'Transdisciplinarity in higher education: STEAM+ solutions'
Online event 15 Oct 2020 - *Short report*

General info

In this online event, part of the Europe-wide Erasmus Days, the topic of transdisciplinarity in higher education and the relation to talent development programs was introduced and discussed, based on the STEAM+ project.

In the first hour of the meeting, the project was introduced and three presenters highlighted different aspects related to the main topic. In the second hour, participants discussed a general and a specific question in small groups in 'breakout rooms'. Each room was hosted by a STEAM+ team member. Reporting was done in the main session and through questions in the app Mentimeter.

Just over 100 people registered for the event, and about 70 eventually took part. Registered participants came from 24 countries (Austria, Bangladesh, Belgium, Bulgaria, Denmark, France, Germany, Greece, Indonesia, Ireland, Italy, Lebanon, Lithuania, Mexico, Netherlands, New Zealand, Norway, Poland, Romania, Russia, Saudi Arabia, South Africa, Turkey and the USA).

About the STEAM+ project

Innovating STE(A)M in Higher Education with Transdisciplinary Talent Programs (STEAM+) is a large-scale innovative project with a holistic approach, aiming to provide educational policy makers with instruments to prepare new generations for handling the challenges of our time.

It is supported by the EU's Erasmus+ program in Key Action 3 (support for policy reform), as a Forward-Looking Cooperation Project. It will run until December 2022.

The project was introduced by project leader Prof. Marca Wolfensberger (Hanze University of Applied Sciences, Groningen, the Netherlands).

An introductory short video about the project (around 5 minutes) was shown during the event and can now be found on the project website (blog). More info about the project can also be found on https://www.steamtalent.eu.

Presentation 1: "Developing a trans-disciplinary honours program at the University of Oslo"
(by Prof. Anders Malthe Sørenssen - University of Oslo, Norway)

Professor Sørenssen works as Director of the Center for Computing in Science Education, a Center for Excellence in Education at University of Oslo; and he is the Programme leader of the Honours Program, University of Oslo (UiO). In his talk Anders Malthe-Sorensen addressed how they have worked to develop a challenge based common curriculum for the honours students at UiO, how to build a learning culture where students dare participate in interdisciplinary discussions, and how this also impacts research and collaboration between faculty at University of Oslo.

Presentation 2: "An example of a transdisciplinary project in an honors program"
(by Dr. Anne Snick - KU Leuven, Belgium)

Dr. Snick has first worked in academia for 10 years, then worked with people in poverty, cocreating knowledge on complex themes like inclusion and poverty. She is now back at university to introduce this kind of transdisciplinary work in the curricula and is the Belgium National Coordinator of STEAM+.

In her presentation, she showed an example of transdisciplinary thinking from a project from the KU Leuven – Belgium: the Honours programme transdisciplinary insights, which is supported by the Institute for the Future KU Leuven.

More information about this program can be found here: https://rega.kuleuven.be/tdi

Presentation 3: "STEAM+ Fun solutions"
(by Prof. Zsolt Lavicza - JKU Linz, Austria)

Professor Lavicza is working on numerous research projects worldwide related to technology integration into schools; leading the doctoral programme in STEAM Education at JKU; teaching educational research methods worldwide. Both at the Universities of Michigan and Cambridge, Zsolt Lavicza has worked on several research projects examining technology and mathematics teaching in a variety of classroom environments. Professor Lavicza is very active in the GeoGebra community, and is also Director of Research of the International GeoGebra Institute, where they are doing many STEAM projects in all different directions and utilising many different technologies.

Professor Lavicza's presentation was shown on video. It can be found at
https://www.youtube.com/watch?v=S_xNODIklOA&feature=youtu.be

Breakout rooms
After a short break, participants went in to small discussion groups in breakout rooms. One question was discussed in all rooms: 'What is the first action required to get more transdisciplinary STEAM+ education?'
In addition, in each room a different question was discussed. Some highlights from the breakout room sessions were presented by Prof. Ella Cosmovici Idsøe (University of Oslo, Norway), Dr. Sonata Mačiulskytė (Klaipeda University, Lithuania) and Prof. Carmen Cretu (UAIC University of Iasi, Romania). Ideas included:

- Curriculum policy makers at different levels could have an active and specific role if the transdisciplinary education and competencies for the future is needed.
- The need for policy makers to recognize the importance of transdisciplinarity as a frame for bridging the gap between disciplines but also as a frame for "training" the future generations for solving complex societal problems.
- Activate the student organizations -national and international- and university networks already existing and include and challenge them in promoting transdisciplinary STEAM+ education through common projects

Thanks and next steps
Finally, we want to thank all participants for their commitment and active participation.
Particular thanks go out to our session organizers, presenters, breakout room hosts and note takers.
More info about the project can be found on the website https://steamtalent.eu/.
The (anonymized) notes from the breakout room sessions will be used for the further development of the project. You will be kept up-to-date if you have indicated so on registration; by registering for the newsletter, or if you send an e-mail to info@steamtalent.eu

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