

Virtual Mobility for All - Teaching and Learning in a Connected World

1st International Conference

13 May 2023

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A virtual mobility project between Argentina and Italy: students' perspectives

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Format: Poster Presentation, Track IV: Student Voices, Delivery Mode: virtual

Since 2019, the School of Educational Sciences of the National University of Rosario, Argentina, has a double degree Agreement with the Department of Language, Culture and Society of the University of Calabria, Italy. The Agreement was put into effect a few months before the pandemic, a circumstance that led to the entirely virtual implementation of the courses in both higher education institutions, becoming eventually a virtual mobility Program. Among the subjects involved, the Seminar "Intercultural Dialogue" delivered by the Argentine university for both its own students and those from Italy, is analyzed in this presentation from their perspective. The course proposal was founded on project-based learning, and consisted of carrying out an intercultural project grounded on educational research with ethnographic fieldwork. As regards the content, students should get in contact with migrants in the city of Rosario, Argentina and the region of Calabria, Italy, respectively, and gather information about some educational situation they are undergoing. Students worked in groups, some of which were of mixed nationalities, and the subsequent exchange of results was also planned. Synchronous virtual classes with bibliographic support were

provided by the staff, leading to the preparation of a written report followed by oral presentation within the class. In order to monitor the educational effects of the virtual experience, the Argentine staff in charge of this subject implemented an online semi-structured questionnaire to both the Italian and Argentinian students. In such instrument, different aspects involved in the virtual mobility were elicited: interpersonal relation mediated by virtuality, the role of a foreign language in the university studies, the immigration issue in both contexts, the convenience of the ethnographic approach to address these topics, academic and extra-academic obstacles, and future perspectives of the virtual mobility. In this scope, this presentation systematizes the perspective of the students -both the Italians studying this subject online at the University of Rosario and the host Argentine students- about the different aforementioned dimensions. As a whole, the results show a general acceptance of the intercultural experience on both groups of students; in the case of the Italians in virtual mobility, they highlighted a more active and participatory teaching style of the host university; on the other hand, the Argentinians valued the benefit of knowing other cultures, although the impact was not so strong. As regards obstacles, time shortage for the development of the project, difficulties in the learning contents involved, deficient connectivity, and time zone difference are mentioned by the students. From their perspectives, recommendations for the next editions of virtual mobility between Argentina and Italy are drawn, which can also be transferred to other similar Programs.

Afrogarnics

Author(s): Zeddy Bariti, Evelyne Muchiri, Donald Ochieng, Corinne Wangare, Catherine Mwangangi, Caroline Kivanga, Sylvia Ndung'u, Ian Migwi (The University of Nairobi School of Business)

Format: Poster Presentation, Track IV: Student Voices, Delivery Mode: in person

BAIN – Becoming an International Negotiator: Student Voices

Author(s): Linh Vu Dinh, Felix Wegen (Hochschule Bonn-Rhein-Sieg)

Format: Poster Presentation, Track IV: Student Voices, Delivery Mode: in person

Baltimore to Bonn and Beyond

Author(s): Jamie R. Gurganus, Ph.D. | Engineering & Computing Education Program, Mechanical Engineering & Graduate School | University of Maryland, Baltimore County | Baltimore, USA

Michael M. Malschützky | Centre for Teaching Development and Innovation (ZIEL) & Department of Management Sciences | Hochschule Bonn-Rhein-Sieg, University of Applied Sciences | Sankt Augustin, Germany

Format: Presentation, Track I: Innovation and Learning, Delivery Mode: virtual/in person

The value and need for global competence and inter- and multi-cultural engineering education evolution is at the forefront in the relationship between the Centre for Teaching Development and Innovation (ZIEL) at H-BRS and University of Maryland, Baltimore

County (UMBC) in Maryland, USA. Collaborating on various initiatives since 2021, this collaboration has focused its efforts in the development and innovation of the scholarship of teaching, research and learning in the USA, Germany and international spaces. In this seminar, Dr. Jamie Gurganus (UMBC) and Mr. Michael Malschützky (H-BRS) will highlight this dynamic partnership and future opportunities as it lends to innovation and learning. Part One: Ongoing Collaboration: Ongoing collaboration between the two institutions includes the development and facilitation of international workshops for a new international certification and research in failure culture in engineering. As a part of a new international certification, ZIEL developed and facilitated a cultural awareness workshop for graduate students at the World Engineering Education Forum (WEEF) 2022 in South Africa. This workshop was vital to open a pathway to international students to earn a US nationally recognized certification, Center for the Research Teaching and Learning (CIRTL). With the help of the H-BRS team, this is now a sustained opportunity at future international conferences. Around 18 students from the US and 10 from represented countries participated in this workshop and certification. Qualitative data was collected and analyzed revealing increased efficacy in participation in the workshop and developing a new international network for the graduate students. This opportunity is also being extended to H-BRS graduate students. In further collaboration, Dr. Gurganus and Mr. Malschützky have partnered to seek and find new ways to better understand and promote engineering students' self-efficacy and motivation, especially as it impacts marginalized communities and first generation students. Several tools are being developed and designed to create an instrument to assess dimensions of a culture of failure in higher education

teaching and learning settings. This survey was issued in German and English to undergraduate and graduate students at both H-BRS and UMBC in mechanical engineering in the spring 2022 in order to evaluate the survey's validity and reliability. The information from this instrument will be used to help inform higher education culture, make appropriate adjustments and provide meaningful interventions that will impact a more positive failure community. Part Two: Future Opportunities: There is a movement globally in engineering education to make pedagogy more aligned to the United Nations Sustainable Development Goals (SDGs) of developing globally competent engineers. Like the US, Germany has made strides in developing engineers who match the current culture where acceptance of differences is promoted for religion, gender balance and democracy. Engineering has also become more dependent on international partnerships between industrial collaborators, manifesting the need for more globally aware and culturally competent engineering professionals. With this said, in the Spring 2024, Dr. Gurganus and partners at H-BRS will launch a multidisciplinary elective for undergraduate students in global engineering, building on a previous model established between UMBC and the University of Porto.

BBAC – Promoting Cultural Diversity

Author(s): Daniel Agyapong (Ghana), Regina C. Brautlacht (Germany), Lurdes Martins (Portugal), Daniel Otieno (Kenya), Joseph Owino (Kenya)

Format: Poster Presentation, Delivery Mode: in Person

BIDA – Becoming Intercultural Diversity Ambassadors

Author(s): Christine Freitag, Eileen Küpper (H-BRS), Zubeda Chande Mpinga, Arthur Joseph Ngasani (IFM), Fiona Oyatsi and Benjamin Afubwa (MKU), Dr. Masauso Simon Chirwa, Dr. Isaac Kabelenga, (UNZA)

Format: Poster Presentation, Track IV: Student Voices, Delivery Mode: in Person

Blended Learning in a Global Context

Author(s): Ms. Eileen Küpper, H-BRS; Ms. Christine Freitag, H-BRS; Dr. Peter Kirira (Mr.), Mount Kenya University (Kenya); Prof. Peter Wanderi (PhD, Mr.), Mount Kenya University (Kenya); Ms. Fiona Melisa Oyatsi, Mount Kenya University (Kenya); Ms. Zubeda Chande Mpinga, Institute of Finance Management (Tanzania); Mr. Arthur Ngasani, Institute of Finance Management (Tanzania); Dr Isaac Kabelenga (Mr.), University of Zambia (Zambia); Prof. Masauso Chirwa (PhD, Mr.), University of Zambia (Zambia)

Format: World Café, Track I: Innovation and Learning, Delivery Mode: in Person

The recent COVID-19 global pandemic has reshaped the education system and learning processes worldwide and has highlighted the benefits of utilizing technology within the learning environment. The present post-pandemic situation constitutes a

pivotal moment for determining the way education is implemented in higher education in the future. Blended learning as a teaching method has had an increasing impact on learning & teaching globally and is being implemented to bring the digital world and traditional face-to-face teaching together to enrich the learning processes and to create a flexible & versatile learning environment, both within HEIs and with partner HEIs around the world.

Besides a number of positive impacts of blended learning, such as access to global resources, autonomy in learning, increased student interest in engagement, learning future work skills, there are also significant challenges. These include expense of and access to technology, technical issues and adapting course materials.

In the framework of a World Café we would like to discuss the positive effects as well as challenges of the different didactic formats: online, face-to-face, and blended learning as well as how to combine the strengths of each to create a framework for global blended learning courses.

We will start with a short impulse presentation using the blended learning course "Becoming Intercultural Diversity Ambassadors - BIDA" as a case study. In this course students from four different countries (Germany, Kenya, Tanzania, Zambia), as well as different disciplines, participated on several levels, teacher to students, student to student and student to technology, in a collaborative learning framework.

Following on three tables will be set-up in order to pool the ideas and experiences of the participants:

Table 1 online courses: chances and challenges

Table 2 face-to-face courses: chances and challenges

Table 3 blended learning courses: chances and challenges

The World Café participants will discuss the chances and challenges of the different didactic formats in three table rounds of 15 minutes each. Two facilitators from the BIDA course, who will document the discussions at their respective tables and subsequently provide a brief plenary summary of the highlights and learnings from each table, will moderate each table.

Finally, the advantages of all the formats will be reviewed in an open discussion session, incorporating the experiences of the participants, with the aim of creating a high quality model for international blended learning courses, which can be adapted to suit the course content and the institutional framework.

Building a Community of Virtual Exchange

Author(s): Kristi Julian, Middle Tennessee State University; Wendi Hulme, Fanshawe College; Maria de Lurdes Martins, Polytechnic Institute of Viseu; Paula Fonseca, Polytechnic Institute of Viseu; Regina Brautlacht, Bonn-Rhein-Sieg University of Applied Science; Joseph Owino, University of Nairobi; Daniel Agyapong, University of Cape Coast; Gloria Agyapong, University of Cape Coast

Format: *World Café*, Track I: Innovation and Learning, Delivery Mode: in person

In May 2020, member coordinators from Canada, Ghana, Germany, Portugal, Kenya, and the USA founded The Consortium of Virtual Exchange (CoVe). Although CoVe was founded in 2020, these institutions have been participating in various virtual and in-

person exchanges for almost a decade. Through the commitment of each of the respective universities, projects have defined learning outcomes specific to proposed virtual exchange (VE). More recently, CoVE project coordinators have explored use for teacher education competencies and investigated skillsets of the varied faculty. CoVE's vision is to build a community of virtual exchange enthusiasts, educators, and administrators. VE as a form of 'internationalisation at home' provides an opportunity to increase student and teacher access to international learning experiences. Internationalisation is becoming an increasing priority for student and teacher education (Abraham & Brömssen, 2018). In this interactive session, Building a Community of Virtual Exchange, conference attendees will have the opportunity to network with each other and the CoVE coordinators to discuss past, present and emerging trends in virtual exchange. Twenty-five minutes of the forty-minute session will be dedicated to a speed-dating style exchange and networking opportunity where attendees will engage in five given topics for five minutes each. The discussion topics will be: 1. Emerging Technology, 2. Multidisciplinary Projects, 3. Methodological-Didactic Activities, 4. Faculty Competencies, 5. Project Management. CoVE project coordinators will begin the session with a five-minute introduction describing how integration of the overall concept of the CoVE projects were implemented into the digitalisation and internationalisation strategy of the participating HE institutions.

During the speed-dating portion of the session that follows, the five topic sections will be led by CoVE coordinators for a fruitful discussion and culminate in a discussion summary. Registered participants will be divided into the five discussion topics and will transfer from one topic coordinator to another after five minutes until they have had the opportunity to engage and network at all

five topic stations. The World Café will close with a 10-minute summary presentation of the results from all five topics.. Participants will be exposed to new perspectives, information and colleagues toward CoVE's vision to build a community of virtual exchange enthusiasts, educators, and administrators.

Reference: Abraham, G Y., von Brömssen, K. (2018) Internationalisation in teacher education: student teachers' reflections on experiences from a field study in South Africa *Education Inquiry*, 9(4): 347-362
<https://doi.org/10.1080/20004508.2018.1428035> Access to the published version may require subscription. N.B.

Can an e-learning course support students' self-regulated-learning in virtual settings?

Author(s): Moiken Jessen (University of Würzburg)

Format: Presentation, Track I: Innovation and Learning, Delivery Mode: in person

Students in tertiary education are often considered competent learners. However, it has been shown, that in distance-educational settings, they are less likely to apply metacognitive learning strategies (Broadbent & Poon, 2015), and instead resort to superficial cognitive strategies (e.g., Karpicke et al. 2009; Enders & Wienzierl, 2017; Dunlosky et al., 2017). Distance-learning settings pose particularly high demands on the self-regulation of learning (SRL), while at the same time minimizing instructors' options to offer guidance. Is it possible to support students in their learning process with a short intervention in form of an e-learning course, specifically targeting the use of metacognitive strategies of self-regulated learning? To foster

students' self-regulated learning and to support instructors in teaching students good learning habits, we combined instructive and reflective elements in a brief e-learning course, providing information about declarative and conditional knowledge on effective SRL-strategies. The course was thus aimed at stimulating students' awareness of planning, monitoring and controlling their learning process.

We evaluated the effects of this e-learning course in an introductory course for teacher students, held remotely during the pandemic, in a pre-post experimental design. Students (N=85) were randomly assigned to either an experimental condition (n=36) or to one of two control conditions. The experimental group completed a pretest, the SRL-e-learning-course and a post-test. Participants in control condition A (n=23) completed a pre-test, a psychoeducational e-learning course on sleep-hygiene and a post-test. Participants in control group B (n=26) only completed the sleep-hygiene course and the post-test. The pre- and post-test assessed knowledge on effectiveness of SRL strategies, self-reported (planned and actual) application of cognitive and metacognitive strategies during exam preparation, motivation and effort. Grades were collected from the final exam.

The intervention in form of an e-learning course had significant effects on the application of relevant SRL-strategies and on strategy knowledge. To detect these effects, a zooming in on individual variables comprising the construct of learning competence was necessary, underscoring the importance of finer-grained analyses (cf. Panadero, 2017). Regarding the learning outcome as measured by grade, lacking statistical power, we didn't find a significant effect on grade, despite a medium sized effect ($d = -0.47$).

Our results show that a brief e-learning course has a positive effect on the learning process and on knowledge about effective learning strategies. The e-learning course can thus support students and instructors in virtual learning settings.

We discuss developmental potential of SRL-courses based on finer-grained analyses, following desiderata of similar studies (e.g., Biwer et al., 2020; Foerst et al. 2019).

Limitations of the present study include a high dropout rate as well as the self-reporting nature of the questionnaires.

Cloud based interactive and collaborative simulation of basic telecommunications concepts

Author(s): Roberto A. Kiessling, Universidad Nacional de San Luis, Argentina, Marwan A. Geraiges, Universidad Nacional de San Luis, Argentina; Alfredo F. Debattista, Universidad Nacional de San Luis, Argentina; Alejandro A. Valenzuela, Hochschule Bonn-Rhein-Sieg, Germany

Format: Presentation, Track II: Technical Solutions, Delivery Mode: virtual

A proposal is presented for a didactic activity based on interactive and collaborative simulation of basic telecommunications concepts, using free cloud-based services. This approach has the advantage of allowing the exchange of live documents for collaborative work between people anywhere in the world, without facing the costs of acquiring and maintaining high-capacity hardware or paying for software licences. The main disadvantage is the need for an internet connection, but there is no need for high bandwidth. A computer, tablet or even a mobile phone is sufficient for the development of the practices, although

in the latter case there may be some difficulties in editing the documents. The proposal is based on the numerical simulation of modulation and demodulation processes of both analogue and digital signals, using Jupyter notebooks in Python language on the Google Colab cloud-based platform. To simplify the use of the platform and reduce the learning curve, a library of functions for processing and plotting signals in the time and frequency domain was developed. This library is also hosted on the cloud-based service GitHub, which also allows access from anywhere, facilitates its development, updating and debugging in a shared way. The Google Colab platform allows the development of interactive notebooks, which combine text content cells and Python executable code cells. The rich text cells based on Markdown, LaTeX formulas, images, videos and HTML content in general, allow developing the necessary theory in a dynamic and non-linear way. On the other hand, the code cells allow access to highly developed and useful Python modules, one of the main attractions of using this programming language. The Python modules used in this proposal are: NumPy for efficient numerical processing, Matplotlib for flexible plotting of graphs, ScyPy for scientific processing, ipywidgets for code execution by modifying parameters interactively and lpython.display.audio for playing the sound of worked signals. As a side benefit, students acquire programming and problem-solving skills using a very practical and ubiquitous language such as Python, which is widely used in today's job market for rapid prototype development in multiple application areas. The document ownership system of the Colab platform based on access permissions with differentiated capabilities (editor, reader, commentator) as well as the available system for version control, allows its shared use in a secure and traceable way. Some alternatives for its use in the context of

education are presented, like the presentation of theoretical topics with live modifiable examples as well as the resolution of simulation practices in groups of students and correction by teachers in a collaborative way, even from different academic units and locations around the world.

Consumption Behaviour – Analyzing our own Ecological Footprint

Author(s): Alina Yousefi-Zanjani-Fard, Amara Härtwig, Hannah Sölter, Johannes Münzner

Format: Poster Presentation, Track IV: Student Voices, Delivery mode: in person

Customized Software Environment for Remote Learning

Author(s): Thomas Gerlach (H-BRS)

Format: Poster Presentation, Track IV: Student Voices, Delivery mode: in person

The Covid-19 pandemic has led to a significant shift in the educational landscape, necessitating the rapid adoption of alternative teaching methods. In particular, the demand for online tools and platforms has increased, prompting a need for new ways to distribute educational materials and applications to students.

One of the most significant challenges in this context is the delivery of applications, which can be complicated and dependent on specific licenses, compiling methods, and operating system (OS) support. Moreover, it is impossible to anticipate all the

hardware configurations of students and their ability to set up specific applications. In this situation teachers may need to spend a significant amount of time out of their already busy schedule for additional configuration if students are unable to set up specific applications.

To address this challenge, several general approaches have emerged, such as using an OS alongside the existing one (i.e., dual/multi-booting), utilizing virtual machine (VM) images to run applications while using the student's own OS, and leveraging container software (e.g., Docker) to reduce the overhead of a VM. Each of these approaches has its advantages and disadvantages, which must be carefully considered for effective implementation.

The primary goal of this work is to inspire teachers to explore new software delivery methods that can reduce barriers for students to use professional software without spending hours configuring it. This poster will present these different approaches in an accessible and understandable way, highlighting their technical requirements and the way they address student needs. It will also introduce students' personal experiences and potential modifications, as well as remote access versions of the software for later discussion.

Overall, the rapid shift to online learning has created a pressing need for new approaches to software delivery, which can be challenging but also offer significant opportunities for innovation and enhanced learning experiences. The information on our poster aims to facilitate this process and provide a starting point for further exploration and experimentation.

Design a user-centred learning experience with the future in mind

Author(s): Catalina Mueller (Lecturer PhD, Gisma Business School)

Format: Lightning Talk, Track I: Innovation and Learning, Delivery Mode: virtual

Are you struggling with how to engage all your learners in a hybrid classroom? Do you find it challenging to provide individual attention to both your in-person and online students? As we move towards a new normal in education, we must adapt to the digital approach when designing user-centered learning experiences. Join me for an exciting presentation where I will share with you some simple activities that can connect learners to the context of their learning and their future work.

Design and Implementation of CAN Bus Experiment for Remote Learning

Author(s): Oleksandr Velihorskyi, Hochschule Bonn-Rhein-Sieg / Chernihiv Polytechnic National University; Roustiam Chakirov, Hochschule Bonn-Rhein-Sieg; Christoph Mael, Hochschule Bonn-Rhein-Sieg

Format: Presentation, Track II: Tech Solutions, Delivery Mode: in Person

Challenges in last years, such as COVID-19 pandemic, war in Ukraine extremely increased attention to the technologies of online and remote learning. Learning management systems such Moodle or Ilias can help with the organization of access to learning materials, tests and assignments. Zoom and WebEx can help with online lectures and consultations and replace on-site meetings of academic staff with the students that can be enough

for some specialties. In the same time, for technical specialties, such as electronic and electrical engineering, practical-oriented competences cannot be achieved by only online lectures. Experiments with real laboratory and measurement equipment, development boards are a crucial part of bachelor and master curricula. Such experiments can't be provided through Skype or Zoom that is a challenge for many higher educational institutions in technical areas. Concept of so called "Remoted Laboratories", introduced by researchers from Deusto University in Spain, provides the tools for implementation of online access to real experiments in different areas that can be used in middle and higher education. Weblab-Desuto framework, developed by that team is a management system, combines scheduling tasks for participant, timeslots, control tools by means of web-interface, web-cam view of required workplace, and finally, interface with real experiment equipment (e.g., development boards). In current work that was done as a part of DAAD-funded project FUTURE (funding program "Ukraine digital: Studienerfolg in Krisenzeiten sichern"), Weblab-Deusto framework was used for the development of remote access for CAN Bus experiment. This experiment is aimed to obtain the competences by students of principle of communication in CAN bus, programming the CAN bus devices in accordance to their specification, and finally, controlling the operation of different devices combined in automotive system by means of CAN bus interface. The system contains sensors – steering wheel, throttle pedal, temperature, and actuator - throttle valve. Raspberry Pi and servo-drives were used for the position control of throttle pedal and steering wheel, as well as receive and transmit CAN messages on the bus. Python language was used for the software development that running on Raspberry Pi and controlling hardware of the experiment. Web-

application for visualization and control was developed by means of weblablib library from Weblab-Desuto. It provide the functions of human-machine interface: control (switching on and off) of all CAN bus nodes (sensors and actuators) and throttle pedal and steering wheel, visualization of received CAN messages on the bus, and sending the user messages to all nodes, web-cam view of real equipment for the checking of operation, logging of the data (commands that was sent by students, received data, etc) and saving it into text file for further analysis. Weblab-Deusto framework is working as a management system that is responsible for user management and providing the access to the hardware, logging of user data (date, time, duration of experiment, etc.). Altogether it creates hardware and software environment that can be useful for universities, and helps in remote education of students from technical specialties, such as electronics or automotive technologies with reaching of practical-oriented competences in electronic communication interfaces.

Digital Inclusivity and Equal Opportunity through the BAIN Project

Author(s): Joseph Owino, University of Nairobi; Kenya, Gloria Agyapong, University of Cape Coast Ghana; Regina Brautlacht, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany

Format: Presentation, Track I: Innovation and Learning, Delivery Mode: in Person

Doing business internationally requires understanding of the different cultural contexts in foreign countries. The cultural setup of a society influences communication and business negotiation

process. Whereas negotiation is an important ingredient in closing business deals, people without exposure to a wide range of cultures are disadvantaged and rarely succeed in getting better outcomes from the negotiations. Hence, Cross-Cultural awareness is an important competence in a globally interconnected world. Cross-Cultural competence is key in establishing negotiation skills and critical thinking capabilities. The African market presents future opportunities for other countries. Hence, it is important for students from to understand African markets and how Africans negotiate business dealings in their cultural context. Using a blended mobility approach helps students to appreciate other cultures and also adopt cultural communication strategies in their interaction. The purpose of this project is to provide equal opportunity for students to learn about business in Africa and Europe, including exposure to environmental realities in the African context that are rarely understood or poorly analysed by foreign investors in the negotiation process. Again, the BAIN project has a unique integration in each higher education institution, where all coordinators are actively involved in the co-creation, co-teaching, and co-management of this blended-learning project. The paper reports on the experiences of sustained virtual exchange project which has involved students from different continents in inter-culturally constructive conversations, while co-creating knowledge and enhancing digital inclusivity negotiation skills. However, designing and implementing virtual negotiation projects across continents go far beyond the decisions on the tasks and tools needed to facilitate students' dialogues; it requires changes in pedagogy and didactical models, embracing task-based learning and project-based learning and learner-led, guided independent self-study, where students take responsibility over their learning. We will

compare the learning output/outcome as well as impact from the past virtual exchange.

Digitalization of higher education in Ukraine: reality, challenges and perspectives

Author(s): Iryna Sikorska (Mariupol State University)

Format: Presentation, Track III: Policies and Strategies, Delivery Mode: in person

The Russian invasion of Ukraine immensely damaged the Ukrainian higher education system. According to the data of the Ministry of Education and Science of Ukraine (MESU) as of January 2023, as a result of shelling and bombing, 3,051 educational institutions were damaged, of which 420 were completely destroyed. This caused the vital necessity of digitalization of Ukrainian education sphere in general and higher education in particular. The higher educational institutions (HEIs) are to continue functioning and maintain, fulfil their mission and contribute to the societal development.

To support and sustain the HE sector, the Digital Education Action Plan up to 2027, Education & Science Digital Transformation Concept by Ministry of Education and Science of Ukraine up to 2026 and Plan for the Restoration of Education and Science were adopted and approved by the government of Ukraine.

The abovementioned documents outlined the priorities for development of higher education for the post-war recovery of Ukraine. Among them: quality of education and training, inclusion and gender equality, green and digital transformations,

higher education geopolitical dimension, enhancement of digital transformation in education by creating an integrated digital educational ecosystem in Ukraine to ensure continuous, high-quality, inclusive, and transparent education, regardless of the student's and teacher's location, with the use of existing digital achievements and innovations in the field of education, and the understandable paradigm of involving future innovations.

According to the research, conducted by the MESU in June-August 2022 more than 57% out of 749 institutions, which took part in the survey provided education process only online, while 41% worked in the blended format. The Ukrainian HEIs have repeatedly reported about a number of problems in the sphere of digitalization of the education process, like: low level of the digital competences of teaching staff, deficit of the high-quality digital content or resources to be accessible for the students and teachers, insufficient number of computers/other equipment for digital formats of teaching and learning.

International virtual mobility was introduced to the Ukrainian students during Covid-19 pandemic, but it did not become popular. There have been observed only fragmented practices and ad hoc 'success stories' of the virtual mobility among teachers and students. However, definite measures are taking in order to improve the situation with a long-term objective to create the all-Ukrainian digital educational environment in the field of higher education. Certain number of Ukrainian HEIs independently (usually with the help of international donors) have advanced in this area.

In the situation of the ongoing war the digitalized high-quality learning is defined as one of the key instruments not only for Ukrainian HEIs' survival but also as the way of sustainable

functioning of the higher education system. The role of internationalization in this regard should not be underestimated.

Distance Teaching, Virtual Class Rooms, and Video Conferencing in Computer Science between UNB & H-BRS

Author(s): Rainer Herpers^{1,2,3}, Ken Kent^{1,2}, Gerhard Dueck², and Nadine Kutz¹

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2 York University, Department of Electrical Engineering & Computer Science, Toronto, Canada

3 University of New Brunswick, Faculty of Computer Science, Fredericton, Canada

Format: Presentation, Track I: Innovation and Learning, Delivery Mode: in person

Initiated originally based on an EU-Canada exchange program between the Faculty of Computer Science at UNB in Fredericton, Canada and the Department of Computer Science at Bonn-Rhein-Sieg University of Applied Sciences dating back until 2000 both institutions have developed and established dual Master Degree programs. To fulfill the graduation guidelines of both graduate programs on the one hand side and to keep the number of additional courses low on the other hand side, dual degree students have to take distance teaching courses delivered via video conferencing tools.

At that time special permission were needed to mount "online classes" with mixed student participation from both institutions,

which has however, been obtained on both sides. Two instances of the course were officially mounted in the course calendars on both sides. In general, the set up of these classes was hybrid, meaning that at one place courses were given in a classical class room style with physical attendance while the content and the presentation was recorded and broadcasted to the partner institution. One experience gained during these activities was, that the usage of 2 two independent video channels was advantageous, one for the slides and one for the video of the presenter. This supported the interaction with the audience a lot. At that time, to achieve this goal it was necessary to run two instances of video conf. session in parallel. The new tools available since the pandemic now already include these features in one instance. Although the direction of presentation was predefined in general that means the German instructor taught on German ground and vice versa, it frequently happened that the instructor physically moved to the other place at least for a few days and the direction of video conferencing was reversed. This already provide a positive impact in particular for the so far remote students, that they were able to get in direct contact with the physical person and vice versa. Some students even reported back that it made a big difference to get in physical contact with the instructor at least for a day or two, and they were surprised by themselves how different this feeling was. Technically initial experiences were made with Skype and Google Hangouts tools which nobody might even remember now after these Zoom-, Teams-, and Webex-years.

In conclusion, it has been shown, that these kind of distance learning activities in mixed class room settings support physical mobilities of both, students and faculty. Moreover, students were able to adapt and get used to the different cultures of teaching

and university regulations and organization in general, so that the cultural shock might be reduced when the physical mobility is finally started. Additional findings are in the size and number of students in the physical and remote classes as well as in how to examine students remotely. Both modes have been applied, remote written exams as well as oral exams again using video conf. equipment.

Effects of E-Learning Drivers on Students' Satisfaction and Performance Among Tertiary Students in Ghana

Author(s): Michael Odamtten, Pearl Sitsofe Bani

Format: Poster Presentation, Track IV: Student Voices, Delivery Mode: virtual

E-learning satisfaction in advanced education has gotten much attention lately. In Ghana's higher institutions, particularly among distance learning students, the problem of educational satisfaction has received little attention. There has been little focus over the years on societal values in distance learning graduates' skills and talents or asking students how satisfied they are with their educational experiences. As a result, universities and colleges are stressing the need to raise the quality of their educational programs. Collaborative virtual learning has risen in popularity in distance learning. Higher education institutions are researching the most effective ways for the strategic contribution of E-learning. The Ghanaian government, Oracle, and the New Partnership for Africa's Development (NEPAD) collaborated on the E-school initiatives. One of its primary aims is to expand tertiary

education to include private and public universities. The world is dealing with the effects of coronavirus illness 2019 (COVID-19), which has impacted practically all of the world's economic sectors. In such situations, E-learning (online learning) has emerged as a savior, bringing education to users via technology and the internet. Many colleges and universities are either offering or planning to provide online courses. The World Wide Web (www) has grown into an excellent educational tool, allowing students to access previously unreachable educational possibilities. Due to rising pressure on infrastructure and resources, existing financing is woefully inadequate. Despite budget constraints, postsecondary institutions are working hard to increase enrollment, with a Gross Enrollment Ratio (GER) of 5.71 per cent in 2007, 12.08 per cent in 2011, 12.20 per cent in 2015, and 19.57 per cent in 2019. E-learning refers to the teaching and learning processes on computers linked to the internet. Benefits of e-learning include the ability to learn regardless of time or location, reduction of geographical barriers as well as travel and program overhead expenses, and the ability for each user to study the information at their speed. Many E-learning initiatives, on the other hand, have failed to achieve the desired learning results because too much of the online education has thus far been transitory, ineffective, and far from sustainable. The poster presentation will cover aspects of the work, including the background, problem statement, methodology, findings and results, the significance of the study, conclusion, and recommendations.

Elevate Your Virtual Teaching Game: The Role of a Professional Studio Setup

Author(s): Prof. Dr. Henrik Dindas (Professor, FOM University of Applied Sciences Essen)

Format: Presentation, Track I: Innovation and Learning, Delivery Mode: in person

Virtual teaching as a place of joint interaction and communication between students and teachers requires answers as to how this can be designed and supported in a learner-oriented and effective manner and what requirements are placed on the technical equipment. Virtual teaching has become an increasingly popular and necessary mode of instruction in recent years, particularly in the wake of the COVID-19 pandemic. While virtual teaching offers many benefits, such as the ability to reach students from anywhere in the world, it also presents new challenges. One of the most significant challenges is the need to create a professional, engaging, and effective online learning environment. Hence, a professional studio setup is essential for virtual teaching because it helps to create a sense of professionalism and credibility, which is essential for building trust with students. A well-organized and visually appealing studio can also help to create a more engaging and interactive learning experience for students, as it can help to keep them focused and engaged during the lesson. In addition to creating a professional and engaging learning environment, a professional studio setup can also help to improve the technical quality of the virtual teaching experience. A well-equipped studio can help to eliminate distractions, such as background noise or poor lighting, which can disrupt the learning process and make it difficult for students to

focus. Overall, a professional studio setup is an essential component of successful virtual teaching. It can help to create a professional and credible learning environment, improve the technical quality of the virtual teaching experience, and enhance the engagement and interaction between students and instructors. This presentation explores the question of what interaction and communication have to offer for the design of virtual teaching settings and what the “teaching studio of the future” should look like. As a best practice, a hybrid classroom will be presented that is used at FOM University.

Enhancing Distance Education Delivery in Ghana with Mobile Technologies

Author(s): Ebenezer Acheampong, David Nii-Okai, Doris Nimakoh (University of Cape Coast Library Systems, The University of Cape Coast, Cape Coast, Ghana); Andrew Oboo (University of Cape Coast, Cape Coast, Ghana)

Format: Lightening Talk, Track I: Innovation and Learning, Delivery Mode: virtual

The use of mobile technologies has promoted and widened access to educational opportunities by removing barriers associated with the traditional medium of classroom instruction. The integration of mobile technologies and improvements in ICT infrastructures in education, in general, has created a collaborative educational system where instructors and learners are no longer dispersed by physical space but they can hook up with each other in real-time to learn and share educational resources. Additionally, without any doubt, several institutions of higher learning nowadays offer courses by taking into consideration mobile wireless technologies as a substitute instructional tool. Mobile technologies have

facilitated access to rich digital learning materials and encouraged university students to be part of the design of curriculum and instructions. This study, therefore, aimed at assessing students’ and instructors’ awareness and appreciation for delivering distance education on m-tech platforms, examined students’ and instructors’ competencies in relation to mobile technologies usage, and investigated the challenges associated with delivering distance education on m-tech platforms. The study research design was a descriptive survey and the mixed method research approach was also used. A total sample size of 388 was used, and this consists of 4 system analysts and 384 distance students recruited from public universities in Ghana (using purposive and convenience sampling techniques). The data analyses were performed using descriptive statistics and thematic analysis. The results showed that mobile device usage was widespread in university settings and that the awareness and appreciation for delivering distance education on m-tech platforms were significantly high. The results of this study also showed that Ghanaian universities were lagging behind in adopting m-tech platforms for the delivery of teaching instructions due to a lack of technical m-tech capabilities and challenges in persuading university administration to accept and invest in m-tech technologies. The study's conclusions are applicable to helping universities create plans for utilising mobile technologies to promote distant learning, not only in Ghana but also in other nations. Based on these findings, it was recommended that higher education institutions in Ghana must increase their m-tech infrastructure investments and strengthen their human resource base through hiring and specialist training in cutting-edge technologies.

Enhancing the Teaching and Learning Experience in Management Science

Author(s): Dr. Jack Woo (Business School, Shenzhen Technology University)

Format: Presentation, Track II: Tech Solutions, Delivery Mode: not specified

- (1) Sharing innovative teaching method in management science, using simulated programs (Advanced Excel functions, VBA and Python programming) to enable an interactive, engaging and richness experience in understanding how management science can help solve real world problems.
- (2) Sharing innovative teaching administration process, using MS 365 (SharePoint, Forms, Streams, List, etc.) , Power platform (Power BI, Power App, Power Automate and Power Virtual Agents) and MS Education Platform to enable an easy-to-manage, fully digitalized and automated administration workflows that can optimize productivity of faculties and enhancing the learning experience of students.
- (3) Exchanging experience with faculties on using technology in conducting hybrid-teaching (mixing online and offline teaching) and engaging students in online teaching.

Financing Digital Education in Ghana: An Emerging Country Experience

Author(s): Prof. Dr. Daniel Agyapong (School of Business, University of Cape Coast, Ghana), Gloria Agyapong and Georgina Asuah

Format: Presentation, Track III: Policies and Strategies, Delivery Mode: in person

The paper explores the financing options available for institutions of higher learning in their quest to pursue virtual education, in the COVID-19 era and other socioeconomic challenges of education. It employs exploratory inquiry with the application of content analysis. This method enables a detailed and systematic analysis of the contents of materials for identifying verifiable themes and patterns. Data was obtained from websites, books, newspapers, case studies, unpublished theses, projects and databases. Data was analysed based on the emerging themes from the content analysed. The paper sets the tone for the discussion on strategies and approaches to financing digital education. It suggests policy and practical implications for developing suitable financing instruments and sources of funding for digital education.

Gamification in E-Learning

Author(s): Dr. Hao Chen (Business School, Shenzhen Technology University)

Format: Presentation, Track I: Innovation and Learning, Delivery Mode: virtual

Game has been one of the most influential ways for learning since the dawn of humanity. Given the rapid development and adoption of technology, computer games were introduced to formal education in the 1970s, e.g., in Pre-K (in the U.S.),

undergraduate, graduate education in social science and natural science fields. In the past 50 years, game has gradually become one of the popular methods, taken various forms, and applied to different scenarios and contexts.

In Business Schools, more and more faculty members are adopting gamification, a process of using game mechanics, elements, and principles and applying them to non-game contexts, in classes and consider it as one of the effective ways to convey ideas, engage students, inspire creativity (Boyle, 2011). Gamification makes it easier for students to engage in learning difficult/abstract concepts/frameworks/theories and makes the learning process fun for both the instructors and the students (Hamari et al., 2014, Kim, 2015). It is also one of the popular methods used in applied science schools since it connects real world problems with theories and packages them in a fun and coherent way.

Thanks to the internet, gamification has reached further through online learning platforms and created greater impacts in both the academia and the field. It is no longer a requirement for a pilot, a surgical doctor, or a professor to be physically in the field/classroom to learn or to teach. People from different regions could easily connect online to solve difficult problems, to discuss, to build, to create, and to work together through gamification using various format/technologies, e.g., simulations, VR, AR etc. There is a great room for innovation in formal education based on what we have achieved through adopting gamification.

Despite the popularity of gamification in online education in Business Schools, little is known about its impact and influence on student online learning, not to mention how it could be designed and implemented in an effective way to ensure learning

outcomes. In this study, we explore how gamification for online education is developed and applied in Business Schools over the years, and examine the effects and challenges of such methods in online education. In particular, we focus on one specific type of gamification—simulation since it has been one of the most well-developed methods in Business Schools and has drawn great interests in Chinese Business Schools. The rapid development and adoption of such method in Business Schools in China has provided us a nature experiment field to explore its impact and influence.

Hybrid simulation activities for international HEI learning using easily accessible digital cooperation tools: The example of a virtual German - Sri Lankan joint MBA education in times of crisis.

Author(s): Prof. Dr. Siegfried Zürn (Faculty of Management and Technology, Esslingen UAS, Germany), Chaminda Hettiarachchi (Faculty of Management, Colombo University, Sri Lanka)

Format: Presentation, Track I: Innovation and Learning, Delivery Mode: in Person

In post Covid-19 HEI teaching, international virtual collaboration has gained importance. This should not be limited to digital synchronous lectures or asynchronous teaching elements but include (inter)-active student participation using a combination of problem-based and project-based learning. Using digital collaboration tools enables students that have limited resources and possibilities for physical mobility to take part in international projects and learning, too. However, sophisticated communication and collaboration equipment is not always available and internet

bandwidth are often limited. Especially in the case of Sri Lanka, the issues were not triggered by the pandemic but also by a severe economic and political crisis with long-time power-cuts and closings of public buildings including Universities.

The overall objective of the presented DAAD funded project of Esslingen UAS and the University of Colombo, Sri Lanka, was to use standard digital collaboration tools on interactive small- and large group cross-university and cross-regional student projects in the digital transformation management applied to a real case in a developing country.

The collaboration focused on the application of a systems thinking model for the digital management of the non-profit organisation FabLanka, Sri Lanka using a specific modelling software (simcision) by a mixed MBA student group from Esslingen University of Applied Sciences and the University of Colombo. Students from the two MBA groups jointly develop digital competencies in the development and application of simulations and they share information and actively work together across global regions in small teams and larger groups.

This approach demonstrated that hybrid simulations help students to quickly acquiring competences in describing a technological problem in a holistic way, including economic, technological, sustainable and intercultural aspects. Having small physical teams sharing a digital collaboration equipment lowers the threshold for active participation. By “experiencing” the framework conditions, rules, constraints and working methods of the partner country in

managing the digital transformation all participants rapidly gained an intercultural understanding that is an indispensable prerequisite for MBA graduates for their future industrial careers in a globalised economy.

KEYNOTE: Implementing virtual exchange in a virtual summer school

Author(s): Dr. Müge Satar (Newcastle University)

Format: Keynote Speech, Delivery Mode: in person

Virtual summer schools are perceived as one method of virtual mobility but are different from virtual exchange in that they do not necessarily require direct engagement, collaboration, or dialogue between students from different countries. While both virtual exchange and virtual mobility offer more environmentally sustainable, accessible, and equitable experiences, virtual mobility on its own may not offer meaningful intercultural and multinational experiences without a purposefully designed virtual exchange component. In this presentation, I will introduce the implementation of a collaborative and virtual exchange-embedded virtual summer school on multilingualism and intercultural learning for postgraduate students in the context of European Higher Education. I will illustrate learner outcomes with an example video project. Drawing on a pre and post summer school survey, a qualitative evaluation questionnaire and a student-participant account, I will share insights from the project team in relation to how the summer school created a meaningful learning experience for participants and staff involved.

Lessons from the BIP "International Perspectives on Education"

Author(s): Ida Andersson-Norrie, Örebro University; Anette Bagger, Örebro University; Michaela Vogt, Bielefeld University

Format: Presentation, Track I: Innovation and Learning, Delivery Mode: in person

In 2022, the universities of Bielefeld (Germany), Ostrava (Czechia), and Örebro (Sweden) set out to create a joint course on the topic "International Perspectives on Education: Inclusion and inclusive teaching materials in different countries". The course would provide innovative content and cross-cultural experience to students in teacher-training programmes, a student group that is typically under-represented in out-going cohorts. The idea was to create a Blended Intensive Programme (BIP), a concept that was introduced in the Erasmus+ program launched in 2021. After many meetings and discussions between the universities as well as at each university, it was decided that the course would be tested during an extended weekend in June 2022, but not in the official capacity of a BIP. Teachers and students from the three universities participated during the test-run and the feedback from the students was very positive, highlighting the knowledge gained from interacting with students from other countries to reflect on educational systems and how they address inclusion and inclusive teaching materials. Based on the student feedback and lessons learned so far, work began to create a formal BIP which will run during the last week of March 2023. The three universities are part of the NEOLAiA alliance, an alliance aiming to become a "European University" under the Erasmus+ European Universities Initiative. This setting has been vital in the BIP process. Many challenges have been overcome and some remain. We now

want to share our experiences from this process and hope we can inspire and support fellow colleagues also interested in running a BIP. We also wish to provide some thoughts on how European alliances can drive the internationalization efforts, and challenge the status quo, in their home institution.

Library & E-Learning – a Success Story

Author(s): E-Learning Team, H-BRS

Format: Presentation, Track II: Tech Solutions, Delivery Mode: in person

This talk will present the library's e-learning strategy and some of the recent projects.

For more than ten years now, the library of the Bonn-Rhein-Sieg University has been responsible for the university's central e-learning infrastructure. Starting with the launch of "LEA" as the university's gateway to digital teaching and learning, the project quickly expanded into a full service e-learning support that goes far beyond the operation of a learning platform. Today, thirteen highly qualified e-learning specialists aim at covering all areas relevant to teaching and learning in a digitally agile university, such as "hybrid lecturing", "one button video recording" or online examining. Besides technical and didactic support, individual counseling and training play an important role in the team's work. But it is also networking, personal contact and experience exchange across university boundaries that make the project successful.

Metaverse, virtual spaces and XR as alternate education spaces?!

Author(s): Dr. Markus Rach (Business School, Shenzhen Technology University)

Format: Presentation, Track II: Tech Solutions, Delivery Mode: virtual

Since Facebook's renaming to Meta, the concept of the metaverse has gained tremendous traction, mostly in the form of a virtual space for information exchange. The speculative asset hype has further propelled the notion of the metaverse via the sales of virtual real-estate, creating further buzz around a hardly understood technology. Businesses and academics alike have started to tout the metaverse as the most innovative space for higher education, often failing to acknowledge the lack of a dominant application design and the lack of technology democratization with regards to XR-technologies. What started with COVID and the exogenously forced decentralized learning, has gained new but dangerous momentum.

Whilst the mentioned technologies hold tremendous potential to create highly engaging learning spaces, their wrongful or misguided application risks a waste of education resources, high levels of stress for educators and a lack of positive-technology-experiences for learners. XR-spaces thrive on the concepts of immersion and presence, which are hardly being achieved without the creation of dedicated XR-ready content. Creating content and thus learning experiences for XR-spaces requires a deep understanding of the technology, its application use-cases and thus the need for a meaningful matching of the current and or future education curriculum to the highest learning performance delivering technology. As such, the porting of 2D learning content

into a 3D environment is providing a sub-par learning experience, even when compared to the traditional learning environment.

The issue of technology democratization adds to above and has proven to mostly an inconsiderate problem for educators, due to a lack of awareness. It includes access to hardware and access to high-bandwidth Internet. Even in highly developed industrial nations, neither of the two can be assumed a given.

With over 10 years of experience in XR-technology design and application, the NFT-proven host of the first ever Sino-Swiss Metaverse class in 2021, followed by numerous other decentralized Metaverse experiences, this talk aims to explore the notion of the metaverse, virtual spaces and XR as mainstream suitable technologies for the design of learning experiences in higher education. It highlights application potentials, but equally the risks and downsides of a premature technology investment by education institutes. The presentation builds upon three layers of knowledge, ranging from practitioner oriented XR-applications, representing the state of art application knowledge, a literature review of the current body of academic works and insights into the hosting and application of the above-mentioned technologies in cross-border, decentralized and international education settings.

If time and technology constraints allow, this talk will be delivered in a fully virtual metaverse environment to not only deliver said points, but to provide participants a first-hand experience of the ups and downs of virtual spaces.

KEYNOTE: New mobility formats in the EU – Shaping the Future of Digitalisation in International Higher Education

Author(s): Angeliki Psychogyiou (Academic Cooperation Association)

Format: Keynote Speech, Delivery Mode: in Person

In present times, counting the effects the Covid-19 pandemic has had across the board, as well as in the higher education sector, digital transformations have gained new momentum and new scope. Even though, a topic debated for many years, the acceleration brought by Covid-19 proved to be a catalyst in terms of transforming distance learning into a new standard. Being currently at the end of the health crisis, it is imperative to continue these processes, recognising and fully materialising the potential of digital teaching and learning, not only as an emergency solution, but rather for its added value in connection to enhancing inclusion and strengthening international orientation. This presentation will provide some context and frame the scope to the digital transition in international HE. The primary focus will be on discussing the present-day realities in the digital transition in higher education sector, highlighting current challenges from a multi stakeholder perspective and showcasing how bottom-up actions should and are supported and enhanced through top-down policies. Such top down policies will be discussed both from an EU and a national perspective, bringing as well forth the potential of University associations and networks in Europe and the role they can play in channeling discussions and bringing the ground reality to the EU level, providing, therefore, the opportunity for much-needed feedback to policy makers that will eventually drive future advancements. The presentation will end with a number of reflections on what the future might hold

and how we can build, as a sector, on current innovations in digitalisation, to support more, sustainable, and inclusive approaches to education in the post Covid-19 world.

Optimizing Grading Processes with a Consistent and User-Friendly Grading Template

Author(s): Abanoub Abdelmalak, Hochschule Bonn-Rhein-Sieg; Minh Truong, Hochschule Bonn-Rhein-Sieg; (Supervisor): Dr. Karl Kirschner, Hochschule Bonn-Rhein-Sieg

Format: Poster Presentation, Delivery mode: in person

As part of a Python coding course that incorporates natural science ideas, we observed that the feedback given to homework assignments had common statements and features (i.e., the type of the students mistakes and our suggested corrections). Another concern was how to provide more uniform feedback with multiple graders who have different expertise (e.g., coding, scientific practices, communication, English language), experiences (e.g., PhD, master, bachelor) and different tolerances (i.e., strictness). To save time and unify the feedback given, we created a platform-independent and open source grading template using HTML, CSS and JavaScript. The template is hosted on GitHub, allowing for a centralized, version-controlled repository and the deployment of the live webpage (https://karlkirschner.github.io/scipro_assignments_grading). This template consists of various feedback statements, collected from our previous grading experiences, that are categorized based on a given homework's goal. We used JSON files as input to allow for easy modification and addition of new feedback statements. Each grader can select their desired feedback statements, add their own customized sentences if desired, and assign grade to

different feedback sections (e.g., Code quality & design, Scientific programming, Creativity) that are automatically incorporated into the homework's final grade. The final grade is computed based on a defined scheme by the template's creator. This grading template improves the efficiency – particularly with the more complicated homeworks – and standardizes the feedback across multiple graders. This idea can be generalized over different courses, providing informative, robust and clear feedback to the students while allowing for individualized feedback to be included.

Professional development through Virtual Exchange: Teaching for Belonging, a Case Study

Author(s): Dr. Daniel Otieno (Kenyatta University, Kenya)

Format: Presentation, Track I: Innovation and Learning, Delivery Mode: not specified

Pluralism is an ethic of respect for diversity and a way of life that fosters inclusivity of all people as equal and legitimate members of society. Pluralistic lenses provide opportunity and inspiration for faculty engagement on conversations that address historical narratives that perpetuate exclusion of minority and marginalized voices. Virtual Exchange (VE) is an educational practice that involves the engagement of groups of learners in extended periods of online intercultural interaction and collaboration with international peers as an integrated part of their educational programs and under the guidance of educators and/or facilitators. This presentation is the outcome of design experimentation and facilitator experience of a VE project involving teachers and other educators from 30 countries who participated in a Virtual professional development course organized by the Global Center

for Pluralism (GCP) based in Canada and facilitated by 3 VE facilitators. The training sought to address challenges teachers face, including: the persistence of one-sided historical narratives that can perpetuate group-based conflicts and limit students' ideas of who belongs and who should hold power in their societies; the need for dialogue facilitation training so teachers can create spaces for discussions that explore controversial issues related to diversity and the increase of fear and hate-based narratives around difference that come from student's often uncritical engagement with social media. The case study provides insights on incorporating a pluralism lens in teaching for belonging.

Keywords: inclusion, pluralism, virtual exchange, diversity

ProGlobe – Our Globe Matters!

Author(s): Regina C. Brautlacht (Germany), Paula Fonseca (Portugal), Kristi Julian (USA), Lurdes Martins (Portugal), Wendi Hulme (Canada)

Format: Poster Presentation, Delivery mode: in person

ProGlobe 2022: Portuguese students' voices about Sustainability in Festivals

Author(s): Lurdes Martins, Paula Fonseca, Alda Sousa, Ana Sousa, Ana Carvalho, Márcia Carvalho, Ritha Santos (Polytechnic Institute of Viseu)

Format: Poster Presentation, Track IV: Student Voices, Delivery mode: in person

This poster created by a group of Portuguese undergraduate students studying tourism at the Polytechnic Institute of Viseu at the School of Technology and Management of Viseu aims to

share students' results of the ProGlobe 2022 Project: Promoting the Global Exchange of Ideas on Sustainable Goals, Practices and Cultural Diversity. As tourism students, we are well aware that sustainability is no longer a choice but a commitment that everyone must make to preserve the world's unique cultures, landscapes and tourist attractions for future generations.

Sustainable tourism is all about making the best use of natural resources while having a positive impact on conserving natural and cultural heritage. This means that a truly responsible tourism should provide more benefits than negative impacts and should equally consider the visitors and residents of a tourist destination.

Portugal is a country that relies on tourism and one of the great tourist attractions are festivals, bringing together people from all over the world. This tourism product has been growing exponentially, especially after the covid-19 pandemic, with several sustainable practices, thus contributing to a decrease in the ecological footprint. As future tourism professionals, our concern is to promote Portugal as a sustainable tourism destination and this poster will focus on sustainability in festivals.

Remote Lab: an implementation guide and case study with free hardware boards

Author(s):

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Format: Lightning Talk, Track I: Innovation and Learning, Delivery Mode: in person

The article aims to present the conceptual and preliminary results of scientific, pedagogical and technological research oriented to the implementation of remote laboratories. The main characteristics of remote laboratories and a tentative guide for their implementation, based on an international standard, are presented. The use of Python and microcontrollers is a recurrent practice nowadays, which deserves to be taken into account in the creation of a teleoperation project to turn it into a real practice scenario for engineering students. At present, educational institutions are taking into account other independent training processes, mediated by various technologies, in order to promote learning without limitations of location, occupation or age of students.

Students' on-line learning and well-being – before, during, and after the Covid-19 pandemic.

Author(s): Ida Andersson-Norrie, Örebro University; Anette Bagger, Örebro University; Michaela Vogt, Bielefeld University

Format: Lightning Talk, Track III: Policies and Strategies, Delivery Mode: in person

Before the global outbreak of the coronavirus COVID-19 in 2020, many universities across the world had implemented, and were using, digital platforms for teaching and learning and had done so for several years. In 2016, researchers at Örebro University School of Business, started to collect data to analyze the impact of continuously using teaching and learning tools via Blackboard, our digital learning management system (LMS), on students' learning and well-being. Using data collected January 2018-June 2021, we found statistically significance differences across satisfaction with teaching and learning before and after the outbreak of the pandemic in March 2020. Even though both students and teachers were already using the digital tools before the pandemic, the recommendations were that all teaching, learning and examinations at the higher-education organizations were to be done remotely, were negatively associated with students' general life satisfaction and many educational and non-educational domain satisfactions. However, due to the "Swedish exceptionalism" of using a seemingly non-authoritative wait-and-see strategy for COVID-19, relying on the individual's own responsibility given governmental voluntary recommendations, our results might be different in an international context. Compared to universities in other countries, Sweden was an exception, locally allowing for larger flexibility implying that the higher education was never completely locked down. Therefore,

the teaching, learning and well-being of the students at Swedish universities were less affected than students at universities in other countries. We tested this hypothesis using data collected via a web-survey distributed to students studying at universities from the European alliance NEOLAIa. Most of the questions were included in the web-survey that was answered by students at Örebro University Business School several times during 2017-2021. Additionally, to make it possible to test our hypothesis, collecting data from NEOLAIa, an alliance aiming to become a “European University” under the Erasmus+ European Universities Initiative, we would also facilitate gaining knowledge useful for both the individual universities and for the alliance as a whole. The results from the data collected from students studying at NEOLAIa universities in the joint survey will serve as a basis to find ways to tackle the changing landscape of higher education at the NEOLAIa universities. It may also be used as a basis for discussions on the importance of analyzing the use of digital tools and online teaching for students’ learning and well-being. This can lead to the offering of more tailored learning environments for students to increase their learning and their well-being as well as to finding ways to make education and mobility more inclusive for diverse student groups. Moreover, the results can be used in the debate about increasing the use of digital resources and their impact on the students’, teachers’, and staffs’ well-being. This is critically important to assure the development a sustainable environment for teaching and learning.

Teaching and connecting international students through innovative community management platform

Author(s): Alexander Götz, StudyCentral GmbH

Format: Presentation, Track III: Policies and Strategies, Delivery Mode: in Person

With the development of modern society and technology, internationalization and digitalization have become important goals in higher education institutions around the globe. Soon we have come to realize the close relation between these two goals. Advancement in digitalization immensely assists the development of internationalization. Especially during the past years, in response to the impact of the pandemic, numerous digital strategies have been created in order to make internationalization possible, when actual mobility becomes limited. Against this backdrop, this presentation presents a pilot study of implementing the platform StudyCentral in teaching and organizing the joint-course “Conflict communication in international teams” between the China Center of the HTWG Konstanz University of Applied Sciences and the Mechanical Engineering Department of the Beijing Institute of Technology in the summer semester 2022. The main goal of the course is to prepare the students for a globalized labor market by improving their intercultural competencies and conflict management skills. StudyCentral is implemented as the virtual classroom and team meeting room, in which conflicts, communication, perception and connection take place through the digital medium and eventually in the real world.

StudyCentral is an innovative community platform developed by a Berlin EdTech Startup, featuring a semin-open cohort management concept, secure communication channels and content exchange functions. In contrast to established solutions it enables access to external users (not enrolled at the German university), presents no problem with the Chinese Great Firewall, and is within the security of GDPR compliance. Academic staff and students are able to organize their content and collaborative group works on one common ground / single source of truth. The platform combines established design concepts of modern community platforms and social media platforms with crucial learning functionalities. In addition, it offers a user-friendly and aesthetically appealing interface.

The use of StudyCentral proved to have helped the students reach virtual mobility and connect with each other more effectively. Both, constant feedback from the students and analyses of their evaluation of the course show significant success in improving their intercultural awareness and conflict communication skills despite the digital format. The positive results prove the added value and importance of having a shared virtual learning space in teaching in an international and digital context. From the organizational perspective, StudyCentral reduced administrative burdens for the lecturers and coordinators greatly and could enable a much smoother workflow.

Key words: internationalization, digitalization, community platform, cohort management, E-teaching/learning

The culture of the future in higher education and international digital collaboration: A view from the international digital platform IELSM

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Format: Presentation, Track I: Innovation and Learning, Delivery Mode: in person

Recent scientific reports on a global scale highlight the absence of a culture for entrepreneurship in the context of digital transformation. In these studies it is discussed that the results and methodologies used by higher education institutions to generate entrepreneurship should be optimized, with methods where collaboration and knowledge interaction are imperative for the development of new ideas. This is exactly how the conditions for entrepreneurship emerge and represent a problem from the perspective of innovation policy and digital transformation. The development of competencies for entrepreneurship, through digital platforms that promote higher education institutions constitute an advantage to anchor within these institutions a culture of entrepreneurship, but also represents a challenge, due to the complexity of the strategic, organizational, programmatic and operational organization of these platforms. These forms of organization are elementary conditions to secure efficient processes of communication, exchange of ideas and capabilities by those who participate in this type of platforms. This research work uses as a case study the German platform: International Entrepreneurship-Lab Smart Money, which is coordinated by the Business & Law School Berlin, and with which this complexity is analyzed. There, with the participation of more than 400 students



from 16 international universities, 50 academics, 60 experts and 50 global business models, ideas and business models (IMN) are readapted. In addition, it shows how the process of highly collective multicultural interaction enhances the development of entrepreneurial competencies, but also shows how such interaction depends on the organizational approach to articulate objectives and reduce the complexity that means the participation and interaction of multiple actors and diverse cultures. The results of this work are oriented on the one hand to recognize the value of digital platforms for entrepreneurship learning in higher education institutions, but on the other hand to recognize the challenges that it means for these institutions to efficiently take advantage of these spaces to enhance the development of their students' competencies. The latter implies a change in the organizational and teaching culture. Data will be presented through a descriptive and sequential analysis strategy on the process of interactions from the initial stage to the final stage of the business model analysis. A representative example will be taken to determine levels of learning achieved by students during the process and finally, elements that could be part of digital strategies for teaching and learning in higher education will be identified.



The dynamics of self-reliant peer teaching for digitally taught courses

Author(s): Dirk Reith, Martina Grein, Daniel Röthgen, Jan Behrendt, Tobais Held, Michael Malschützky, and Iris Groß

Format: Presentation + Lightning Talk, Track I: Innovation and Learning, Delivery Mode: in Person

Motivation to learn is a cornerstone for learning success. It can be promoted through active participation, reference to the topic, and a good learning atmosphere – all of that is more difficult to achieve in virtual teaching environments. One way to ensure an active role for the learner is through project-based learning approaches, which offer the opportunity to work on complex tasks that go far beyond classic theoretical modules. A rarely tried approach in an academic context to foster a good learning atmosphere and students' connection to the topic would be to use highly qualified peers as instructors. As we strive to increase learning outcomes in digital courses, we explored how peer teaching by specially trained senior student teachers can be set up in application-oriented project modules for engineering university learners. To do so, the modules "Applied Computer-Aided Design" and "Applied Electronic Circuit Design" were chosen and first taught purely digitally for students of our department.

In this presentation we discuss in which respect the learning process is altered if advanced peers act as teachers. The results of a self-reflecting interview with the letter are presented to show how they could profit from their teaching job. We also discuss what abilities are prerequisites for students to act as peer teachers.. A survey-based analysis will be shown to prove that student participants significantly improved their technical skills

compared to their level before the project. Furthermore, the data clearly indicates that learners felt more comfortable participating actively in the course if it was taught by a peer familiar with specific real-world applications compared to when it was led by professors. In addition, students were motivated because they were able to choose their own project as well as being encouraged and assisted in working on their own. We will finally discuss how the course dynamics changed when transformed to classroom teaching or if the course would be taught for an internationally mixed class.

KEYNOTE: The Future of Learning in an Increasingly Connected World

Prof. Dr. Bitange Ndemo, Kenya's Ambassador to the Kingdom of Belgium

The impact of VE projects in higher education teachers' digital competence

Author(s): Maria de Lurdes Martins, Polytechnic Institute of Viseu; Paula Fonseca, Polytechnic Institute of Viseu; Regina Brautlacht, Bonn-Rhein-Sieg University of Applied Sciences; Kristi Julian, Middle Tennessee State University; Wendi Hulme, Fanshawe College

Format: Lightning Talk + Presentation, Track I: Innovation and Learning, Delivery Mode: in Person

Virtual exchange (VE) projects have become increasingly popular as a means of enhancing teachers' and students' digital skills from different countries via technology, allowing them to collaboratively create knowledge, share resources and best practices. Research has heavily focused on learners' outcomes in

these VE. However, not much attention has been paid to the impact these projects have had on teachers' digital skills. This work aims to show how a multidisciplinary VE project has provided opportunities for its coordinators to develop their digital literacy and to gain experience using digital tools in their teaching practice. Additionally, it has had the potential to enhance their digital skills and to support their professional growth in a rapidly changing digital landscape. Within this context, this study aims to assess how a VE project has helped higher education (HE) teachers develop their digital competences according to the DIGCOMPEDU framework (Redecker, 2017), which identifies the competences all educators should possess to effectively use digital media in education. The ProGlobe Project - Digital Project-Based Learning: Promoting the Global Exchange of Ideas on Sustainable Goals, Practices and Cultural Diversity, whose main goal is to raise awareness on the impact of environmental and social issues within a global context, has provided opportunities for these participants to develop their skills in using digital tools and technologies, as well as to communicate and collaborate effectively using these tools. The virtual exchange project, which began in 2013 encourages communication among HE teachers and students from Germany, Portugal, Canada and the USA. This project has especially impacted the coordinators' professional engagement competence due to their strong communication with each other, which has reflected in networking with other colleagues from each partner institution for the collective good of the higher education institutions they belong to. Furthermore, it has also enhanced the coordinators' skills to digitally create content, namely project guidelines, presentations, videos, and other digital resources. The coordinators of this VE project have also seen improvements in their digital problem-solving skills,

adapting to the individual digital transformation happening within each institution and applying these changes to the international collaboration. Ethical research and data protection requirements have been successfully integrated into the VE project over the past 10 years. The results of this work show that it is possible to identify the specific digital competences that are developed or enhanced through this VE project, and to evaluate its effectiveness in supporting teachers' digital skills according to the DIGCOMPEDU framework.

References: Redecker, C. European Framework for the Digital Competence of Educators: DigCompEdu. Punie, Y. (ed). EUR 28775 EN. Publications Office of the European Union, Luxembourg, 2017, ISBN 978-92-79-73494-6, doi:10.2760/159770, JRC107466

The potential of virtual exchange projects in decolonizing conversations: the case of Building Bridges Across Continents

Author(s): Lurdes Martins (Polytechnic Institute of Viseu); Regina Brautlacht (H-BRS); Joseph Owino (University of Nairobi); Daniel Agyapong (University of Cape Coast)

Format: Presentation + Lightning Talk, Track I: Innovation and Learning, Delivery Mode: in person

Virtual exchange projects have the potential to play a role in decolonizing conversations by providing opportunities for students and teachers to engage with perspectives and narratives from different cultures and communities, which can help to counteract the dominance of Western perspectives in education. This provides students with a more complete understanding of

the world and its history. These projects can also afford opportunities for students to challenge their own assumptions, stereotypes and biases by becoming aware of perspectives and ideas that are different from their own and develop a deeper understanding of their experiences, struggles and perspectives, creating a space for different viewpoints to be heard and respected.

This study aims to showcase how a multidisciplinary virtual exchange project between two European countries (Germany and Portugal) and two African countries (Ghana and Kenya) - Building Bridges Across Continents (BBAC) - has played a significant role in decolonizing conversations by providing opportunities for students and teachers to engage with diverse perspectives and to develop the skills and attitudes necessary for understanding and respecting diverse cultures. In this project, which has been running since 2013, undergraduate students have been provided opportunities to learn, discuss and encounter a new world of ideas, share similar interests, and find about the cultural diversity in Europe and Africa and to work together by exploring the richness of different languages, traditions, and customs. We have started to include a more focused approach on developing and designing our task to include more indigenous contexts and to highlight the long history of Ghana and Kenya. Furthermore, BBAC offers a platform to start new conversations on decolonizing dialogues and being aware of the colonial past, its outcomes and move on to build new relationships of mutual respect and understanding by building social networks and bonds across continents.

The results of our project show that the most significant learning outcomes were increased consciousness of cultural differences

between the countries involved in the project. Students have also highlighted that the project tasks aim at virtually establishing empathy and rapport, which has helped them overcome personal fears and encouraged in-depth dialogue. It has also created a network among students and staff of participating universities, and promoted knowledge transfer. We are just beginning our journey and have recognized that we need to reevaluate our higher education exchanges often based on Euro-American context and need to tailor to the African context.

Overall, virtual exchange projects can help to create a more inclusive, equitable, and decolonized space for conversations and learning, by providing opportunities for diverse voices to be heard, and for the examination of power dynamics and biases in the education system.

The ProGlobe Podcast Journey

Author(s): Alina Bîrsan, Iulian Antoci, Benjamin Thober, Nico Seiler
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Format: Poster Presentation, Track IV: Student Voices, Delivery mode: in person

Virtual Mobility Through a Student Lens

Author(s): Meret Girgis, Middle Tennessee State University; Jordan Johnson, Middle Tennessee State University; Mahala Owen, Middle Tennessee State University; Jacob Davis, Middle Tennessee State University; Kristi Julian, Middle Tennessee State University

Format: Poster Presentation, Track IV: Student Voices, Delivery mode: in person

This poster discusses the integration of virtual exchange in two separate projects: ProGlobe and Cultural Synergy. These experiential virtual exchanges were designed to provide participants opportunities to establish deeper understandings of international perspectives, considering imperative sociopolitical issues and 21st century skills. The focus was to comprehend how individuals manage intercultural communication, as well as utilize important skillsets for their field of work.

ProGlobe was an international project between four different countries and was heavily based on self-reflection. The project goal aimed to highlight the roles of culture, language, and our power to change the environment. ProGlobe allowed us to communicate with other students in different majors from around the world to see our lives and culture as well as discuss how we can improve our carbon footprint by working toward a common goal-sustainability. The ProGlobe Project also provided students

with a scholarship opportunity to travel out of their country to fully immerse themselves in a new culture. The Cultural Synergy Project allowed students to communicate with other interior design students from different areas about harsh issues such as cultural and social injustices, and to implement a design solution to address them.

For this presentation, student presenters will briefly outline and describe how the integration of the VE projects in the courses was designed, and what their expectations and challenges were. They will also reflect on the impact of the projects on their attitudes for intercultural communicative competence, self-reflection, and self-awareness. Students will compare their individual virtual exchange experiences with that of other classmates based on personal conversations and reflective papers, addressing the use of such programs for individuals with preexisting intercultural backgrounds and upbringings.

The student poster presentation will explore the insights of students as they identify ways in which they may implement shared global learning into everyday life and professional work. Both VE projects partner students internationally to identify common features, themes, and practices, as well as create a collaborative performance piece to be presented. For both projects, student voices express not only the visions of the present, but ideas for the future to promote global understanding. This poster will show how students from diverse backgrounds can create meaningful VE experiences that both foster global understanding and enable them to share their knowledge with overseas peers.

Virtual Team Learning in Entrepreneurship Education: The Role of Culture

Author(s): Maria Elo, (Associate Professor at the University of Southern Denmark and Professor at the Belt and Road Institute of International Business at Shanghai University) and Joyce W. Soila Treptow (Centre for Entrepreneurship, Innovation and SME Management / Department of Management Sciences, Bonn-Rhein-Sieg University of Applied Sciences, Rheinbach, Germany)

Format: Presentation, Track I: Innovation and Learning, Delivery Mode: in person

Global virtual team learning has become prevalent in entrepreneurship education presenting a unique learning context for both students and teachers. By collaborating with peers across cultures and time zones, students access authentic cross-cultural interaction without the typical time and financial costs associated with travel or study abroad (Elo, Torkkeli, & Velt, 2022; Schulze & Krumm, 2017).

However, virtual teams working under high cultural diversity, reliance on technologies, and in geographically dispersed locations experience many virtuality-related challenges (Schulze & Krumm, 2017). Amongst them, we highlight cultural differences which have been identified as critical factors in determining functioning and successful student teams in multicultural settings.

We build on previous learnings from multiple International Business and Entrepreneurship courses held at South Denmark University (SDU), Lappeenranta- Lahti University of Technology (LUT, Finland) and Bonn-Rhein-Sieg University of Applied Sciences (H-BRS). In this presentation, we highlight three unique cultural challenges for virtual teams based on findings from

literature (e.g. (e.g. Elo, Torkkeli, & Velt, 2022; Morrison-Smith & Ruiz, 2020; Schulze & Krumm, 2017) and our experiences as course facilitators.

First, diversity in values, norms, and working styles leads to misunderstandings and conflicts between team members. Second, diverging working and communication styles and expectations among European (German, Danish, Finnish), Chinese and African (Ghanaian and Kenyan) makes it difficult for team members to build trust and personal connections. Finally, language represents a particular challenge to global virtual teams. With English being the de facto language used in the presenters' courses, there are wide discrepancies in the student's English proficiency levels, which negatively impede the teams' performance. For instance, students may withdraw from conversations and experience anxiety if spoken or written language is not readily understood as expected.

However, global perspectives facilitated by multicultural teams are immensely valuable and can offer different solutions to global problems than mono-cultural teams. Nevertheless, the potential and value of multicultural collaboration remains underexplored and requires different awareness in the virtual classroom, particularly in addressing different developmental levels and contexts (Elo, Rudaz & Chrysostome, 2022). This interactive presentation will present and discuss the results of a preliminary scoping study on the cultural challenges perceived and reflected both by students and teachers in globally dispersed virtual teams and how these impact students' performance when students tackle global problems together. Under demanding times, additional resilience in approaching virtual challenges is needed. As facilitators, we aim to create a vibrant session with a fruitful

cross-disciplinary conversation that will bring together researchers and practitioners to discuss these issues and suggest future research questions to enhance collaboration among diverse and multidisciplinary student teams and teachers and virtual classroom collaboration.

References / Further Reading

Elo, M., Ermolaeva, L., Ivanova-Gongne, M., & Klishevich, D. (2022). Resilience and business model adaptation in turbulent times: experiences of Russophone migrant entrepreneurs in Germany during Covid-pandemic. *Small Enterprise Research*, 29(3), 250–272.

<https://doi.org/10.1080/13215906.2022.2134916>

Elo, M., Rudaz, P., & Chrysostome, E. (2022). Editorial: Entrepreneurial internationalisation in, from and to Africa – perspectives and insights. *International Journal of Entrepreneurship and Small Business*, 47(4), 431–447.

Elo, M., Torkkeli, L., & Velt, H. (2022). Matching International Business Teaching with the UN Sustainable Development Goals: Introducing Bi-directional Reflective Learning. *Journal of Teaching in International Business*, 33(4), 247–270.

<https://doi.org/10.1080/08975930.2022.2137277>

Morrison-Smith, S., & Ruiz, J. (2020). Challenges and barriers in virtual teams: A literature review. *SN Applied Sciences*, 2(6).

<https://doi.org/10.1007/s42452-020-2801-5>



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