

INVENTING EDUCATION

second international conference

<http://www.scuolademocratica-conference.net>
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The **2nd INTERNATIONAL CONFERENCE of the JOURNAL SCUOLA DEMOCRATICA "REINVENTING EDUCATION"** will be hosted online **June 3 through 5 2021**, by **Scuola Democratica, Centro Interuniversitario per la Ricerca Didattica** (University of Cagliari and University of Sassari), **il Mulino**. The challenges posed by the contemporary world have long required a rethinking of educational concepts, policies, and practices. The question about education 'for what' as well as 'how' and 'for whom' has become unavoidable and yet it largely remained elusive due to a tenacious attachment to the ideas and routines of the past which are now far off the radical transformations required of educational systems. Scenarios, reflections, and practices fostering the possibility of change towards the reinvention of the educational field as a driver of more general and global changes are centerstage topics at the Conference and will have a multidisciplinary approach from experts from different disciplinary communities, including sociology, pedagogy, psychology, economics, architecture, political science, etc. We hope with this opportunity to confirm the participation obtained at the first edition of the conference. Organizers, promoters and partners of the Conference wish to invite educators, teachers, researchers, scholars, academics, scientists, professionals, experts and policy makers to join the conversation and bring the disciplines towards a more integrated set of alliances by:

- promoting a trans and inter disciplinary discussion on urgent topics;
- fostering debates among experts and professionals;
- diffusing research findings all over international scientific networks and practitioners' mainstreams;
- launching further strategies and networking alliances on local, national and international scale;
- providing a new space for debate and evidence to educational policies.

We invite you to submit ABSTRACT/PAPER for your presentation at the **Panel session**:

I.11 WHY DO WOMEN STILL UNDERACHIEVE IN MATH? CAUSES AND SOLUTIONS OF THE GENDER GAP IN STEM

Convenors

Tania Cerni (Università di Trento); Raffaella I. Rumiati (SISSA Scuola Internazionale Superiore di Studi Avanzati)

Keywords

math; numeracy; gender gap; STEM; gender stereotype

The gender gap in mathematics is a well-recognized fact. It persists around the world and at different grades. The latest international evaluation of mathematic and scientific learning in 4th and 8th grades (TIMSS 2019, Mullis et al., 2020) demonstrates that females obtain lower scores in math tests in around half of the participating countries. This trend persists when assessing math performance in higher grades, as apparent from the PISA investigation involving 15-year-old students (OECD, 2020), and this holds true also in Italy, with a gap persisting up to the final year of high school, as apparent from the 2019 INVALSI survey.

The gap is rooted in primary and secondary education and spills over into higher education, where women are still dramatically underrepresented in science, technology, engineering and mathematics (STEM). Many hypotheses have been advanced to account for this gap, emphasizing either biological or social causes (see Wang, 2020 for a recent review). Importantly, individual differences in non-cognitive factors that penalize women, such as math anxiety, math-related self-concept and self-efficacy, are found to be of great significance in maintaining the gap.

Furthermore, persistent gender stereotypes according to which females lack of math abilities interfere with the construction of an equal self-perception and with in-class relationships between peers as well as between teachers and students. As the gender gap cannot be overcome by itself, more effort is needed in order to transfer empirical findings into effective education interventions.

In this panel we aim to discuss cognitive and non-cognitive factors that have been suggested to contribute to the gender gap in mathematical abilities at different educational levels. We welcome contributions on new theoretical hypotheses as well as on empirical findings that may account for the persistent underachievement in the numerical field of females, and that may determine the probability of being engaged in a scientific career in areas where men are overrepresented. Moreover, we wish to make room for the presentation of successful intervention strategies that have been found to be effective in increasing female math performance and of programs promoting participation of females in hard science fields. A better understanding of the factors underlying this multifaceted phenomenon will allow designing evidenced-based interventions and policies in education to reduce the gender gap.

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ABSTRACTS/PAPERS SUBMISSION

HOW TO SUBMIT

ABSTRACTS/PAPERS should be submitted by **April 4, 2021 (check Conference Dates and Deadlines)**. ABSTRACTS/PAPERS should be submitted via the [pre-conference tool](#).

Please do not submit your ABSTRACT/PAPER by e-mailing it to the Convenor(s) of the Panel session you chose. Convenor(s) will receive submitted ABSTRACTS/PAPERS automatically from the [pre-conference tool](#) and they are going to reject ABSTRACT/PAPER submitted to their e-mail addresses.

Language for ABSTRACTS/PAPERS is English.

You can submit an ABSTRACT or in case you prefer a PAPER. **Be careful: DO NOT SUBMIT BOTH ABSTRACT AND PAPER. EITHER YOU SUBMIT THE FORMER OR THE LATTER.**

ABSTRACT/PAPER should include:

1. Title (limited to 20 words in UPPER CASE)
2. Author's name and surname, institution, and email address
3. Five keywords
4. ABSTRACT's text (limited to 500 words). In case you decide for the PAPER, text will be 3.500 words min. 5.000 words max. In the submission text, please write: ABSTRACT or PAPER after the title. Example: FAMILY BACKGROUNDS AND STUDENT ENGAGEMENT IN SECONDARY SCHOOLS. A CASE STUDY (PAPER)

The Conference formula is: **1 SUBMISSION = 1 FEE (check FEES webpage)**

It is possible to submit a maximum of 2 ABSTRACTS/PAPERS per person (double submission must concern 2 different Panel Sessions). Each ABSTRACT/PAPER is eligible if it is backed by an **APP FEE**.

Co-authors who do not submit ABSTRACT/PAPER as first author may access to the Conference via the discounted P FEE (check FEES webpage).

The submitting and presenting author must be listed as the first author in the [pre-conference tool](#). Please note that the submitting author will receive all correspondence about the ABSTRACT/PAPER. Therefore, we recommend that the submitting author details that are entered are the same details as those of the presenting author.

ABSTRACTS/PAPERS may not be edited/uploaded after final submission.

Before you submit, please make sure the following requirements are met:

- ABSTRACT/PAPER must be allocated to a specific Panel session. Therefore, you must select the proper Panel when submitting. For a complete listing of Panel sessions please [click here](#).
- If possible, write your ABSTRACT/PAPER highlighting methods, outcomes, references. Word count is affected by inclusion of references.
- Convenors and the Scientific Committee will review all submitted ABSTRACTS/PAPERS. Notification regarding acceptance and scheduling will be sent to the submitting author via the [pre-conference tool](#).

Please note, if your ABSTRACT/PAPER is accepted, you will be permitted a maximum of 20 minutes for oral presentation.

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