotovoz. *International Journal of Sociology of Education*, 13(1) pp. 20-42. <http://dx.doi.org/10.17583/rise.12950>

**Correspondencia Autores(s):** Patricia S. Sánchez-Muros Lozano

**Dirección de contacto:** [sonsoles@ugr.es](mailto:sonsoles@ugr.es)

The historical changes brought about by COVID-19 have had repercussions in many areas of life, and especially have changed –and will change even more– the educational institution. Universities around the world closed their doors and the entire student body was sent home, thus drastically changing the primary mode of social interaction hitherto sustained: face-to-face teaching (Fisher et al., 2022). The suspension of face-to-face teaching, as a result of the health crisis caused by COVID-19, has led to an unprecedented, swift, and radical change in the global history of education, which has been affected at the very core of its activity. This step has been so abrupt and unexpected that teaching centres, teachers, and students alike have had to adapt, often with few tools and resources, to a new methodology of teaching and learning based entirely on physical distance and virtualisation of the teaching-learning processes (Bryson & Andres, 2020).

These difficulties have also been aggravated by the health, economic, employment, and social isolation problems suffered by the population as a result of the pandemic and by lockdown measures in a bid to contain the spread of the pandemic. This situation has plunged a significant part of the student body and their families into a context of increasing uncertainty and vulnerability, which has also posed a serious threat to educational equity (Carhill-Poza & Williams, 2020).

The University of Granada, the university setting in which the research presented here was conducted, faced one of the most extensive suspensions of face-to-face teaching (except some practical activities and assessment) as a result of the pandemic. The University of Granada endured practically more than a full academic year of completely online teaching, when the duration of complete school closures in Spain as a whole was 70 days, and 96 days in the European Union (UNESCO, 2023).

Specifically at the University of Granada, face-to-face teaching was suspended for two periods of time. The first of these was triggered by the declaration of the first state of emergency by Royal Decree 463/2020, of 14 March, which established the closure of all non-essential activities, lockdown of the population, and the suspension of face-to-face academic activity throughout the education system. The lockdown measures brought in by this state of emergency meant the massive closure of all teaching facilities, leaving more than 1.5 million university students in their homes (Ministerio de Universidades, 2021). In view of this, the Andalusian Higher Education System adopted measures for the online adaptation of university teaching. At the start of the academic year 2020-2021, blended teaching was restored, which in the case of the University of Granada barely lasted three weeks, when classes were suspended again on 15 October 2020, as a result of the gravity of the pandemic situation in the city. This second period of suspension lasted until 12 April 2021, when a blended model of teaching was once again resumed. The end of face-to-face teaching at the University of Granada affected more than 53,344 students enrolled in undergraduate and postgraduate studies, and 3,798 teachers (UGR, 2021).

Against this backdrop, the article analyses the effects of suspending face-to-face teaching and the lockdown measures imposed as a result of the State of Emergency called due to the COVID-19 pandemic on the experiences of university students at the University of Granada. The specific objectives of this research are: 1) to explore the impact on the structural conditions of online teaching and learning strategies, on the assessment of the teaching-learning process, and on emotional well-being; and 2) to identify students' demands and proposals for

improvement. To access the experiences of university students, we used the photovoice method applied in the context of online teaching (Doyumğaç et al., 2021; Wass et al., 2020).

## **Background**

Since the start of the pandemic, the university population has been the object of social and academic attention, as one of the groups most affected by the suspension of face-to-face teaching (IESALC, 2020). With regard to online teaching and learning processes, comparative studies on the impact of coronavirus show that the shift from face-to-face to virtual teaching is not valued positively, among other reasons, because it is associated with an overloading of academic work, a failure to move beyond the instrumental nature of information and communication technologies and thus a failure to truly adopt an online teaching model (Tejedor et al., 2020). Ibrahim Doyumğaç et al. (2021), applying the photovoice technique during the pandemic in the context of Turkish university teaching, identified the main barriers to online learning: a lack of technological resources and access to the internet; the lack of an appropriate study environment; inequity of learning opportunities and a lack of appropriate resources for online or remote learning; and the lack of interaction and communication. In addition, uncertainty about the future, monotony, and unproductivity were also highlighted.

Other studies have shown, on the other hand, positive aspects to this adaptation of higher education to the pandemic situation in relation to the development of new skills and practical abilities in communication and information technologies, together with new forms of interaction, solidarity and volunteering, as well as the availability of more time for study, flexibility of study thanks to recorded classes that could be reviewed repeatedly and at any time (ubiquitous learning), and more time to ask questions (Ando, 2020; Gonzalez et al., 2022).

Another important area of research has been the impact of online teaching in the context of a pandemic on the deterioration of mental well-being in the university population (Amerio et al., 2020; Amsalem et al., 2021; Howard et al., 2021; Kaparounaki et al., 2020; Son et al., 2020). Poor housing conditions (Amerio et al., 2020), lifestyle changes and fewer hours of sleep (Banhidi & Lacza, 2020), and the effects of excessive technology use (technostress) (Amerio et al., 2020; Upadhyaya & Vrinda, 2021) have been identified as determinants of poor mental health. The increased flow of information and intensified workload have negative consequences in terms of increased anxiety and depression in the face of uncertainty and the blurred boundaries of time and space (Sarno, 2020). Of particular interest is the study carried out by (Gillis & Krull, 2020), which explores teaching techniques used in the transition to virtual teaching along with the perceptions of university students regarding the efficiency, enjoyment, the accessibility of these techniques as well as the barriers they face and, especially, how these barriers are experienced in terms of inequalities based on race, class, or gender. The results show that, for students, teaching techniques are not as important as how well, or poorly, they are implemented for learning. Although there are inequalities of access among different social categories, the teacher is responsible for increasing accessibility to interactive formats. Internet and technological barriers are less important than social barriers arising from the

pandemic, such as distractions, increased anxiety, and a sense of diminished motivation, especially for non-white, female, and first-year students.

In the case of Spain, the mental health of university students during lockdown and the pandemic has received significant attention, highlighting the psychological impact in the form of increased anxiety, depression, and stress (Odrizola-González et al., 2020). In particular, research on students at the University of Granada shows, on the one hand, a greater psychological impact on the female population, with greater stress and technostress, and whose capacity for resilience depends on self-esteem and the management of emotions (Morales-Rodríguez, 2021). Other research has taken as its starting point the addiction to online social media, which can be the result of depression, harassment, and anxiety, affecting daily life, including academic responsibilities, and which can be exacerbated in certain anomalous situations, such as lockdown (Carpio-Fernández et al., 2021; Gómez-Galán et al., 2020). Interventions have also been designed (online mindfulness sessions for 16 days aimed at students) with positive results in terms of reducing stress and anxiety (González-García et al., 2021). The importance of communication as a decisive factor in avoiding the psychological effect of social isolation has been emphasised, especially among those from families with a low level of education (Pérez-López et al., 2021).

A review of the pros and cons of the virtual teaching experience is provided by Sáiz-Manzanares et al. (2022), which is in line with the indications of UNESCO, DigCompEdu, and the targets of the Agenda 2030, approving the digital transition while specifying that the teaching-learning process desired by university students tends towards a hybrid model.

## Methodology

### The Photovoice Method

The research presented here is based on the photovoice method, adapted to a university context of online teaching-learning (Doyumğaç et al., 2021; Wass et al., 2020). This method is defined as follows:

Photovoice is a process by which people can identify, represent, and enhance their community through a specific photographic technique [...] As a practice based in the production of knowledge, photovoice has three main goals: (1) to enable people to record and reflect their community's strengths and concerns, (2) to promote critical dialogue and knowledge about important issues through large and small group discussion of photographs, and (3) to reach policymakers (Wang & Burris, 1997: 369).

The photovoice method facilitates access, knowledge, and assessment of group needs from their own perspective (Wang & Burris, 1997), while promoting processes of sharing, inclusion, and empowerment (Wang & Burris, 1994) Its application in the context of higher education has several advantages. It provides first-hand knowledge of students' experiences with regard to the teaching-learning process (Doyumğaç et al., 2021), but also allows students to engage actively with research, promoting collaborative processes (Wass et al., 2020; Wai-Yan Wan,

2021) and inclusiveness in education (Agarwal et al., 2015; Kroeger et al., 2012). Its potential has also been identified as a formative tool for improving learning processes, especially in online contexts (Perry, 2006). With this dual purpose of research and training, the photovoice method was applied here in order not only to understand student experiences in relation to online teaching during the pandemic, but also to teach novel techniques for analysing social reality using images, which are of great interest in sociological training.

Given the circumstances of lockdown and the suspension of classes during which this research was conducted, the photovoice method was adapted to suit a fully online context. The digital application of the photovoice was carried out using virtual communication, information and interaction tools. Specifically, the following measures were implemented: 1) synchronous online classes, where the activity was explained to the group of students and the results were shared and discussed; 2) the communication tools provided by the University of Granada's Teaching Support Resources Platform (PRADO, s.f.), such as e-mail, discussion forums, surveys, and the sending of assignments. In this way, synchronous and asynchronous interaction was combined for the production, analysis and discussion of the visual material produced.

This mode of application offers several advantages (Lichty et al., 2019): it engages and connects many geographically scattered participants; it is compatible with the technological culture of the young population; and on a pragmatic level, it reduces the costs of the project. For these reasons, the online application of photovoice becomes a particularly useful tool for investigating difficulties, problems related to the teaching-learning process during the pandemic and the well-being of the population in full-time education (Doyumğaç et al., 2021; Tumkaya et al., 2021; Rania et al., 2021). However, virtual application presents limitations and challenges in terms of restricting the spaces and processes of interaction and effective participation for the construction of a collective interpretation of the problem studied (Call-Cummings & Hauber-Özer, 2021).

## **Data Production**

For the application of photovoice, a structured online interview script was designed consisting of three blocks of open-ended questions (Table 1). The first block contains the initial stimulus to guide the production of photographs by students. The second deals with defining the meaning and significance of the photographs taken, in terms of their objective and subjective dimensions. The third block includes questions about the needs and demands of students to improve the quality of online teaching. In addition, basic sociodemographic variables such as sex, age, living situation (cohabitation), degree course, and academic year were collected. This scheme aims to address two central goals of the photovoice method: 1) structure research on the basis of participation; and 2) promote proposals for social change and empowerment (Liebenberg, 2018). Scripted questions when working on the images.

**Table 1**  
*Structured online interview script*

<b>Areas of analysis</b>	<b>Central categories</b>
Initial stimulus	What image summarises your learning experience in terms of online teaching during lockdown?
Significance and meaning of the photograph	Objective conditions: In which context did you take the picture? Subjective explanation: Why did you take this picture? What does it mean/signify to you?
Needs, demands and improvements	Do you think you have the necessary means to follow and get the most out of online teaching? What difficulties are you encountering in terms of following and getting the most out of online teaching? Are you finding any new learning advantages or possibilities with the use of online tools? How do you think online teaching could be improved in this pandemic?
Educational and sociodemographic variables	Degree, academic course, age, sex, living situation, geographic origin

The implementation phases were as follows:

- 1) Contextualisation and preparation: During synchronous online class, the researchers explained how photovoice is used as a technique in participatory research and social transformation, providing specific examples adapted to the theme of each subject. The aim was to get students to engage more actively and reflectively, and to play a leading role in the research, whilst also learning a new action-research technique.
- 2) Photo production: From the initial stimulus, each student took a photograph that reflected their experiences vis-à-vis the teaching-learning process in the context of pandemic and lockdown. They uploaded the photograph to the virtual learning platform (PRADO) along with their written answers to the structured online interview.
- 3) Selection and pre-analysis: Once the material was collected, the most significant photographs were selected, taking into account the diversity of experiences. These images were organised by the researchers around the central analytical themes for subsequent discussion and collective reflection in the class group. Pursuant to data protection ethical considerations, the information produced by the students was anonymised.
- 4) Collective discussion and reflection: in this phase, carried out through the synchronous online sessions, the main outcomes from the photovoice experience were shown, and the students shared their views on how the pandemic affected their university experiences, identifying needs, demands and proposals for improvement.

## **Participants**

A total of 99 students from three different degree courses taught at the University of Granada participated in the research. The degree courses were: Social Work, Social Education, and

Sociology, and the students were from two different academic years (1<sup>st</sup> and 3<sup>rd</sup> years) which allowed us to examine the diversity of experiences according to the academic career of the participating student, gender, living situation and geographical origin (table 2). There is an overrepresentation of women, which can be explained by the feminization of the careers included in the study. Although this may imply limitations in the gender comparison, it makes it possible to delve into female student's experiences of lockdown.

**Table 2**

*Participating student profiles (N: 99)*

<b>Characteristics</b>	<b>n</b>	<b>%</b>
Degree		
Social Work	11	11.1
Social Education	48	48.5
Sociology	40	40.4
Academic Year		
1st year	59	59.6
3rd year	40	40.4
Gender		
Women	85	85.9
Men	14	14.1
Age		
17-22	77	77.8
23 and over	22	22.2
Living situation		
Living in a shared flat	16	16.2
Living with partner	2	2.0
Living with family	20	20.2
Living alone	2	2.0
Origin		
National	93	93.9
International	6	6.1
Total	99	100

## Data Analysis

Once the visual and textual material had been collected, it was organised and analysed. The Atlas.ti v.8 programme was used for the joint coding of images and text. Inductively, following the procedures of grounded theory (Glaser & Strauss, 2010), the main categories of analysis were identified and organised around three key interrelated areas and a cross-cutting and comparative axis (Table 3). The first area refers to the effects of suspending face-to-face teaching on the organisation and strategies of remote study, in which the elements related to the structural conditions that affect online teaching-learning were expressed: space, time, material and technological resources, planning and routines. The second area focuses on the assessment of the teaching-learning process, exploring educational difficulties and possibilities in a virtual context. The third area relates to the effects of online teaching during lockdown on emotional well-being. The fourth area refers to the needs, demands and proposals expressed by students to improve the online teaching-learning process in this new scenario. Finally, a cross-



sectional and comparative area has been identified that relates to conditions of diversity and inequality that impact on university experiences of online teaching, and which are fundamentally: academic year, geographical origin, and linguistic diversity, living situation, and gender.

**Table 3**

*Areas and categories of analysis*

<b>Areas of analysis</b>	<b>Central categories</b>
Effects on structural conditions and study strategies	Destructuring of study time/space Resource limitations Organisational strategies and responses
Effects on the teaching-learning process	Intensification of workload Lack of adaptation Concentration/motivation difficulties Dehumanisation of the teaching-learning process New learning and relationship possibilities
Effects on emotional well-being	Negative emotional effects Positive emotional effects
Conditions of diversity and inequality	Academic year Geographical origin and linguistic diversity Living situation Sex

## Results

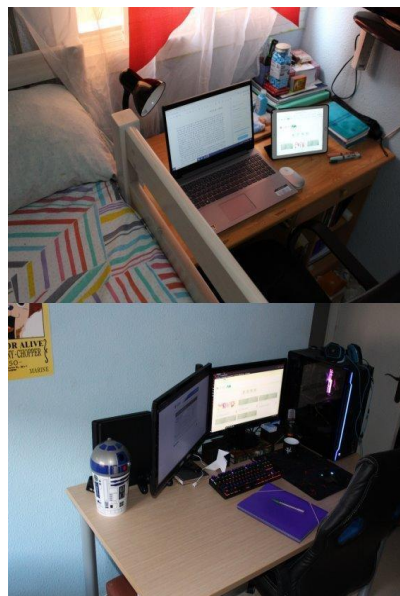
### Effects on Structural Conditions and Study Strategies

One fundamental dimension of the meanings expressed in the photographs taken by the students shows the unexpected and drastic change brought about by the suspension of face-to-face teaching in terms of the organisation, resources, and strategies for students to carry out their work completely online. Faced with the situation of university closure, students developed three residential responses, which conditioned the ways in which they organised their work and the resources available.

The first response was that a significant number of students returned to their family home, having previously lived in shared student flats – a formula widely used among students, with a significant percentage coming from outside the city. This sector of students was “forced” to return home mainly because of their family’s financial circumstances, which forced them to cut costs. This response affected learning experiences and available resources differently. On the one hand, the majority of students participating in the study pointed out the advantages and comforts of living in the family home and the availability of technological connectivity resources to follow their classes. However, problems of space were more common in the case of students who did not have a room of their own in which to carry out their learning activity, having to occupy communal spaces in the home or share them with other family members who were also studying or working remotely<sup>1</sup> (Figures 1 and 2).

**Figure 1***The Living Room*

The photograph is taken in a communal area of the house (the living room). It shows a typical morning, where my mother is in her office, and I am at the table, both of us working. [...] we have turned the living room into our workplace. Sometimes there have been difficulties, since she frequently has to take work calls, which limits me in terms of speaking in class. (SOC12\_W20).

**Figure 2***My Brother's Study Area*

The photograph shows the difference between my brother's study area and mine during online teaching. [...] While My brother (bottom photo) who still lives at home full time, has a spacious area, properly set up, with nothing else in the way, and with more than enough writing space as well as a good computer to follow everything, I (top photo) have a desk where I can just about fit a computer, with little space and right next to the bed, which takes up space, which is why I have been studying away from home, and have had to come home because of the pandemic and online teaching. [...] many students who live away from home at university now have this situation. (SOC10\_W20).

Another response to the pandemic covers a different sector of students who stayed in their student flats. The decision to maintain pre-pandemic residential routines also presented conflicts over the use of space within student flats, especially considering the closure of libraries and study centres. Many student flats are not set up to support the remote study activities (with different routines and sharing resources simultaneously) of all the flatmates.

In most cases, the abruptness of the change and the effects of lockdown on academic routines are particularly noteworthy, as this experience is limited to the four walls of a room or to a life that involves sitting up to a desk and a computer for most of the day. This brought about the dissolution of temporal and spatial boundaries and the concentration of their entire life (study, leisure, rest, and in some cases, work) in their rooms or at their desks. Many of the photographs taken show this new reality that involved an effective destructuring of spaces, times, and forms of social interaction, leading to inadequate and improvised reconfigurations of study spaces (Figure 3).

### Figure 3

#### *Working on my Bed*



I decided to take a picture working on my bed because with remote lessons this is where I spend most of my time, I think. In fact, in the morning I find it difficult to motivate myself to go to my office to sign into my classes and I don't have good Wi-Fi reception. (SOC-27\_W20)

The dissolution of boundaries between the study space and the home space also leads to complex situations in which remote studies must be reconciled with housework and self-care. An issue that mainly affects female students who, on returning to their family homes, were involved in family caregiving duties (Figure 4).

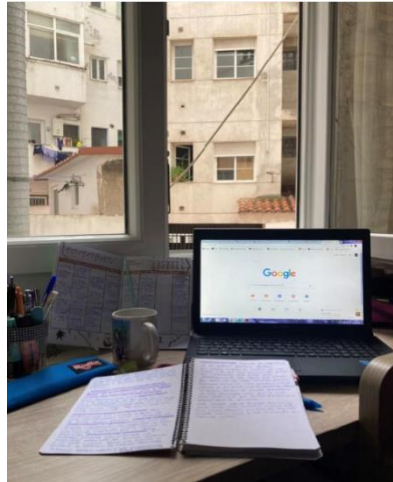
**Figure 4**  
*Lunch Time*



The photograph was a totally spontaneous idea since just as the teacher was explaining the task, I was making lunch while still listening to the class [...] the boundary between place of study/home has become blurred. I have to deal with everything I do when I'm at home, plus everything I do when I'm in class. It is an added stress having to make lunch or take care of your grandfather while listening and taking notes from an online class. (SOC-25\_W21).

The suspension of online teaching due to the pandemic also led to a re-evaluation of resources – economic, digital, pedagogical, and emotional – to cope with this change. These difficulties in adapting to the new telematic study and assessment procedures are intensified among first-year students, who are unfamiliar with the new university environment, and among international students, who often expressed language barriers and lack of social support.

In the photographs and discourses generated, the importance of having a dedicated space to follow online classes and do university work “normally” is emphasised. Most of the photographs reflect tidy desks and planning for long days of classes and remote study (Figure 5).

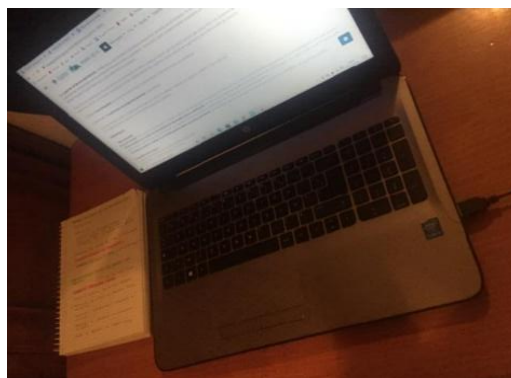
**Figure 5***Summarizing My Life*

This photograph has a lot of meaning for me, as it kind of summarises my life. (ED14\_W18).

Connectivity problems with online classes are also highlighted. This technology dependence also accentuated the digital gap among students based on their economic conditions.

**Effects on the Teaching-Learning Process**

The overall evaluation of online teaching is negative, marked by major difficulties and obstacles in terms of following and getting the most out of it. One particularly prominent aspect is the intensified workload created by the switch to online teaching (Figure 6).

**Figure 6***In the Evening*

I took it in the evening, because that was the time I could do the amount of work and studying I had to do during the pandemic. I took it because that desk and computer represent my situation during the pandemic, I could spend all day sitting there and sometimes all night. (ED-21\_W19).

The participants highlighted the lack of preparation, both of faculty and students, to cope with this change, which often materialised in the multiplication of tasks and continuous assessment activities that ended up saturating students. Methodological shortcomings in terms of online delivery (for example, classes that were too long, predominantly theoretical...) together with the lack of faculty coordination in the planning of activities and evaluations, resulted in an accumulation of tasks and assignments that generated stress and anxiety in many students, notably female students. This latter aspect is related to another of the more negative effects reported by students in relation to the dehumanisation of the teaching-learning process. All this resulted in difficulties reported by many students in terms of attention, understanding and concentration. For male students, electronic devices (computers, consoles, videogames...) often served as an escape tool from the confined four walls of a room.

These difficulties were much more pronounced among first-year students and among students with specific learning needs. These difficulties in terms of paying attention were often related to distractions associated with the domestic context in which the online classes were taking place, but also the teacher's inability to control students' actions or attitudes, hidden behind the anonymity of video conferences with their cameras switched off (Figure 7).

**Figure 7**  
*Screenshot*



The photograph is a screenshot of WhatsApp conversations where I express on several occasions that I'm just not getting any of it. I thought about lots of different options to reflect how I feel about this situation, but nothing seems to me to better reflect the reality of what I'm experiencing than this photograph. It sums up exactly what I have been feeling throughout the year. I don't get what we're supposed to be doing, I can't concentrate as well as I would like, I don't understand many of the topics. During classes, I am unable to concentrate as well as I would like, so there are lots of things that I miss, and I don't understand. (SOC4\_W20).

Despite this negative general assessment, the students participating in this research highlighted some positive aspects of the experience of online teaching in a pandemic, such as learning to manage new technological resources and new ways of learning and working remotely. New forms of communication and collaborative work have also opened up, which in many cases have been expanded in view of the difficulties encountered following the subjects. New opportunities for improving teaching methodologies through the use of information and communication technologies, which can later be useful in their professional future, have also been noted. Flexibility in the learning process is also valued in a particularly positive way, along with the convenience and cost savings of remote learning (Figure 8).

### **Figure 8**

#### *Comfortable Place*

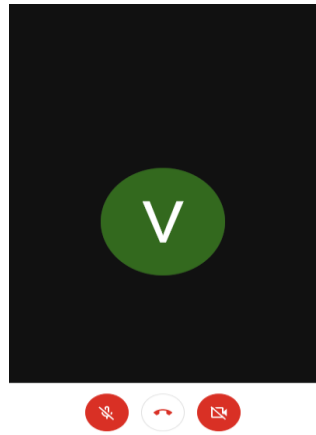


[...] As an advantage, you are in your own home, and you can be in a quiet and more comfortable place than in the faculty classroom. (SOC1\_W20).

### **Effects on Emotional Well-Being**

The pandemic has had a significant negative emotional impact on university students. The photographs taken by the students reflect loneliness and social disconnection, monotony, fear, strain, lack of control, frustration, and feelings of injustice. One particularly prominent sentiment in the images is that of social isolation, resulting from the loss of social interactions typical of university life, and which is particularly salient among first-year and international students, profiles that have not had the opportunity to build new social relations in the context of a pandemic. Online teaching has not been able to replace social relations, and many of the students have felt disconnected from the rest of their group. This is also largely due to the widespread practice of switching off cameras in online classes and the lack of participatory dynamics that could encourage the active engagement of students in classes. In many cases, teachers and students had to face a screen with impersonal icons (Figure 9).

**Figure 9**  
*Online Class*



I took the picture from my desk chair, where I spend most of the time [...] I took it from a screenshot of my own computer while in an online class. [...] the little interaction with the outside world with online classes, where the only thing you can hear is a voice (mostly the teacher's) and at most two cameras switched on (including that of the teacher). This photograph shows us the social distance between people, in this case classmates, and the coldness between subjects. (SOC23\_W23).

Feelings that often result in emotional distress linked to depression, anxiety, discouragement, and hopelessness (Figures 10).

**Figure 10**  
*On The Balcony*



The photo was taken in my hometown, on the balcony of my parents' house, because of the situation in Granada I decided to go back home. For me, this picture represents stress, discouragement and feeling disconnected from university. I'm not finding online teaching particularly helpful, and I feel that I am not making the most out of this or learning anything about what Sociology is. (SOC11\_W20).



Although the exception rather than the rule, some positive feelings do emerge in the images and discourses of the students, especially in relation to gratitude and feelings of self-improvement and resilience in the face of difficulties.

### **Demands and Proposals for Improvement**

One of the objectives of the photovoice method is to produce knowledge that can help guide and improve public policies and social interventions (Wang & Burris, 1997). In our case, through their images and discourses, university students have expressed different needs and demands to improve education policies and pedagogical practices that we can summarise in the following proposals.

The first, and most fundamental one, concerns the need for teacher innovation and to adapt teaching-learning methodology to new scenarios, integrating information and communication technologies in a creative and participatory way. This involves moving beyond traditional lecture or master class formats to develop new teaching strategies (more dynamic, inclusive, motivating, and participatory), new evaluation systems (more focused on continuous evaluation), and to improve coordination between teachers that would in turn improve the learning process without intensifying workload or overlapping contents and activities.

Along these lines, there is a widespread demand for more learning materials and resources in digital formats that enable flexible learning without relying on physical resources.

Furthermore, another goal to work on is the humanisation of teaching, which implies greater knowledge and concern for the experiences and needs of students, the extension of communication pathways between students and teachers (for example, through new interaction dynamics in the virtual scenario) and the development of more personal and personable formal and informal interactions.

### **Conclusions**

The photovoice technique applied to the pandemic context has allowed us to approach students' perceptions and meanings around online teaching, helping to reveal the intersection of individual identities, contexts and students' motivations (Jehangir et al. 2022). This study supports the usefulness of photovoice as a pedagogical tool (Coronado et al., 2020), as it has served not only as a way to teach-learn a novel social research technique. But also as an instrument for reflection and sociological understanding of individuals' and groups' own experience of the pandemic (Suprpto et al., 2020).

However, the application of the technique in this work has some limitations. Firstly, the focus of the sample on a few class groups (although large in terms of the number of participating students) linked to the authors' teaching practice, but which do not allow for systematic comparisons between profiles. Secondly, its development in a context of home confinement made it difficult to deepen the community approach characteristic of this technique. It would be useful in future studies to diversify the sample to other student profiles

(also including teachers and administrative and service staff) and to combine the photovoice with face-to-face participatory and dialogic techniques.

Regarding the results of the research, the shift to online teaching during the most severe period of the pandemic has had significant effects on student experiences, intensely affecting three central aspects: the structural conditions of study, the teaching-learning process, and the subjective well-being of university students. With regard to the structural conditions of study, the research presented in this article highlights the importance of attending to socio-economic and gender inequalities and the different family and living situations that they have marked such experiences. Above all, these inequalities are expressed around the uses of space, and not so much in relation to access to computer equipment as to the lack of technological capital, which is especially evident in profiles such as first-year students.

Furthermore, this research throws into sharp relief the profound effects observed on the emotional well-being of students. Despite the necessary acceptance of online teaching, the balance is tipped more towards negative impacts on human relations. Although social media is presented as an alternative for social interaction, students did not discover that advantage in the reality of physical and social isolation. Thus, the convergence of loneliness and social disconnection, together with monotony, fear, stress and strain, a lack of control, frustration, and feelings of injustice have been highlighted by the main research in this regard (Fiorillo & Gorwood, 2020; Odriozola-González et al., 2020). It is here that the axes of social inequality are expressed most forcefully, since living situations and the possibility of continuing to live independently of the family home have had a high cost for the university population. Similarly, gender emerges as a factor that conditioned student experiences of the pandemic. Female students expressed greater difficulties in reconciling the demands of studying (exacerbated by the online context) and by household chores in the family context. Female students experienced greater mental health challenges because of loneliness, isolation and lack of communication. Another aggravating circumstance of student distress is linked to national origin and academic trajectory, with foreign students and first year students being the ones to indicate to a greater extent the isolating effects of the pandemic.

The pandemic has changed students' perception of the value for money of their learning experience. While most felt that the quality of the provision had deteriorated, the costs, in financial terms, remained constant. Due to the lockdown, academic activity was severely restricted, and therefore the value of higher education depreciated significantly.

In this regard, one fundamental recommendation is that universities should adjust their enrollment policies to the new circumstances, seeking to serve students more efficiently and always striving for educational equity. Michele Lee Kozimor, in her recap of “lessons learned” from university teaching in lockdown, indicated that the urgent transition to virtual teaching has not had the best possible response for several reasons, including: different levels of skills acquisition in the digital world of teachers and students (Kozimor, 2020). In this regard, attending to the experiences, needs, and demands of students is fundamental and points – moving beyond the pandemic – to a critical reflection on how to improve and adapt teaching and learning processes and methodologies in a more dynamic, participatory, and inclusive way, where the virtual tools of communication and learning must be accommodated, but always by means of interactive and empathetic pedagogical approaches. In addition, it is essential to take

account of the diversity of university student cohorts and pay special attention to factors of vulnerability stemming from gender, socioeconomic status, specific learning needs, and national origin.

## **Declarations**

### **Availability of data and materials**

The data that support the findings of this study are available from the authors but restrictions apply to the availability of these data, which were used under licence for the current study, and so are not publicly available. Excel database is however available from the authors upon reasonable request and with permission of the authors.

### **Acknowledgements**

We thank the students who participated in this research for their sincere and generous contribution to this research, as well as for their open collaboration in the review of the results.

### **Notes**

<sup>1</sup> Citation codes express first and by means of acronyms the degree course (SOC: Sociology; ED: Social Education; SW: Social Work); followed by a case identification number; thirdly, an acronym to identify the sex of the student (W: Woman; M: Man), and finally, the last two figures, express the age of each student.

### References

- Agarwal, N., Moya, E. M., Yasui, N. Yura & Seymour, C. (2015). Participatory Action Research with College Students with Disabilities: Photovoice for an Inclusive Campus. *Journal of Postsecondary Education and Disability*, 28(2), 243-250.
- Amerio, A., Brambilla, A., Morganti, A., Alessandra Agugli, A., Bianchi, D., Santi, F., Costantini, L., Odone, A., Costanza, A., Signorelli, C., Serafini, G., Amore, M. & Capolongo, S. (2020). COVID-19 Lockdown: Housing Built Environment's Effects on Mental Health. *International Journal of Environmental Research and Public Health*, 17(16), 5973. <https://doi.org/10.3390/ijerph17165973>
- Amsalem, D., Dixon, L. B. & Neria, Y. (2021). The Coronavirus Disease 2019 (COVID-19) Outbreak and mental health: current risks and Recommended Actions. *JAMA Psychiatry*, 78(1), 9-10. <https://doi.org/10.1001/jamapsychiatry.2020.1730>
- Ando, S. (2020). University teaching and learning in a time of social distancing: A sociocultural perspective. *Journal of Human Behavior in the Social Environment*. <https://doi.org/10.1080/10911359.2020.1814928>
- Bánhidi, M. & Lacza, G. (2020). Lifestyle changes during Covid-19 period in Hungary – feedback of university students. *World Leisure Journal*, 62(4), 325-330. <https://doi.org/10.1080/16078055.2020.1825251>
- Bryson, J. R., & Andres, L. (2020). Covid-19 and rapid adoption and improvisation of online teaching: curating resources for extensive versus intensive online learning experiences. *Journal of Geography in Higher Education*, 44(4), 608-623. <https://doi.org/10.1080/03098265.2020.1807478>
- Call-Cummings, Megan & Hauber-Özer, Melissa (2021). Virtual Photovoice: Methodological Lessons and Cautions. *The Qualitative Report*. <https://doi.org/10.46743/2160-3715/2021.4971>
- Carhill-Poza, A. & Williams, T. P. (2020). Learning “Anytime, Anywhere”? The Imperfect Alignment of Immigrant Students’ Experiences and School-Based Technologies in an Urban US High School. *Comparative Education Review*, 64(3), 428-450. <https://doi.org/10.1086/709430>
- Carpio-Fernández, M.V., García-Linares, M.C., Cerezo-Rusillo, M.T. & Casanova-Arias, P.F. (2021). Covid-19: Uso y abuso de internet y teléfono móvil en estudiantes universitarios. *Revista INFAD de Psicología. International Journal of Developmental and Educational Psychology.*, 2(1), 107-116. <https://doi.org/10.17060/ijodaep.2021.n1.v2.2123>
- Coronado, C., Freijomil-Vázquez, C., Fernández-Basanta, S., Andina-Díaz, E., & Movilla-Fernández, M.-J. (2020). Using photovoice to explore the impact on a student community after including cross-sectional content on environmental sustainability in a university subject: A case study. *International Journal of Sustainability in Higher Education*, 21(7), 1331-1350. <https://doi.org/10.1108/IJSHE-01-2020-0031>
- Doyumğaç, I., Tanhan, A. & Kiyamaz, M. S. (2021). Understanding the Most Important Facilitators and Barriers for Online Education during COVID-19 through Online Photovoice Methodology. *Int. J. High. Educ.*, 10(1), 166. <https://doi.org/10.5430/ijhe.v10n1p166>
- Fisher, D., Solomons, D., & Makhathini, K. B. (2022). Face-to-face versus online-based

- lectures: A COVID-19 induced study on assessments. *Frontiers in Education*, 7. <https://doi.org/10.3389/educ.2022.1045311>
- Fiorillo, A. & Gorwood, P. (2020). The consequences of the COVID-19 pandemic on mental health and implications for clinical practice. *European Psychiatry*, 63(1). e32. <https://doi.org/10.1192/j.eurpsy.2020.35>
- Gillis, A. & Krull, L. M. (2020). COVID-19 Remote Learning Transition in Spring 2020: Class Structures, Student Perceptions, and Inequality in College Courses. *Teaching Sociology*, 48(4), 283-299. <https://doi.org/10.1177/0092055X20954263>
- Glaser, B. G. & Strauss, A. L. (2010). *The discovery of grounded theory: Strategies for qualitative research* (5. paperback print). Aldine Transaction.
- Gómez-Galán, J., Martínez-López, J.A., Lázaro-Pérez, C. & Sarasola Sánchez-Serrano, J.L. (2020). Social Networks Consumption and Addiction in College Students during the COVID-19 Pandemic: Educational Approach to Responsible Use. *Sustainability*, 12(18), 7737. <https://doi.org/10.3390/su12187737>
- Gonzalez, R., Sørum, H., & Raaen, K. (2022). Emergency Digital Teaching during the COVID-19 Lockdown: Students' Perspectives. *Education Sciences*, 12(3), 152. <https://doi.org/10.3390/educsci12030152>
- González-Calvo, G., Barba-Martín, R.A., Bores-García, D., & Gallego-Lema, V. (2020). Aprender a ser docente sin estar en las aulas: La COVID-19 como amenaza al desarrollo profesional del futuro profesorado. *International and Multidisciplinary Journal of Social Sciences*. <https://doi.org/10.17583/rimcis.2020.5783>
- González-García, M., Crespo Álvarez, J.C., Zubeldia Pérez, E., Fernandez-Carriba, S. & López, J.G. (2021). Feasibility of a Brief Online Mindfulness and Compassion-Based Intervention to Promote Mental Health Among University Students During the COVID-19 Pandemic. *Mindfulness*, 1-11. <https://doi.org/10.1007/s12671-021-01632-6>
- Howard, A.L., Carnrite, K.D. & Barker, E.T. (2021). First-Year University Students' Mental Health Trajectories Were Disrupted at the Onset of COVID-19, but Disruptions Were Not Linked to Housing and Financial Vulnerabilities: A Registered Report. *Emerging Adulthood*. <https://doi.org/10.1177/21676968211053523>
- IESALC (2020). *COVID-19 y educación superior: De los efectos inmediatos al día después. Análisis de impactos, respuestas políticas y recomendaciones*. (p. 57). UNESCO. Instituto Internacional para la Educación Superior en América Latina y el Caribe. <https://www.iesalc.unesco.org/wp-content/uploads/2020/05/COVID-19-ES-130520.pdf>
- Jehangir, R. R., Collins, K., & Molengraff, T. (2022). Class Matters: Employing Photovoice With First-Generation Poor and Working-Class College Students as a Lens on Intersecting Identities. *Journal of Diversity in Higher Education*. <https://doi.org/10.1037/dhe0000417>
- Kaparounaki, C.K., Patsali, M.E., Mousa, Danai-Priskila. V., Papadopoulou, E.V. K. & Papadopoulou, K.N. (2020). University students' mental health amidst the COVID-19 quarantine in Greece. *Psychiatry Res.*, 290(January), 2.
- Kozimor, M.L. (2020). Editor's Comment: Three Teaching Takeaways from the COVID-19 Pandemic. *Teaching Sociology*, 48(3), 181-183. <https://doi.org/10.1177/0092055X20931953>
- Kroeger, S., Embury, D., Cooper, A., Brydon-Miller, M., Laine, C. & Johnson, H. (2012). Stone soup: Using co-teaching and Photovoice to support inclusive education. *Educ. Action*

- Res., 20(2), 183-200. <https://doi.org/10.1080/09650792.2012.676285>
- Lichty, L., Kornbluh, M., Mortensen, J. & Foster-Fishman, P. (2019). Claiming Online Space for Empowering Methods: Taking Photovoice to Scale Online. *Glob. J. Community Psychol. Pract.*, 10(3), 1-26.
- Liebenberg, L. (2018). Thinking Critically About Photovoice: Achieving Empowerment and Social Change. *International Journal of Qualitative Methods*, 17(1), 1609406918757631. <https://doi.org/10.1177/1609406918757631>
- Lozano Díaz, A., Fernández-Prados, J.S., Figueredo Canosa, V. & Martínez Martínez, A.M. (2020) Impactos del confinamiento por el COVID-19 entre universitarios: Satisfacción Vital, Resiliencia y Capital Social Online, *International Journal of Sociology of Education*, Special Issue: COVID-19 Crisis and Socioeducative Inequalities and Strategies to Overcome them, 79-104. <http://doi.org/10.17583/rise.2020.5925>
- Ministerio de Universidades (2021). *Datos y cifras del Sistema Universitario Español. Publicación 2020-2021* (p. 132). Ministerio de Universidades. [https://www.universidades.gob.es/stfls/universidades/Estadisticas/ficheros/Datos\\_y\\_Cifras\\_2020-21.pdf](https://www.universidades.gob.es/stfls/universidades/Estadisticas/ficheros/Datos_y_Cifras_2020-21.pdf)
- Morales-Rodríguez, F.M. (2021). Fear, Stress, Resilience and Coping Strategies during COVID-19 in Spanish University Students. *Sustainability*, 13(11), 5824. <https://doi.org/10.3390/su13115824>
- Odrizola-González, P., Planchuelo-Gómez, A., Iruirtia, M.J., & de Luis-García, R. (2020). Psychological effects of the COVID-19 outbreak and lockdown among students and workers of a Spanish university. *Psychiatry Research*, 290, 113108. <https://doi.org/10.1016/j.psychres.2020.113108>
- Pérez-López, E., Vázquez Atochero, A. & Cambero Rivero, S. (2021). Educación a distancia en tiempos de COVID-19: Análisis desde la perspectiva de los estudiantes universitarios. *RIED-Revista Iberoamericana de Educación a Distancia*, 24(1), 331-350. <https://doi.org/10.5944/ried.24.1.27855>
- Perry, B. (2006). Using photographic images as an interactive online teaching strategy. *Internet and Higher Education*, 9(3), 229-240. <https://doi.org/10.1016/j.iheduc.2006.06.008>
- Plataforma de Recursos de Apoyo a la Docencia (PRADO). (s.f.). <https://prado.ugr.es/>
- Rania, N., Coppola, I. & Pinna, L. (2021). Adapting qualitative methods during the COVID-19 era: Factors to consider for successful use of online photovoice. *The Qualitative Report*, 26(8), 0\_1-2729. <https://doi.org/10.46743/2160-3715/2021.4863>
- Sáiz-Manzanares, M.C., Casanova, J., Lencastre, J.A., Almeida, L. & Martín-Antón, L.J. (2022). Student satisfaction with online teaching in times of COVID-19. *Comunicar*, 30(70). <https://doi.org/10.3916/C70-2022-03>
- Sarno, E. (2020). Emergenza sanitaria e chiusura di scuole e università. Il divario culturale come ulteriore effetto del COVID-19. *Documenti geografici*, 1. [https://doi.org/10.19246/DOCUGEO2281-7549/202001\\_13](https://doi.org/10.19246/DOCUGEO2281-7549/202001_13)
- Son, C., Hegde, S., Smith, A., Wang, X. & Sasangohar, F. (2020). Effects of COVID-19 on college students' mental health in the United States: Interview survey study. En *J. Med. Internet Res.* (Vol. 22, Número 9, p. e21279). <https://doi.org/10.2196/21279>
- Suprpto, N., Sunarti, T., Suliyanah, S., Wulandari, D., Hidayaatullaah, H. N., Adam, A. S., &

- Mubarok, H. (2020). A systematic review of photovoice as participatory action research strategies. *International Journal of Evaluation and Research in Education (IJERE)*, 9(3), Article 3. <https://doi.org/10.11591/ijere.v9i3.20581>
- Tejedor, S., Cervi, L., Tusa, F., & Parola, A. (2020). Educación en tiempos de pandemia: Reflexiones de alumnos y profesores sobre la enseñanza virtual universitaria en España, Italia y Ecuador. *Revista Latina*, 78, 1-21. <https://doi.org/10.4185/RLCS-2020-1466>
- Tümkeya, S., Kayiran, B.K., Tanhan, A., & Arslan, U. (2021). Using Online Photovoice (OPV) to Understand Youths' Perceptions of Distance Education during COVID-19. *International Journal of Education and Literacy Studies*, 9(4), 45. <https://doi.org/10.7575/aiac.ijels.v.9n.4p.45>
- Upadhyaya, P. & Vrinda (2021). Impact of technostress on academic productivity of university students. *Education and Information Technologies*, 26(2), 1647-1664. <https://doi.org/10.1007/s10639-020-10319-9>
- UGR (2021). Anexo estadístico de la memoria académica del curso 2020-2021. <https://secretariageneral.ugr.es/areas-gestion/memorias/academica/2020-2021/anexo-estadistico>
- UNESCO (2023). Global Monitoring of School Closures Caused by the COVID-19 Pandemic. <https://covid19.uis.unesco.org/data/>
- Vargas Quesada, B., Zarco, C., & Cordón, O. (2023). Mapping the Situation of Educational Technologies in the Spanish University System Using Social Network Analysis and Visualization. *International Journal of Interactive Multimedia and Artificial Intelligence*, 8(2), 190. <https://doi.org/10.9781/ijimai.2021.09.004>
- Wai-Yan W., Sally, C., Carson K.W., Ho Hui Cheng, A., Sein-Yue Hui, E. Chun-Kit Fung, K., & Hoi-Wik Yu, H. (2021). “Getting ready to teach”: using photovoice within a collaborative action research project. *Journal of Education for Teaching*, 47(1), 125-130. <https://doi.org/10.1080/02607476.2020.1841553>
- Wang, C., & Burris, M.A. (1994). Empowerment through Photo Novella: Portraits of Participation. *Health Education & Behavior*, 21(2), 171-186. <https://doi.org/10.1177/109019819402100204>
- Wang, C., & Burris, M.A. (1997). Photovoice: Concept, Methodology, and Use for Participatory Needs Assessment. *Heal. Educ. Behav.*, 24(3), 369-387. <https://doi.org/10.1177/109019819702400309>
- Wass, R., Anderson, V., Rabello, R., Golding, C., Rangi, A., & Eteuati, E. (2020). Photovoice as a research method for higher education research. *High. Educ. Res. Dev.*, 39(4), 834-850. <https://doi.org/10.1080/07294360.2019.1692791>