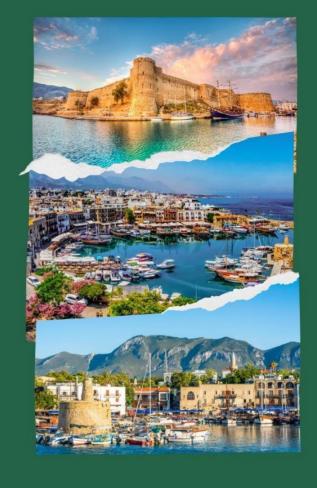
6TH WORLD CONFERENCE ON SCIENCE AND MATHEMATICS EDUCATION



ABSTRACTS BOOK

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KEYNOTES



Dr. Arthur Bakker

Utrecht University, Utrecht, Netherlands Editor-in-Chief: Educational Studies in Mathematics (Index in SSCI and Scopus) http://orcid.org/0000-0002-9604-3448

Keynote Title: "Future themes of mathematics education research: an international survey before and during the pandemic"

https://link.springer.com/article/10.1007/s10649-021-10049-w

Abstract: Before the pandemic (2019), we asked: On what themes should research in mathematics education focus in the coming decade? The 229 responses from 44 countries led to eight themes plus considerations about mathematics education research itself. The themes can be summarized as teaching approaches, goals, relations to practices outside mathematics education, teacher professional development, technology, affect, equity, and assessment. During the pandemic (November 2020), we asked respondents: Has the pandemic changed your view on the themes of mathematics education research for the coming decade? If so, how? Many of the 108 respondents saw the importance of their original themes reinforced (45), specified their initial responses (43), and/or added themes (35) (these categories were not mutually exclusive). Overall, they seemed to agree that the pandemic functions as a magnifying glass on issues that were already known, and several respondents pointed to the need to think ahead on how to organize education when it does not need to be online anymore. We end with a list of research challenges that are informed by the themes and respondents' reflections on mathematics education research.



Prof. Dr. Hüseyin Uzunboylu

Higher Education Planning, Supervision, Accreditation and Coordination Board, Nicosia, North CYPRUS

Editor-in-Chief, Cypriot Journal of Educational Sciences (ERIC& SCOPUS) President, Cyprus Educational Sciences Association (Members of EERA& WERA)

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Keynote Title: will be announced...

Bio: Hüseyin Uzunboylu graduated from Anadolu University, completing a degree in BSc Educational Communicating and Planning in 1991. He graduated from Ankara University; completed a degree in MA Curriculum

and Instruction in 1995 and completed PhD in area of Educational Technology in 2002. He became Assistant Professor in 2013, Associate Professor in 2015 and Professor of Educational Technology in 2010 at Cyprus Near East University. He was elected to member of "Higher Education Planning, Supervision, Accreditation and Coordination Board" by the Republican of Parliament in November in 2019.

Determination of science and biology teachers' ethical sensitivities towards the use of experimental animals

Büşra Ceyhan, İstanbul Health and Technology University

Abstract

Purpose: It is important to determine the ethical sensitivities of teachers who have high potential to work with experimental animals due to their branches. With this purpose the current study aimed to determine science and biology teachers' ethical opinions about the use of experimental animals. Method: In order to collect data, the Questionnaire of Opinions about the Use of Experimental Animals developed by Yiğit, et al. (2015) was employed. The collected data were analyzed by using descriptive statistics, percentages, frequencies, mean values and t-test (N=70). Findings: While the science and biology teachers approached to the sixth item "Animals can be used in experiments in which they experience some pain for the benefits of humanity" with higher ethical sensitivity, the female participants were found to be more sensitive towards the second item "Alternative methods should be the first methods to be employed by researchers". Implications for Research and Practice: In light of the findings of the current study, it can be suggested that science and biology teachers who are more likely to be involved in experiments in which animals are used (according to the science and biology course contents published by YÖK) should be subjected to trainings during their pre-service and in-service years to raise their ethical sensitivities about the issue; thus, they can help their students more to recognize the value of animals.

Keywords: Teachers' sensitivity, ethics, animals, laboratuary experiments

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