Educating the next generation decision makers - the multi-disciplinary classroom as a platform for developing communication skills needed for future progress of adaptation measures

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Educating the next generation decision makers - the multi-disciplinary classroom as a platform for developing communication skills needed for future progress of adaptation measures
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Suggested session:
8. Climate services and communication
   I. Ingredients for effective communication of climate change knowledge

The scientific knowledge of climate change processes and their worrying future implications for human societies and natural systems has developed considerably during the last decade, but necessary adaptive actions by decision makers have so far been rather limited. There are several causes to this, such as a discrepancy related to the communication between climate scientists and end-users, and the lack of climate educational background of several decision makers. This results in decision makers not fully incorporating knowledge on climate change and impacts into adaptive action measures. Hence, educating future decision makers, as well as scientists providing the climate knowledge, is therefore highly important in order to minimise this reduction of knowledge transfer, and by so improve the necessary decision processes of climate actions.

Here we report how the Department of Physical Geography and Ecosystem Sciences, and the Centre for Environmental and Climate Research at Lund University, work on continuously improving climate communication skills of our Masters students. Throughout the academic programs with Masters in Physical Geography and Ecosystem Analysis, and in Climate Strategy, our students have mixed educational background (ranging from meteorologists to geographers, from biologists to engineers as well as political science students) which generates a unique classroom environment for learning communication across borders of different understanding and knowledge background.

Here we present interesting outcomes of such a set-up, including work hands-on with issues related to climate change, impacts and adaptation through exercises, seminars and projects. Students learn how to systematically treat background climate information and carefully analyse their results, and to efficiently communicate their findings through written reports and oral presentations. Teachers provide formative constructive feedback on assignments throughout the programs, for students to improve their subject knowledge and understanding as well as their communication performance.

To further motivate our students, external professionals from enterprises and authorities working on climate related issues are frequently invited as guest lecturers, which also may act as co-supervisors of degree projects. These networks also contribute to valuable transfer of scientific knowledge between our departments and the non-academia world. Furthermore, teachers are encouraged to develop their own communication skills by e.g. attend tailored pedagogic courses and conferences. Our Master programs provide a highly stimulating learning environment in which students are trained to become effective communicators of climate related knowledge, being able to critically analyse climate information, impact probabilities, and adaptation strategies, and thereby to take on the role as decision makers.