



Blended learning to support training in climatology in the Andean region

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Continuing education and training of students and personnel of meteorological and related services is crucial to ensure the quality of meteorological and climatological products delivered to the public. Therefore, WMO Regional Training Centers (RTCs) aim at providing education in meteorology and climatology at the regional scale. One goal of the Climandes project, a joint project between the Peruvian weather service SENAMHI and MeteoSwiss, is to support the RTC hosted by Peru in the provision of training to the larger Andean Region. To this end online learning as a resource was introduced to enhance capacity building and to support the development and realization of blended courses.

Within the project, a blended course on verification of seasonal forecasts as well as a blended workshop on the use of e-learning technologies were developed and realized. These blended course formats have proven to be very successful and efficient in the context of the RTC. The participants were highly motivated and pleased with the approach. It enabled participants to individually determine the time required for learning during online training, and left more time for longer practical sessions in which they could exchange directly with the instructors. Both, online discussion forums and the classroom setting may foster the mutual exchange of social learning experiences. However, the acceptance of online teaching remains a challenge. It is thus beneficial when instructors accompany the learning process closely and regularly provide help and encouragement.

In addition, the first experiences have shown that both the participation (on the participants side) and the preparation/conduction (on the instructor side) of online courses require a high amount of time as well as good abilities in self-time management. While costs are low for attending e-learning courses, the participation in the classroom seminars, which are an integral part of the blended learning experience, are costly and covering these costs remains a challenge, especially for developing countries.