

BARCELONA RECERCA I INNOVACIÓ

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## MOTEMO-OUTDOOR: A teaching experience in the outdoor spaces of the UAB campus pandemic-proof



As a result of the COVID-19 pandemic, professors of the Psychology Degree at UAB implemented a new teaching experience in a first year subject. MOTEMO-OUTDOOR is an active learning program applied to three environments: indoors, outdoors and online. At the same time, they evaluated the feasibility and effectiveness of this teaching strategy. The success of this program led to the continuation of the initiative.

Image: Antoni Sanz

Although the World Health Organisation is still waiting to declare the end of the state of public health emergency, we can already say that the COVID-19 pandemic has been one of the global events that have had the greatest impact on the daily lives of the people who have suffered it. Almost no human sphere was left out of a drastic and profound transformation, which also includes the education system. At all levels, including at university, professors had to adapt the strategies and methodologies to virtuality in response to this exceptional situation.

After the first and hardest wave of infections, the return to the classroom occurred in a staggered manner, in a context of hard restrictions on social interaction that hindered the performance of academic activities. During this period, universities such as Oxford carried out innovative experiences such as the HyFlex model, which combined face-to-face teaching

with online synchronous teaching, and which highlighted the challenge of maintaining the quality of university teaching while continuing the spread of the virus.

In parallel, and because the SARS-CoV-2 is mainly airborne, several public administrations proposed the adoption of complementary measures to online teaching, such as outdoor learning. Considering these proposals and recommendations and knowing the experiences of many educational institutions during the Influenza A pandemic of 1918, we implemented in the Faculty of Psychology of the UAB an experience of teaching innovation, called MOTEMO-OUTDOOR, with the aim of guaranteeing learning while protecting the health of students and teachers. This program was designed taking advantage of one of the emblems and strengths of our university: an authentic campus, with numerous green spaces adjacent and easily accessible to the classrooms.

With a parallel investigation to the program, we evaluate the feasibility and effectiveness of this "emergency" teaching strategy, based on outdoor active learning, comparing it with the teaching carried out inside the classroom. Likewise, the adaptation of the dynamics of the teaching materials and methods contemplated a third format, online, considering that, at the time of the implementation of the program, the protocol of attention to students infected with SARS-CoV-2, or who had been in close contact with another infected person, implied their confinement at home.

The program involved 370 students of a compulsory undergraduate subject, who attended four seminars. Pseudorandomisation ensured that all students were assigned two indoor seminars and two outdoor seminars. The outdoor space was characterized by being a green space, with quick accessibility from the classroom, no usual transit of people, low noise pollution and a good connection to the Wi-Fi network. Carpets were designed that allowed the insulation of the floor of the students and the personal electronic devices with which they participated in the session (smartphone, tablet, or laptop). In addition, 30 students participated in the 3 formats, which included at least one online session due to the application of confinement measures. An individual questionnaire was designed through which each student evaluated, after each seminar, the learning experience (degree of acquired learning, evaluative impact of learning and hedonic experience), and the learning conditions (environmental, technical and health security).

The results showed that, according to the impression of the students, a better learning experience was achieved in the outdoor format, which was due to a greater experimentation of positive emotions, while in the acquired learning and in the expected evaluative impact no significant differences were found compared to the classic indoor format. On the contrary, the indoor seminars were better evaluated in relation to the learning context, because the classrooms presented better environmental conditions, and even though there was no difference in the technical conditions the outdoor context was perceived as safer.

Finally, in the subsample of students who participated in the three learning contexts, it was observed that the online format had a better learning context than the two face-to-face formats (indoor and outdoor), but the learning experience was superior in the outdoor format. Overall, the differences between the three contexts were small, so it seems that an equivalence between them could be guaranteed, which was the main purpose of the program: to ensure student learning regardless of the format and, therefore, to have a flexible and resilient methodology in the face of changing circumstances.

The conclusion regarding the seminars in outdoor spaces of the UAB campus is that the experience of positive emotions, probably associated with exposure to a green environment, together with the greater perception of health security, compensated for its slight disadvantage in terms of technical and environmental conditions in the context of learning. Therefore, the outdoor context guaranteed a learning experience and expectancies of evaluative impact like the classic model of teaching in a seminar classroom. Given the results obtained, and beyond the pandemic, the MOTEMO-OUTDOOR program continues to be taught regularly in the first year of the degree in psychology, in seminars that, due to their dynamics and group size (20 students), are ideal for this format.

We hope that this experience will serve as an impulse for other teaching teams to bet on the implementation of similar experiences of multiformat teaching adaptation, especially in relation to the outdoor context, which seems to contribute positively to the learning objectives and, probably, is a complementary model to teaching in conventional spaces. In any case, in order to assure its viability and sustainability in the future, various challenges must be overcome, such as the enabling of outdoor spaces adjacent to faculties and schools, the formalization of these as teaching spaces, or the adaptation of the methodology and teaching materials of each subject to this new context.

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