



## **Strengths, weaknesses and lessons learned from the blended learning methodology application at two interdisciplinary doctoral summer schools**

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The blended learning methodology at the level of doctoral studies was not often used as a method of learning and teaching until recently. The reason is, in particular, in the nature of doctoral studies, which require a lot of individual research work in a very narrow scientific field.

Joint initiative of the University of Ljubljana, University of Brescia, University of Natural Resources and Life Sciences from Vienna and private video recording and production company Piktorama, recognised the need to at least partially integrate interdisciplinary and more general knowledge to the level of doctoral studies. In 2015 the above listed organisations were successful with the project application for the Erasmus+ call. The main goal of the project Environmental Protection and Natural Disasters KA2-HE-14/15 was to organise two international, interdisciplinary, doctoral summer schools, where blended learning methodology was used. The first summer school Environmental Protection was organised in 2016, and the second one Natural Disasters was organised in 2017. Both summer schools were partly held at a distance (using ICT) and partly face-to-face (in the classroom).

Implementation of one part of the summer school using distance learning enables students greater flexibility in terms of their time. Additionally, students can access all learning material also after the summer school, which is a great benefit for them. Therefore, blended learning methodology creates a new dynamic and flexible learning. In addition, integration of different disciplines gives the opportunity to solve problems of environmental protection and natural disasters, because at the points of contact of different disciplines, usually new skills and knowledge are developed as a basis for the creation of new and innovative technical solutions and measures. During the summer schools PhD students received responses to their research work through lectures and discussions by other participants and professors, who look at the same problem from different perspective.

To summarise, interdisciplinary and international doctoral summer schools carried out using the blended learning methodology could be the best way of study for PhD students, because participation at the summer school enables students to improve their doctoral research and at the same time enables them greater flexibility in terms of their time.

The project ended in October 2017. Results of the project (including video lectures) can be found at: <http://www.let-group.com/summerschool.html>.