

UNESCO Chairs / UNITWIN Networks Consultation Report Form (Draft)¹

Under the III World Higher Education Conference (WHEC 2021)

Basic information

Date of consultation	20/02/2021			
Location of consultation	Porto Alegre Brazil			
Hosting UNESCO Chair or UNITWIN Network (include webpage if applicable)	Hosting Unesco Chair			
Name and email address of key contact person	Rosa Maria Vicari rosa@inf.ufrgs.br			
Complete name, title, and affiliation of moderator(s)	Universidade Federal do Rio Grande do Sul Centro Multidisciplinar de Informática na Educação			
Language of Consultation	Portuguese			
Time spent in consultation (minutes)	Education, Science and Technology 15 min			
Number of participants	1			
Participants' profiles (please, briefly describe the composition of the group)	<p>Rosa Maria Vicari</p> <p><i>PhD in Electrical and Computer Engineering from the University of Coimbra (1990). Full professor at the Federal University of Rio Grande do Sul in the Informatics Institute and also Chair of UNESCO coordinator of Communication and Information Technologies in Education. Experience in Computer Science, acting on the following topics: intelligent tutors systems, multi-agent systems and Computer and education.</i></p> <p>MyCitations (Google Scholar). GoogleScholar: https://scholar.google.com/citations?user=XsX10SQAAAAJ&hl=en ORCID: http://orcid.org/0000-0002-6909-6405 MyResearcherID : https://www.researchgate.net/profile/Rosa_Maria_Vicari</p>			
Countries represented by participants	Brazil			
Stakeholder groups (please mark with a "x" as appropriate)	<input checked="" type="checkbox"/> Professors/ Researchers	<input type="checkbox"/> Students/Youth	<input type="checkbox"/> Higher education managers/authorities	<input type="checkbox"/> Private sector
	<input type="checkbox"/> NGO/civil society	<input type="checkbox"/> International organizations	<input type="checkbox"/> Policy makers/government	<input type="checkbox"/> Others (please, specify):

¹ This template includes some elements used by the consultation developed by [The Futures of Education](#) initiative.

25.01.21

Which theme did you choose for this consultation?

- | | |
|--|--|
| <input type="checkbox"/> Theme 1: Impact of COVID-19 on higher education | <input type="checkbox"/> Theme 7: Financing higher education |
| <input type="checkbox"/> Theme 2: Higher education and the SDGs | <input type="checkbox"/> Theme 8: Data and knowledge production |
| <input type="checkbox"/> Theme 3: Inclusion in higher education | <input type="checkbox"/> Theme 9: International cooperation to enhance synergies |
| <input type="checkbox"/> Theme 4: Quality & relevance of programmes | <input checked="" type="checkbox"/> X Theme 10: <u>Preparing for the future of higher learning</u> |
| <input type="checkbox"/> Theme 5: Academic mobility in higher education | <input type="checkbox"/> Other (please, specify): |
| <input type="checkbox"/> Theme 6: Higher education governance | |

Synthesis of contributions

Kindly synthesize that best summary reflecting the ideas provided by all participants. There is no need to identify participants. Responses should not exceed 1,200 **words**, including the three responses. As an average, each response would have a limit of 400 words. If necessary, add attachments. Remember that question 1 is general, but question 2 and 3 should refer to the specific theme you have chosen (see list in **Annex 1**).

Question 1: *What should be the present and future role of higher education to favour wellbeing of humans and sustainability of societies?*

With an education for the XXI century, strengthening the learning capacity and the development of competences: 1) develop an ability to do things knowingly; 2) development of personalized learning programs; 3) acceptance of the idea that everyone should attain and obtain full higher education; 4) explicit education of general intellectual skills; 5) development of personal skills; 6) relationship development; development of collaboration skills, and 7) develop work skills in mixed teams of humans and machines.

To achieve this objective, it is necessary to develop a comprehensive education, that is, a process where the human being thinks in all its dimensions: cognitive, ethical, physical, social, and affective. It is about thinking, about an education that enables the integral formation of the human being, in all its aspects. Despite all the technology, human beings remain human. Therefore, comprehensive education must be guided by human needs. Social relationships, for example, may have changed shape over the past century, since they have largely become mediated by technology to the detriment of face-to-face contact. Physical education may also have migrated from outdoor social activities, to personalized activities within gyms. Affectivity can manifest itself more through 'emotions' than through actual hugs, but all these aspects are still present in human beings. Changes with technology are the way that interaction occurs.

Question 2: What are the main **challenges/problems/gaps** in relation to... [rephrase content relative to the main theme you have selected]?

Some strategies allow the university and the community to promote the characteristics of an integral human being. In our opinion it is based on the trans and interdisciplinary (instead of isolated disciplines), ie. interactions among disciplines are requested because that expands our capability to upon diversity. The brain loves changes and sociality because that improves the quantity of new connections.

The work strategy should have a priority, regardless the teaching and learning strategy adopted (by projects, flipped classes, *fablabs to support experimentation*, etc.). The evolution of science, techniques and technology is at the frontiers of those disciplines. Learning is more personalized every day because technology allows it to be adapted to each individual however; creative work, research and the generation of knowledge take place in a collaborative way.

Curiosity → Imagination → Creativity

Curiosity is a learning factor, and with surprise it favors memory. Intuitions and conjectures are also needed to push creativity! First, we generate ideas and afterwards we develop and transform them into something more.

Today, the exemplary case is fake news. You have to be critical. Examine the contents, analyze their correction, discover the false and the error, and correct. We must look at the source.

Strategies allow the university community to identify and change, with social sensitivity, and along the space-time context where it operates.

Concerning the social aspects, the university is linked to a set of diversified products, functions and tasks, which aim to contribute to the social-economic development, providing the indispensable scientific and technological support.

The university has in its hands essential elements for development, which are specified in teaching, research and extensions. And the productive sector demands from the universities prepared human resources and technology, which enables it to face a globalized and highly competitive environment. In addition, universities play an important role to boost of local economies, since that they generate employment and income. They are, therefore, a factor of growth and development for the (smart) cities and regions where they are installed.

To achieve the integration among the university courses and society new scenarios can originate from situations such as: there are research, teaching and extension projects whose results are used for actions that interconnect them. For example, a project that aims to meet a demand that arises in an extension can generate another connected research project that will result in better teaching.



Question 3: *What needs to **change** or be **created** to face these challenges **within** and/or **outside** higher education institutions?*

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To achieve the integration among the university courses and society new scenarios can originate from situations such as: there are research, and extension projects whose results are used for actions that interconnect them. For example, a project that aims to meet a demand that arises in an extension can generate another connected research project that will result in better teaching.

Today, space and time are twisted together and we are forced to pay more attention to what is around us: the future is our aim. Then, think critically, meditate and be prepared to argue constantly.

The project-based and challenge-based activities, including problem solving, experimentation, stimulating learning through experience, interdisciplinary teaching that requires teamwork, articulation, critical and innovative thinking are one way to achieve these competences. In these projects, the students “get their hands dirty”, depending on the problems posed or coming from them.

The role of the educator has changed. He is now a reference of knowledge, of excellence, a reflective person who conducts debates, because the question may be more important than the answer. It awakens skills and desires in students that sometimes go unnoticed. It is in the classroom where we understand the logic of relationships and the activities proposed imposing the group work harder.

Student, work, study, and think, and posing open questions to the teacher aids to expand their knowledge and abuse of critical thinking.

Activities can reinforce logical reasoning, use new ways of working, such as distance learning and that is why digital culture is developed, keep your data safe, respect the privacy of other participants, and act ethically with the ability of colleagues to take decisions and act proactively in the proposed activities. It is also important for students to practice critical reasoning, based on data and facts, and to ask pertinent questions.

So, the academic community needs adopt strategies that allow the collective construction of

25.01.21

knowledge using trans and interdisciplinary working groups and integrated ways. It is necessary to have common goals and objectives. This can occur through the establishment of an integrated curriculum among the various contents necessary for the training of students.

Which Sustainable Development Goals (SDGs) were particularly emphasized during this consultation?

- | | | |
|---|---|--|
| <input type="checkbox"/> Goal 1: No poverty | <input type="checkbox"/> Goal 7: Affordable and clean energy | <input type="checkbox"/> Goal 12: Responsible consumption and production |
| <input type="checkbox"/> Goal 2: Zero hunger | <input type="checkbox"/> <u>Goal 8: Decent work and economic growth</u> | <input type="checkbox"/> Goal 13: Climate action |
| <input type="checkbox"/> Goal 3: Good health and well-being | <input type="checkbox"/> Goal 9: Industry, innovation, and infrastructure | <input type="checkbox"/> Goal 14: Life below water |
| <input type="checkbox"/> Goal 4: Quality education | <input type="checkbox"/> Goal 10: Reduced inequality | <input type="checkbox"/> Goal 15: Life on land |
| <input type="checkbox"/> Goal 5: Gender equality | <input type="checkbox"/> Goal 11: Sustainable cities and communities | <input type="checkbox"/> Goal 16: Peace and justice strong institutions |
| <input type="checkbox"/> Goal 6: Clean water and sanitation | | <input type="checkbox"/> Goal 17: Partnerships to achieve the goals |

You may provide additional feedback...

Are there any other issues that should be considered in relation to higher education challenges and options in your community, your region, the world?

loss of jobs due to the low qualification of people.

Is there any other comment you wish to share with UNESCO or the organizers of the WHEC2021?

