



## **WELSmain 2021 - Abstracts**

**29.09.2021, 16.45 – 17.45 CEST**

### **R13 Inclusion, Equity and Equality in Education II**

Prof. Dr. Terry Burwell, Queen's University Kingston, Canada

Title: COVID-19 and its impact on achievement levels and well-being of students of determination in the United Arab Emirates

This research study chronicles the learning experiences of special education students in the United Arab Emirates. In particular, this study focuses on the self-efficacy skills and aplomb of ten special education teachers who work at a K-12 international school in Sharjah, UAE where California Common Core State Standards are delivered to students representing 47 nationalities. Inculcating by example these ten educators chartered a course that was unprecedented in the UAE's educational history. The study used an exploratory case study, and for the research approach, a qualitative case study method was used to identify key issues impacting the achievement levels, and the physical and mental well-being, of students with special needs during the Covid-19 pandemic. A list of semi-structured interview questions was developed based on the related literature and was used to collect in-depth information from the respondents. The findings of this research revealed some challenges and constraints experienced by students, teachers, and parents in online learning. The challenges related to students were: limited communication and socialization among students, longer screen time. Parents saw challenges as having to balance running a home and assisting with teaching; as well, not being as technically literate as their children and their teacher. Teachers identified problems as not being able to cover as much curriculum as they would have liked, a lack of technological skills by the students and their parents, and the lack of close, personal contact between the students.



Dr. Michael Lopez, California State University Long Beach, USA

Title: Supports and Barriers for Bridging Race and Gender Equity Gaps in Computer Science at the Middle School Levels

Computer Science (CS) in middle school has legislative support and federal funding, yet there are equity gaps in access by gender and race across schools in the U.S. The problem is that access, participation, and academic support of underrepresented students in CS courses remain mostly unaddressed at the middle-school level. Specifically, research is needed about barriers that impede students as well as supports that empower middle schools to advocate for access, incentivize participation, and support academic success. Using the Educational Equity for Computer Science (EECS) framework, four dimensions were used to understand barriers and supports. The study investigated the views of three groups: (1) Administrators, (2) Counselors, and (3) Teachers. Two research questions guide this inquiry: What are the perceived inclusive pedagogical, normative, political, and technical mechanisms related to race and gender equity gaps in computer science (CS) courses? What are the experiences of administrators, counselors, and teachers in implementing CS courses to bridge the race and gender equity gaps? Data analysis included open concept coding and axial coding. Identified supports include inclusive pedagogy mechanisms that aimed to facilitate experiential learning. Identified barriers include normative mechanisms that prescribed students education based on their deficits. The dominant theme for administrators was social justice reform; for counselors, it was a focus on empathy, and for teachers, it was a search for curriculum direction. The most important policy recommendation is for middle schools to adopt a «Computer Science for All» agenda in lock-step with political, normative, and inclusive pedagogical policy and practice recommendations.



Prof. Dr. Thomas Schrei, Private university college Vienna / Krems, Austria

Title: Multi Level Classes – joint research project Austria – Israel

In this joint research project of the KPH Vienna/Krems and Levinsky College of Education Multi Level classes on primary level are in the main focus. The project addresses both social and cognitive factors at the student level. Factors that distinguish multi-level classes from regular school types are recorded, methodology and didactics of teaching from the perspective of students, parents and teachers. Structured interviews with students, parents and teachers served as a research method. At the end of the study, the results were subjected to a country comparison, which showed that the social aspect of the multi-level classes played a central role in both countries. While in Austria the teachers often lead the high administrative and organizational effort, the Israeli teachers see the requirements in methodology and didactics as a central question. However, teachers as well as pupils and parents show a high level of satisfaction with the multi-level classes in both countries. In a follow-up examination, former pupils of the primary multi-level classes in Austria are asked once more after one or two years in a regular secondary-level class. The aim is to work out those competencies that are acquired in the multi-level class and which are now also helpful in the secondary level.