

## Editorial

## Does the JTES help us Create Deeper Personal Meanings for Sustainable Education?

Five years have already passed since the UNESCO Chair on Interplay of Tradition and Innovation in ESD initiated a targeted development of the *Journal of Teacher Education for Sustainability* (JTES) and the *Baltic and Black Sea Circle Consortium (BBCC) for educational research*, which would allow for more effective implementation of the Sustainable Development Goals (SDG) set for teacher education and higher education after 2015.

The implementation of these intentions started in 2016. Historically, the creation of the JTES and the establishment of an international network emerged simultaneously as inseparable ideas aimed at promoting the reorientation of teacher education and higher education towards sustainability. The implementation of the ideas of the JTES and the international cooperation network started in the form of *participatory action research* at the very beginning of the 21<sup>st</sup> century. The organization of such a network on the basis of a participatory action research approach was maintained later in the UNESCO Chair network after the establishment of the UNESCO Chair in 2013.

The experience of the JTES development and journal networking was, and continues to be, a participatory value that provided ESD researchers and practitioners engaged in the networking with a personal perspective on sustainability, sustainable development and sustainable education, as well as highlighted more modern perspectives to be used in their research and professional activities.

A brief general overview of what happened in the action research until 2015 can be obtained in the article “Searching for Sustainability in Teacher Education and Educational Research: Experiences from the Baltic and Black Sea Circle Consortium (BBCC) for Educational Research” published in the journal *Discourse and Communication for Sustainable Education (DCSE)*, volume 6, pp. 21–29, 2015.

Since 2016, there have been changes in the development of the JTES formal indicators, changes in the way the JTES international network is understood and implemented, and changes have continued in the search for the identity of JTES to harmonize adaptive and innovative approaches according to the level of understanding of the phenomenon of sustainability achieved in the age of Anthropocene wicked problems, seeking a scientific basis for creating conditions for decent survival of humanity.

Readers have been informed about the changes in the JTES formal indicators through *editorial* articles. Now, after five years, they are clearly visible: in 2015, the JTES CiteScore was 0.64, but in 2019 it was already 3.4. In 2019, the SJR was 0.418 and the level of Q2 was reached, and the SNIP was 1.462 (<https://www.scopus.com/sourceid/17700156732>; <https://ej.uz/JTEfS>). The changes in the JTES formal indicators currently meet the requirements imposed on universities for scientific publication evaluation, so there is no doubt that the intention to focus on improving the quality of the JTES has been timely made and not all reserves for the development of the JTES have been exhausted. This work is ongoing and the greatest opportunities will be created by the network of the JTES article authors that has been identified and directed for use over the past five years.

Changes in the requirements for higher education and universities after 2015 have influenced the changes in the understanding of the idea of the BBCC network and the JTES, as well as affected the way in which cooperation is implemented. The most visible change is the gradual transformation of the BBCC network from a network recognized through the annual JTES international conferences to the network of the JTES authors. The focus has shifted from organizing conferences to collaborating with authors on sustainable phenomena and ESD research. The transformation maintained the same feature, the type of cooperation tested in previous years remained: *open participation network*. The need to change the old tradition of the JTES network of organizing the annual JTES conferences has raised concerns about the real difficulties in maintaining this tradition. Traditionally, since 2005, the annual conferences of the BBCC have been held at the universities included in the BBCC network. Funding for the conferences was obtained through participation fees of conference participants covered by their universities, and the volunteer work of the network members was used to organize the conferences. After the last conference, the reality for further planning of conferences called for funding, which after 2016 became more obvious at universities. At a number of universities, negotiations on the organization of conferences with the administration of a respective institution started on a simple condition: *if funding is provided, a conference will be organized*. The participation fee approach was ruled out as insufficient. The attitude of higher education institutions towards the issue of conference funding became a signal that the maintenance of the network required changes appropriate at the time. This highlighted the need to link the idea of the JTES network not to the annual conferences at one of the universities or teacher training institutions involved in the BBCC network, but to *use the direct cooperation of the JTES with the authors of the articles*.

After 2016, Daugavpils University (DU) incurred financial expenses for the preparation and publication of the JTES and DCSE links, envisaging them as expenses for the maintenance of the DU UNESCO Chair. The covers of both JTES and DCSE indicated the responsibility of the DU UNESCO Chair for publishing the journals. Articles are published *free of charge if they meet the requirements of the JTES and DCSE and have successfully undergone double-blind peer review*. The team of the JTES reviewers and editors was ready for the development of JTES in the transition from a conference approach to a deeper dialogue on the study of a sustainability phenomenon from the perspective of teachers and higher education. Within five years, this transition has taken place and real results have been obtained, confirming the achievements of teams of both journals and the networking changes that have resulted in a global network of the JTES and DCSE of DU UNESCO Chair. In the period of 2016–2020, JTES authors from 41 countries of the world participated in the network: Australia, Austria, Bangladesh, Canada, Colombia, Croatia, Egypt, Estonia, Fiji, Finland, Germany, India, Indonesia, Iran, Ireland, Japan, Jordan, Kosovo, Latvia, Lithuania, Malaysia, Malta, Namibia, New Zealand, Nigeria, Norway, Poland, Portugal, Saudi Arabia, Serbia, Singapore, Slovakia, Slovenia, South Africa, Spain, Sweden, Thailand, Turkey, Ukraine, the United Kingdom, and the USA. In the given period, 101 articles were published by the JTES authors and the DCSE authors from 29 countries of the world published 105 articles. The achievements of five years give hope that the task of the DU UNESCO Chair to create a global resource center for ESD research has gained a real basis for its implementation in the next five years. *From 2021*, it is planned to specify the name of the network as the *International Network of JTES & DCSE Journals of UNESCO Chair at Daugavpils University*.

What is unique, what does the JTES team offer to authors whose research is being prepared for publication? It can now be called a tradition that has established in the development of the JTES. Both in this volume and in the previous ones, the authors of the articles mention and in some way recognize *the philosophy of the JTES*. There is no doubt that its recognition has developed through participatory action research gradually since the creation of the JTES, and its formation has been based on the real experiences of researchers, coming from their lived experiences and current interests. There is no doubt that it developed at the beginning of the century on the basis of a holistic approach, which was a natural approach, while environmental or ecological education was not overwhelmed by the current wicked problems that gradually entered current education. Therefore, the interest of the JTES authors in highlighting the causes of Anthropocene problems and pedagogical opportunities to *reduce the current unsustainability* of education has become more recognizable.

The idea of Anthropocene has been used by several JTES authors as a context in its broadest sense. The Anthropocene era in the 21<sup>st</sup> century has acquired the status of an era and has already been given several designations: an era of uncertainty, an era of wicked problems, an era of unsustainable development, which is recognized by the enumeration of various crises and problems. All of these names are clearly associated with the quality of unsustainability that has manifested itself in our planetary system around the relationship between human and nature. And just as clearly, the authors find, directly or indirectly, a perspective in which sustainability is present in every human activity or experience. We usually see this in collaboration with authors and reviewers.

The causes of Anthropocene problems can be found in the perspective of anthropocentrism, in which a number of cultural, social and educational studies are performed without a natural (biological) fundamental basis, ignoring the fact that human species formation is also related to fundamental unit *species* formation and cannot be arbitrarily removed from history. Without the use of a species unit, only a natural distortion of historical experience can be promoted, where humans are seen only as creators and consumers of cultural and social values. Unfortunately, human origins from living things and the origin of living things from the life-sustaining system, or human biological origins from nature, can be lost if researchers do not use the evolutionary and ecological interrelationships and ontological foundations to study complex processes. Many rejected articles ignore the reality of the species, replacing it with the omnipotent influence of technology, which is more often unjustified or based on illusions about progress.

Unfortunately, the era of Anthropocene wicked problems in the early 21<sup>st</sup> century changed attitudes towards holism, diminishing its role. As sad as it may seem, to reduce the prospect of holism in education in the first two decades of the 21<sup>st</sup> century, current part of education reformers sometimes call holism a *dirty* word, or when small changes in opaque relationships can have the effect of limiting more holistic views of sustainability. Especially if the choice of priorities is linked to the allocation of funding. It works in all cases. For example, in the early 21<sup>st</sup> century, there were real cases when even in the expert councils of science academies experts in pedagogy and psychology were not elected because among voters the interests of legal, economic and other social sciences were more represented, which also succeeded in the elections. Interestingly, such cases appeared shortly before or at the beginning of the first signs of economic crises in the first decade of the 21<sup>st</sup> century. At present, these cases illustrate *agile* or *proactive* preparations for the fight for science funding. In this case, the highest goals of human education were

shifted from pedagogy and psychology to the top priority issues related to economics, or educational technologies, or technological tools, etc.

This undermined the achievements of the 20<sup>th</sup> century in strengthening the holistic approach to environmental education and pedagogy and opened the door to faster development of Anthropocene relations in the sense of “fair” competition. Thus, with *development* and *illusions about progress*, the perspective of holism has been fragmented into many small goals and objectives, for the study of which the piecemeal approach fits well, which currently hinders the conceptualization of research results and recommendations. Such techniques have contributed to a situation in which the state of unsustainable system quality, characteristic of the Anthropocene era, has become even more recognizable. The pursuit of many different immediate goals and the contradictions that developed in all kinds of discussions about democracy during the first two decades of the 21<sup>st</sup> century have exposed the foundations of *unsustainable democracy*, which in our view is characteristic of the Anthropocene era. At the global and local levels, the Anthropocene era has manifested itself through an unsustainable development path and multiplying patterns of unsustainable behavior in education (UN. (2011). Learning for the Future: Competences in Education for Sustainable Development. Economic and Societal Council. ECE /CEP/AC.13.2011/6).

The use of an action research strategy has a strong potential for adaptation and makes it possible to recognize changes in the action research process, allowing us to see the relationship between adaptive and innovative approaches. The past five years have brought visible changes in the development of the JTES and the network: (1) there is a need to clarify the name of the JTES network taking into account the achievements of previous years, so from 2021 its name will be the *International Network of JTES & DCSE Journals of UNESCO Chair at Daugavpils University*; (2) there is a growing need to promote the development of the JTES and JTES & DCSE journal network by engaging in *Education 2030* to achieve SDGs by 2050. It is clear that this will not be possible without researching and understanding the importance of the currently *underestimated meanings of humanity and human experience* that integrate and synthesize the picture of the world we live in. The JTES experience shows that an in-depth understanding of the role of the *individual and human species* will lead to a more holistic understanding of the unique, natural mission and significance of man-made cultural and social values. The development of educational research is not possible without a more holistic framework for the sustainability phenomenon and ESD.

From a broader perspective, this volume mentions, both directly and indirectly, the JTES philosophy, which has already become recognizable. The formation of philosophy begins with individual philosophy. It looks like that in the next five years it is time to address the question: *Does the JTES help us Create Deeper Personal Meanings for Sustainable Education?* On behalf of the future of the JTES, we invite everyone involved in the maintenance of the JTES (authors, reviewers and all supporters) to accept this question as a contextual issue of personal importance and to seek one's own suggestions by sharing them in the JTES publications. In this volume, the authors of ten articles will share their ideas and experience. Thanks to the authors for their research and inspiration for us and JTES readers.

The paper by **Guillermo Murillo-Vargas, Carlos Hector Gonzalez-Campo and Diony Ico Brath** from Colombia answers the following research question: Is the integration of the Sustainable Development Goals and Universities a field of study? It is a bibliometric study of the intellectual production of the last 20 years. The paper is related to the topics

of the Journal of Teacher Education for Sustainability because it allows evidence of increased academic output from the universities and the Sustainable Development Goals (SDG) issues. Addressed in different studies for decades, from 2015, they gained greater prominence due to the inclusion of higher education as an important actor in fulfilling the 2030 agenda and the United Nations SDGs.

**Maritana Gorina, Oksana Ivanova and Marite Kravale-Paulina** in their paper discuss the mission of foster family pedagogy as an innovative and constantly changing social and pedagogical phenomenon in education for sustainable development. The authors considered a number of real cases in a broader perspective from the point of view of foster family pedagogy, identified the choice of foster care approaches and evaluated the results obtained. The readiness of foster parents to overcome the effects of Anthropocene unsustainability was also examined taking into account the mutual influence and interaction of foster parents and foster children. The authors of the study emphasized that the Latvian society should find its own new perspectives and methods to implement foster family pedagogy.

The paper by **Liene Briede and Elga Drelinga** explores vocational education students' personal sustainability as a predictor to sustainable employability in the future. The results have shown that the most valuable self-characteristics are being good tempered, helpful and kind. Students' attitudes to being responsible and honest change during school years – 1<sup>st</sup>- and 2<sup>nd</sup>-year students do not consider them important values but senior students acknowledge them. It means that their lived experiences have promoted personal sustainability development ensuring more sustainable employability in the future.

**Janis Kapenieks sen. and Janis Kapenieks jun.** in their paper declare that the latest streamy implementation of online learning methods in the learning process requires new solutions based on pedagogical science. New developments in the design and content must provide personal development in the framework of sustainable education. The goal of the research is to find pedagogical and technological solutions for inclusion of the “spaced learning” method in the e-learning process for the fostering of personality. In the spaced e-learning process, a few-minute-long content includes pauses between repetitions, during which students let their brain “rest” with different content and then return to the course. In the research, the e-learning environment is designed to link the content of spaces to the individual learners' interests and to raise their awareness of sustainable development issues.

In their research paper, **Zahra Tavakkoli and Naser Rashidi** from Iran show a picture of Sustainability Education among EFL instructors. The study provided education systems and policymakers with the necessary Sustainability Education competencies so that the system can help teachers and learners identify the relationship among sustainability issues such as culture, ecology, and power structures of their societies. The study is directly related to the philosophy of the *Journal of Teacher Education for Sustainability*. The logic behind the study is that English as a foreign language plays a significant role in ESD, as the knowledge of this language can provide scholars with a key to have access to the ways of sustainability development.

**Katrin Kohl and Charles A. Hopkins** from Canada view the #IndigenousESD research as a community-based participatory global research project aiming at enhancing knowledge on how to create relevant educational experiences for Indigenous children and youth. As required by SDG 4, quality education for all is of crucial relevance for achieving the Goals of the 2030 Agenda but little is known about how to serve Indigenous communities. This in-depth analysis has a focus on knowledge, attitudes and skills, often perceived

as twenty-first century skills, as they were suggested themes by a broad spectrum of Indigenous communities and other stakeholders in various regions of the world. The authors provide recommendations to make systemic changes with the consent and the support of the community.

**Ehsan Namaziandost, Maryam Khodaverdian Dehkordi, Poupak Alipour** from Iran and **Shouket Ahmad Tilwani** from Saudi Arabia investigate the impact of spaced and massed instruction on foreign language reading motivation and reading attitude among Iranian pre-intermediate EFL learners. These two techniques, i.e., spaced instruction and massed instruction, are two beneficial techniques implemented by teachers in the teaching process, which is related to Teacher Education for Sustainability. The results of this research project provide evidence that spaced and massed instructions facilitate the learning process and promote the learning of reading skills, reading motivation and reading attitude, which are necessary to foster and maintain sustainable education.

The paper by **Amani K. Hamdan Alghamdi** representing Saudi Arabia and **Wai Si El-Hassan** representing the United Kingdom highlights that we often find students incapable of engaging with sustainability issues because of the educational material that fails to reflect the local problems students are facing. Take Saudi Arabia, a desert country geographically, as an example, deforestation, is not a relevant case study to raise Saudi students' awareness of sustainable development. By employing an inquiry-based approach, teachers can inspire students to conduct investigation of local environmental issues that challenge their own environment. Our fellow contributors to the JTES and we have formed a strong community to share our best practices in educating younger generations who need to build a better, sustainable future.

The goal of the paper by **Yodsaphon Wanchana, Pram Inprom and Wee Rawang** from Thailand was to find out how to enhance the environmental education competency of secondary school teachers. Data were collected from teacher advisors as mentors in eco-schools covering six regions in Thailand. The research findings revealed that most respondents presented a moderate level of environmental education in six aspects: knowledge of the environment, basic understanding of the environment, responsibility for the environmental education of professional teachers, planning and practice with regard to the environmental education, promoting learning about the environmental education and evaluation of the environmental education. The approach to the improvement of environmental education should be integrated with multidisciplinary learning, community-based learning, project-based learning, happy teaching and learning, as well as holistic learning management.

The final paper of this volume by **Agne Brandisauskiene, Jurate Cesnaviciene, Rita Miciuliene and Lina Kaminskiene** from Lithuania contributes to the philosophy of the Journal of Teacher Education for Sustainability in multiple perspectives: characteristics of sustainable professional development of teachers, value of sustainable professional development of teachers, its links to the quality of education, factors and prerequisites for sustainable professional development of teachers. The paper empirically identifies how specific factors of the process of sustainable professional development are manifested in four countries: Lithuania, Latvia, Estonia and Finland based on the data of TALIS 2018. The identified peculiarities within each country might be further investigated in terms of the differences in academic achievements of students, innovations, and systemic changes in education.

Ilga Salīte, Ilona Fjodorova and Oksana Ivanova