

Pandemic Reshaping of the Academic Agricultural Education

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Introduction

The corona virus is the biggest challenge after the Second World War, which put the humanity in the situation to face with its survival. Besides the huge number of human deaths and damages in all sectors of the civilization, the pandemic caused by COVID-19 made tectonic changes in the teaching process in all levels of education all over the world. In such circumstances, all actors in the educational court were forced to find the solutions how to overcome the limitations and restrictions which were consequences of this planetary disaster, keeping all of them stacked to the main mission of the education: Efficient moving forward to the knowledge based society.

The shortage of physical contact between the children and students with the teaching staff, the lack of possibilities for learning by doing approach, and the desocialization are just some of the obvious negative effects. But the human society is like a vital and flexible organism which is always able to find resources and modalities in order to deal with global dangers.

In terms of education, it is a matter of personal and institutional motivation to emancipate the teaching process in such pandemic circumstances. Even more, it is a matter of skills and imagination how to convert the inconveniences of COVID-19 into an advantage in order to improve and enrich the teaching tools that can be used for better audio-visualization of the lectures, exercises, practical work, internships etc. From one side, the partial or total lock out and quarantine emptied the amphitheaters, laboratories, teaching rooms and student clubs, and also interrupted the academic and research mobility, but on the other side, alternatively it created much more space and instruction time to generate new teaching tools out of the textbooks, guidelines and other conventional and obsolete teaching materials.

Due to its nature, the agriculture as an applied field of science has an incredible need for such action. Demonstration of field and farm practices, lab analyses, processing of food products, observing of crop and livestock occurrences cannot be simply replaced by “improved” lecturing and teaching. But, for sure it is not enough. In that sense, the imperative in front of the academic community in agricultural higher educational institutions is to develop new approaches and tools which will bring closer such practicalities to the students.

Need for action!

This challenge is requiring gradual and heterogeneous activities which will involve all stakeholders in this process and make them equal contributors, beginning from the state level, through institutional and at the end to personal level.

The state authorities should be responsible for creating an atmosphere for active opening of a wide debate about the importance of the reshaping of teaching process and also for providing substantial support for the development of new teaching tools by enabling free access to all databases and media libraries which contain such contents and are in state ownership, such as: national broadcast companies, resource centers, movie theaters etc.

At the institutional level, the universities and faculties need to provide wide sharing of ideas including new kinds of tools which can be used in this process of pandemic reshaping of the teaching process. The best way to do that is to organize series of workshops and seminars in order to increase the computational skills and competences of the teaching staff in order to create and to use the novelties in the teaching process. There is also the huge importance of the skills that need to be acquired among the academic staff via appropriate training in order to use the teaching platforms, to organize the virtual exercises, lectures and exams etc.

Personally, the professors, lecturers and students voluntarily have to define their own tasks that need to be undertaken. The syllabus and teaching program should be the basis for development of the register which will contain all contents that need to be developed in order to improve the virtual teaching process. The professors are the ones who need to create those lists of new teaching tools. The lecturers in a close collaboration with the students should use photos, videos and infographics as authentic resources to create new teaching tools by using available software for such purposes. In such way, the students will be involved directly and interactively in the improvement of virtual teaching. It can be done by tasking them to prepare seminars or homework which are closely related to the teaching contents. It is very important for the students to open their minds and use their imagination in order to come with good ideas. This method could bring several advantages, meaning the students can easily search for new teaching ideas which will fulfill their free time during the pandemic, and eventually they will find the lectures more interesting if they have a part in it.

Such harmonized action in the field of biotechnical sciences will compensate the lack of physical contact between the students and teaching staff by full audio-visualization of the virtual lectures, exercises and exams. By using such approach, the occurrences and processes in food production, processing and control will be more understandable for the future professionals in the field of agriculture.

In this collective effort, as potential employers, it is important to involve the owners and managers of the companies from this sector to give technical and maybe financial support for the development of these new tools in order to overcome the gap in teaching process caused by COVID-19 and furthermore, to get good and innovative employees.

At the end, it is important to point out that the new approach and tools for reshaping of the teaching process in pandemic circumstances can be permanently used for teaching purposes and after the ending of the pandemic, not only in the academic institutions, but also among the companies, NGO's and state bodies dealing with agriculture.

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