Observatory
on H\GHER
EDUCAT\ON
Transformations
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VIRTUAL INTERNATIONALIZATION

FOREWORD

Dear colleagues,

It is our pleasure to introduce the first issue in the series of monthly digests of the Observatory on Higher Education Transformations.

The increasing pace of information flows calls for systematizing and highlighting new data-driven research insights. The purpose of these digests is to identify the most relevant publications in specific research areas that, we hope, will help scholars in their inquiry and reflection on the trending topics of higher education.

Each digest will tackle specific transformations in one of the observation domains: university management, higher education governance, digitalization of higher education, student experiences, higher education system dynamics, and international higher education.

We would like thank all Observatory members for their kind support for the preparation of this issue.

Sincerely,

Isak Froumin
Institute of Education, HSE University

EDITORIAL

Different practices, such as virtual exchanges*, collaborative online international learning (COIL)**, virtual research collaborations, and online international student communities, to name just a few, have spread over the past two years in response to the restrictions of the pandemic.

Virtual internationalization at the national, sector, and institutional levels is defined as the process of introducing an international, intercultural, or global dimension into the delivery, purpose or functions of higher education with the help of information and communications technology (Bruhn, 2017). This concept is closely associated with global digital exchange which is defined by Aspen Institute (2021) as "harnesses technology to educate children and young adults to be successful citizens in a globalized world. The unique feature of global digital exchange is that learning occurs through the direct online connection of students with their peers in other countries. This approach has the potential to address several of today's pressing educa- tion challenges, including xenophobia, unequal access to global education, digital literacy, including assessing the reliability of online information, and use of technology in the classroom."

The experiences during the pandemic lead to beleive that many digital practices are likely to become a part of the new reality due to the flexibility of the digital environment, lower costs for digital internationalization in comparison to on-campus activities, and increased digital capacity of institutions. While digital practices can be a promising solution, there are previously existing and new challenges in this domain. They relate to the quality of virtual internationalization, international digital environment, digital culture of universities, student experiences, inequality issues and uneven access to technological equipment. Making virtual exchange more interactive for both students and teaching staff is essential, a concept that relates to what is called 'collaborative Online International Learning' (COIL) which emphasizes this

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*__Virtual exchange__ refers to the engagement of groups of learners in online intercultural interaction and collaboration with partners from other cultural contexts or geographical locations as an integrated part of course work and under the guidance of educators and/or expert facilitators (Gutiérrez & O'Dowd, 2021).

**__Collaborative Online International Learning (COIL)__ is an approach to teaching and learning, which provides academics and students with the ability to communicate and collaborate with peers internationally through online (Rubin, 2015), connecting classes from different parts of the world (Naiker, 2021).

notion of interaciton and collaboration beteen the different actors. Also issues related to technological affordances on online instruments and environments, and other important aspects remain to be studied.

This digest aims to highlight the research focus in virtual internationalization and highlight the key publications in this domain. Most of the selected publications appeared in 2020-2021. The digest also includes several publications from the previous decade that may be helpful for tracking the development of this domain. The selection of publications includes research articles based on raw data, books that provide a comprehensive overview of issues in digital internationalization, and reports with methodological and practical insights.

While the experience of the past two years allowed us to collect important data and address digital internationalization in a more comprehensive way, there gaps still remain in this research domain: very little has been published about the internationalization of the digital environment of universities, the effects of different digital tools during international students' journey, the virtual internationalization of research, compatibility of different virtual environments in the global online academic space, the experience of many countries in digital internationalization, and implications of digital internationalization on other domains. The selected publications in combination with others pre-pandemic are a good foundation for further analysis and conceptualization of differences and similarities between different modes and types of digital internationalization.

Hans de Wit, Center for International Higher Education, Boston College, USA
Giorgio Marinoni, International Association of Universities, France
Ekaterina Minaeva, Institute of Education, HSE University, Russia

RESEARCH TRENDS

This section presents the insights from the analysis of publications indexed by Web of Science. The clusters of research themes in international education are based on word occurence and interconnection in paper abstracts. The data for 2020-2021 is shown on Figure 1 and includes the analysis of 1000 most cited publications as stated by the Web of Science database. The analysis of publications indicates five major domains of research inquiry: internationalisation and sustainability *(marked green)*, international student mobility *(blue)*, EMI and language issues for international students *(purple)*, international student experiences and effects of internationalisation on students skills and competences *(red)*, and internationalization during the pandemic *(yellow)*.
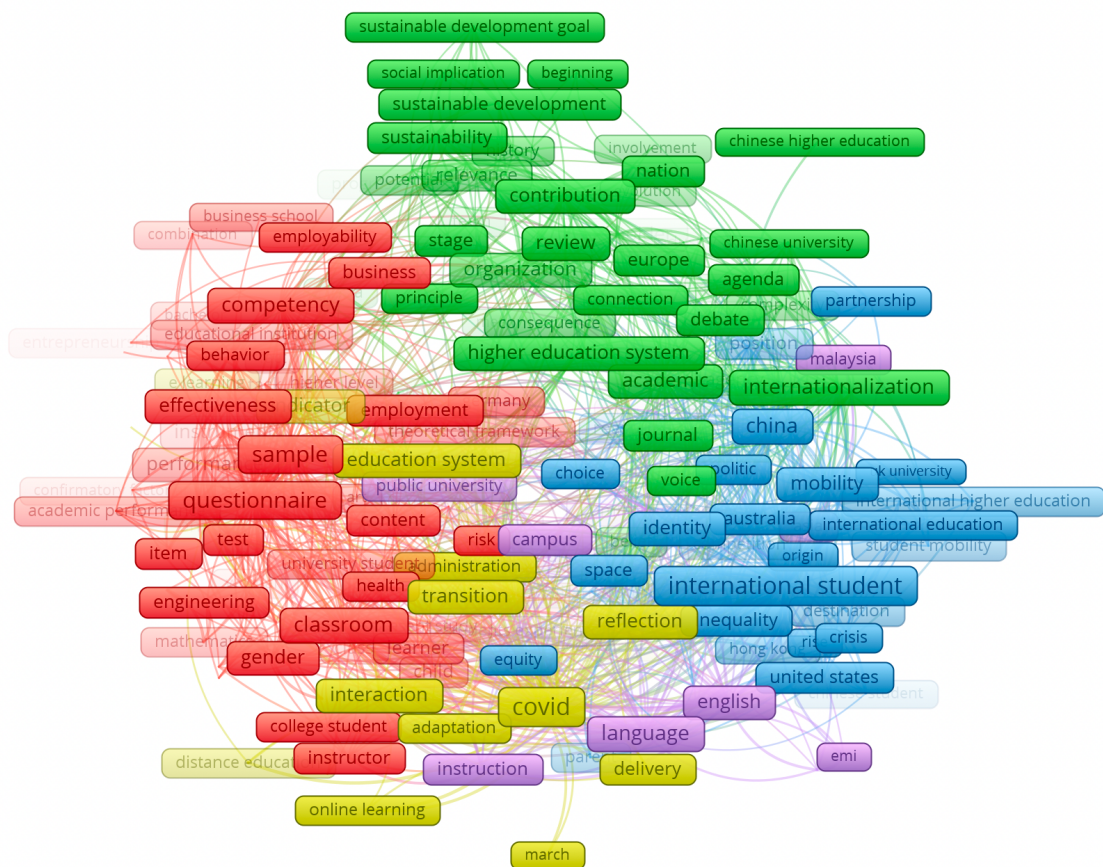

Fig.1. Thematic clusters of international education research publications, 2020–2021.

The data on publications in virtual internationalisation is presented on the figures below. Figure 2 shows the research clusters by study topic since 2014 based on 1000 most cited publications. Figure 3 shows the clusters by study topic on virtual internationalization during 2020-2021. Not surprisingly, the data for 2020-2021 indicates that the pandemic of COVID-19 has a central place in the research papers, being connected with other major research domains: access and equity *(marked blue)*, adaptation of digital technologies *(green)*, sustainability *(yellow)*, and student mobility *(red)*.

Fig. 2. Thematic clusters for research publications in virtual internationalization of education, 2014-2021.

Fig. 3. Thematic clusters for research publications in virtual internationalization of education, 2020-2021.
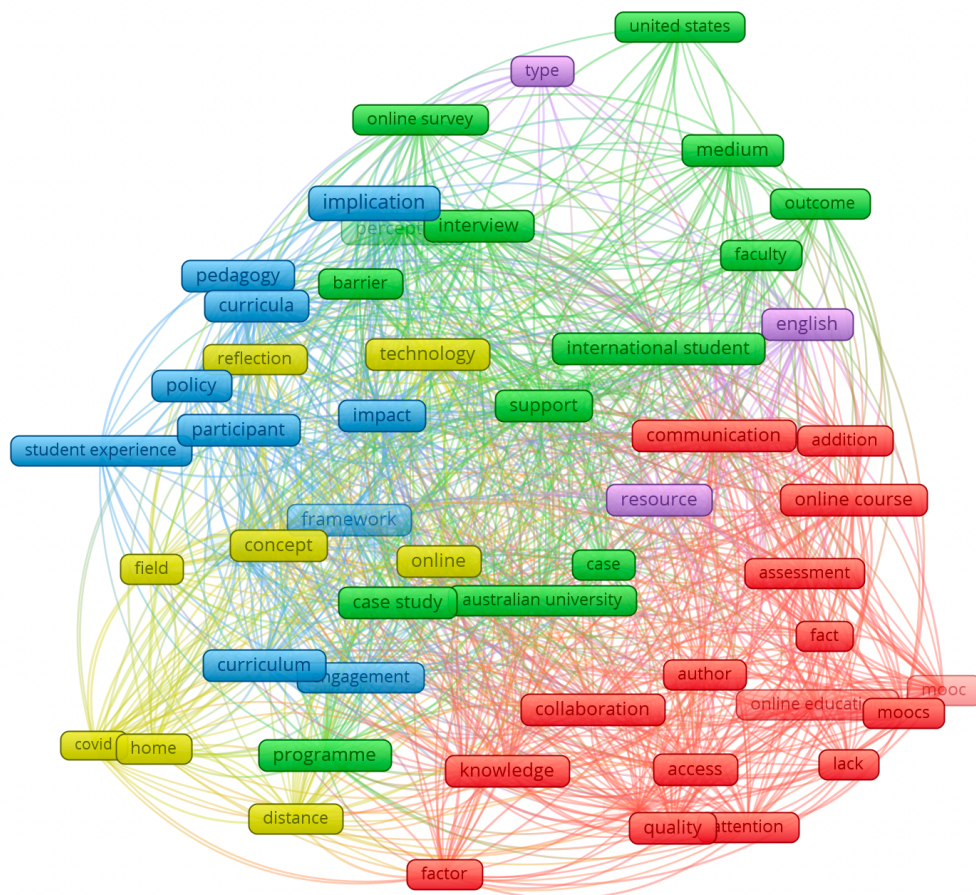
SELECTED PUBLICATIONS

Virtual Exchange Typology (Annotated Bibliography)
Publisher: The Aspen Institute
Year of publication: 2021
Full text

The glossary and framework outlined in the report represent the Stevens Initiative's effort to alleviate the common challenge of confusion about what is meant when individuals or programs describe virtual exchange. This effort represents an important and necessary first step towards improving discourse around virtual exchange and making progress toward a mature field.

Virtual exchange is too complex to describe in a simple or rigid framework, so this document does not include all terms or concepts that might be of interest to individual educators or practitioners. For example, in the Framework Components section, "Key Participant Demographics" includes participants' ages, geographic location, and level of education but does not include other factors that might be of interest. The glossary contains several common terms but is by no means exhaustive.

Virtual Internationalization in Higher Education (Book)
Elisa Bruhn, Deutsche Gesellschaft für Internationale Zusammenarbeit, Germany
Year of publication: 2020
Full text

Digital media and information and communication technology (ICT) are being used more and more in international contexts at universities. In her English-language dissertation, Elisa Bruhn examines how this technological potential can be used strategically to expand internationalization. The data basis of the thesis is a content analysis of contributions to international conferences on university internationalization, online and distance learning, university management and research, and ICT and internationalization. The selected abstracts were analyzed based on the model of "Comprehensive Internationalization" (CI). From the results, Bruhn outlines a model for Virtual Internationalization (VI) that considers curricula, international cooperation, and distance learning as well as the roles of university strategy, administration, management, and teaching staff. The highly topical dissertation closes a gap in university research and offers universities valuable starting points in research and practice of internationalization.

Conceptualizing Internationalization at a Distance: A "Third Category" of University Internationalization

Jenna Mittelmeier, University of Manchester, UK
Bart Rienties, Open University, UK
Ashley Gunter, University of South Africa, South Africa
Parvati Raughuram, Open University, UK

Full text

Internationalization efforts in higher education have often been categorized according to Jane Knight's binary of "Internationalization at Home" (IaH) and "Internationalization Abroad" (IA). However, a rising number of technology-supported activities have created new opportunities for university internationalization. For example, students can now remain "at home" while using technology to study with an institution or program that is simultaneously located "abroad." We have conceptualized these activities as a new third category called Internationalization at a Distance (IaD). In this article, we introduce the concept of IaD and outline an in-depth case study of an international distance education provider at scale, the University of South Africa.

Virtual Exchange to Develop Cultural, Language, and Digital Competencies

Said Machwate, Cadi Ayyad University, Morocco
Rachid Bendaoud, Cadi Ayyad University, Morocco
Juergen Henze, Humboldt-Universität zu Berlin, Germany
Khalid Berrada, Mohammed V University in Rabat, Morocco
Daniel Burgos, Universidad Internacional de La Rioja (UNIR), Spain

Full text

This work presents an evaluation of a telecollaborative online course model organised as a VE between German and Moroccan universities. It was established to explore the benefits of integrating a VE experience by practicing some 21st- century knowledge elements as tools for the development of intercultural, language, and digital competencies from the perspective of mobility. In this paper, we present a VE model and its design, structure, and progress. Then, we evaluate this first experience to overcome some challenges that similar future experiences could face. We analyse the tools proposed in this design, the interactions between the different actors, and their feedback. The evaluative study shows the acquisition of awareness of cultural differences and the improvement of language skills through practice in addition to the development of some digital skills.

Digital Experiences of International Students: Challenging Assumptions and Rethinking Engagement

Edited by Shanton Chang, The University of Melbourne, Australia
Catherine Gomes, RMIT, Australia
Year of publication: 2021
Full text

Using fascinating case studies and current research, this book considers the digital experiences of students as a result of their engagement with international education providers and stakeholders from a transnational and trans-disciplinary perspective.

Looking specifically at the digital transitions and networks that international students experience during their time studying overseas, this book examines the ways in which the curriculum and higher education institutions' engagement strategies have been shaped by the digital environment. Split into three sections, this book:

- looks at the broad experiences of international students, covering the digital transitions and networks that students experience during their time studying overseas
- explores the ways in which the curriculum has been shaped by the digital environment
- considers the ways in which higher education institutions and other service providers implement digital engagement strategies to communicate more effectively with international students.

Internationalization and virtual collaboration insights from COIL experiences

Hildeblando, C. and Finardi, K.R., Federal University of Espirito Santo, Brazil
Year of publication: 2018
Full text

The aim of this study is to analyze the possibilities and limitations of the Collaborative Online International Learning (COIL) approach to foster international collaboration between higher education institutions (HEIs) so as to boost their internationalization process. With that aim, a documental meta-analysis of twenty-three case studies carried out in 2012 by the Global Center of the State University of New York (SUNY) were reviewed and discussed in terms of the potential of COIL to foster the development of global learning, social capital, and international academic collaboration between international HEIs. Results of the analysis suggest that COIL is an approach that can promote online academic mobility and international collaboration as well as enhance intercultural competence when combined with the Intercomprehension Approach (IA) to enable the use of different foreign languages.

Designing Virtual Student Mobility

Frances Bell, Helen Keegan, University of Salford, United Kingdom
Elena Zaitseva, John Moores University, United Kingdom
Year of publication: 2020
Full text

Internationalization in Higher Education has resulted in an increasing number of students who choose to spend time working or studying overseas in order to gain an international perspective on their studies and develop intercultural and linguistic competencies. While the benefits of international student mobility are undisputed, the numbers of students who benefit from 'real' mobility are relatively small due to financial and linguistic constraints. An alternative to real mobility is 'virtual' mobility; the use of ICT to enable students to collaborate and communicate across borders of space and time. Viewing the concept of mobility as an activity where students (and staff) experience a change of educational context that can impact differentially on those involved, this paper describes two European projects where ICT has been used to support real mobility students and to enable other students to experience virtual mobility, focusing on the organizational and socio-educational issues raised by technology choice and configuration.

What do students learn in virtual exchange? A qualitative content analysis of learning outcomes across multiple exchanges

Robert O'Dowd, University of Leon, Spain
Year of publication: 2021

Virtual exchange refers to the engagement of groups of learners in online intercultural interaction and collaboration with partners from other cultural contexts or geographical locations as an integrated part of course work and under the guidance of educators and/or expert facilitators. This study presents a qualitative content analysis of reported learning outcomes by students of English in a Spanish university following their participation in one of thirteen online intercultural exchanges. Based on the analysis of 345 learner portfolios, several key themes were identified which provide insight into the type of learning which virtual exchange can contribute to second language classrooms. These included how virtual exchange contributed to overcoming students' stereotypes, gaining confidence as communicators in their second language (L2) and reconceptualizing English as a tool for communication rather than as an abstract academic activity. A comparison of two models of virtual exchange within the dataset also revealed how task design can influence the outcomes of this activity.

The Impact of International Virtual Exchange on Participation in Education Abroad

Jonathan Lee, Jami Leibowitz and Jon Rezek, East Carolina University, USA
Year of publication: 2021

International virtual exchange is gaining popularity as an innovative approach to providing international experiences to students, particularly considering the COVID-19 pandemic. However, little research has been conducted on this unique teaching approach or how it fits into university comprehensive internationalization plans. In this paper, we develop a simple theoretical model to explain the impact of taking international virtual exchange classes on students' decisions to subsequently study abroad. We use a linear probability model with a longitudinal panel that follows 39,381 students through their entire academic career at a large American university to estimate the impact of international virtual exchange and foreign language courses on the probability of subsequent study abroad. Based on our preferred matching model, which accounts for observable differences in student characteristics, we find the likelihood a student will subsequently study abroad approximately doubles if they take an international virtual exchange course.

Mapping the contours of digital journeys: a study of international students' social networks in Australian higher education

Shanton Chang, Catherine Gomes, Maria Platt, Sabrina Trumpour, Dana McKay & Basil Alzougool, Australia
Year of publication: 2021
Full text

This work presents an evaluation of a telecollaborative online course model organised as a VE between German and Moroccan universities. It was established to explore the benefits of integrating a VE experience by practicing some 21st- century knowledge elements as tools for the development of intercultural, language, and digital competencies from the perspective of mobility. In this paper, we present a VE model and its design, structure, and progress. Then, we evaluate this first experience to overcome some challenges that similar future experiences could face. We analyse the tools proposed in this design, the interactions between the different actors, and their feedback. The evaluative study shows the acquisition of awareness of cultural differences and the improvement of language skills through practice in addition to the development of some digital skills.

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