

Programme of the “International Dialogue on STEM Education” 2019

How do we empower children through STEM education to contribute to creating sustainable societies?

Venue: Robert Bosch Stiftung, Berlin Representative Office, Französische Strasse 32, Berlin
Moderator: Dr Melinda Crane (Deutsche Welle TV, USA/Germany)

THURSDAY, 5 DECEMBER 2019

- 09:00 a.m. **Arrival and welcome coffee**
- 09:20 a.m. **Warm-up, welcome and introduction of the Programme Committee**
Dr Nathalie von Siemens, Managing Director, Siemens Stiftung
Michael Fritz, Executive Director, “Haus der kleinen Forscher” Foundation
- 10:00 a.m. **Opening panel**
Vito Cecere, Director for Research and Academic Relations Policy and Cultural Relations Policy, Federal Foreign Office
Walter Hirche, Chair of the Education Committee, German Commission for UNESCO
Mayte Morales Arce, Chair of the Programme Committee
Nyokabi Njuguna, Executive Director, Impacting Youth Trust
Professor Andreas Schleicher, Director for the Directorate of Education and Skills, OECD
Dr Dagmar Wolf, Senior Vice President, Robert Bosch Stiftung
- 10:30 a.m. **Keynote – Launching children on pathways to sustainable futures with curiosity and STEM learning**
Professor Dr Ilan Chabay, Head of Strategic Science Initiatives and Programmes and Scientific Project Leader of the GSSF and KLASICA projects at the Institute for Advanced Sustainability Studies (IASS) in Potsdam, Germany
- 11:30 a.m. **Coffee break**
- 12:00 noon **Impromptu networking**
- 12:30 p.m. **Presentation and discussion of the core messages of the position paper “STEM Education for Sustainable Development”**
Representatives of the Programme Committee

SPONSORED BY THE



PARTNERS

Helmholtz Association
Siemens Stiftung
Dietmar Hopp Stiftung
Deutsche Telekom Stiftung

CONFERENCE PARTNERS 2019



1:00 p.m. **Lunchtime snack**

2:00 p.m. **Division into workshops**

2:15 p.m. **Parallel workshops (1st round)**

#W1: From local to global – How can we share children’s and teachers’ innovations internationally?

Anette Markula, International Project Manager, StarT, LUMA Centre Finland

#W2: Forging ties – How do we create relationships with governments and financial and scientific partners?

Mary Wakhaya Sichangi, Senior Trainer, Mathematics Education, and Head of Partnerships, Linkages and International Training, CEMASTEAM, Kenya

#W3: Context is king – How can we implement STEM approaches in specific contexts of Education for Sustainable Development?

Ruetai Chongsrid, Senior Director of the Academic Affairs and Youth Science Programme Development Division, National Science and Technology Development Agency (NSTDA), Ministry of Science and Technology, Thailand

#W4: Not just numbers – How can we make the most of monitoring and measurement to drive change and improvement in STEM education for sustainable development?

Claudette Bateup, Director of Education at the Australian Academy of Science, Australia

#W5: Frameworks and models – How do we align STEM Education for Sustainable Development with the SDGs?

*Carol O’Donnell, Director of the Smithsonian Science Education Center, USA
Dr Janna Pahnke, Head of Research & Quality Management at the “Haus der kleinen Forscher” Foundation, Germany
Ute Krümmel, Project Manager, Education for Sustainable Development, “Haus der kleinen Forscher” Foundation, Germany*

#W6: From roots to wings – How can we build place-based and culturally relevant educational programmes?

Martín Bascopé, Assistant Professor of Elementary and Early Childhood Education at the Villarrica Regional Campus of the Pontificia Universidad Católica de Chile (UC)

3:45 p.m. **Coffee break**

SPONSORED BY THE



PARTNERS

Helmholtz Association
Siemens Stiftung
Dietmar Hopp Stiftung
Deutsche Telekom Stiftung

CONFERENCE PARTNERS 2019



4:15 p.m.

Parallel workshops (2nd round)

#W1: From local to global – How can we share children’s and teachers’ innovations internationally?

Anette Markula, International Project Manager, StarT, LUMA Centre Finland

#W2: Forging ties – How do we create relationships with governments and financial and scientific partners?

Mary Wakhaya Sichangi, Senior Trainer, Mathematics Education, and Head of Partnerships, Linkages and International Training, CEMASTEAM, Kenya

#W3: Context is king – How can we implement STEM approaches in specific contexts of Education for Sustainable Development?

Ruetai Chongsrid, Senior Director of the Academic Affairs and Youth Science Programme Development Division, National Science and Technology Development Agency (NSTDA), Ministry of Science and Technology, Thailand

#W4: Not just numbers – How can we make the most of monitoring and measurement to drive change and improvement in STEM education?

Claudette Bateup, Director of Education at the Australian Academy of Science, Australia

#W5: Frameworks and models – How do we align STEM Education for Sustainable Development with the SDGs?

*Carol O’Donnell, Director of the Smithsonian Science Education Center, USA
Dr Janna Pahnke, Head of Research & Quality Management at the “Haus der kleinen Forscher” Foundation, Germany*

Ute Krümmel, Project Manager, Education for Sustainable Development, “Haus der kleinen Forscher” Foundation, Germany

#W6: From roots to wings – How can we build place-based and culturally relevant educational programmes?

Martín Bascopé, Assistant Professor of Elementary and Early Childhood Education at the Villarrica Regional Campus of the Pontificia Universidad Católica de Chile (UC)

5:45 p.m.

Jigsaw session – Exchange and full understanding of today’s findings

Representatives of the Programme Committee

SPONSORED BY THE



PARTNERS

Helmholtz Association
Siemens Stiftung
Dietmar Hopp Stiftung
Deutsche Telekom Stiftung

CONFERENCE PARTNERS 2019



**International
Dialogue** DEVELOPING
on STEM A VISION
EDUCATION FOR EARLY
2019



SIEMENS | Stiftung

7:00 p.m.

Dinner, music and networking

SPONSORED BY THE



Federal Ministry
of Education
and Research

PARTNERS

Helmholtz Association
Siemens Stiftung
Dietmar Hopp Stiftung
Deutsche Telekom Stiftung

CONFERENCE PARTNERS 2019



Federal Foreign Office



under the patronage of the
German Commission for UNESCO

FRIDAY, 6 DECEMBER 2019

- 9:00 a.m. **Energizer – “Truth or lie”**
- 9:15 a.m. **Official presentation and endorsement of the position paper**
- 9 :45 a.m. **Group photo**
- 10:00 a.m. **Division into Workshops and BarCamp sessions**
You can either attend **one 90-minute session** or **two 45-minute sessions**.
- 10:45 a.m. **BarCamp and Workshops – including Coffee and Snacks**
- Parallel BarCamp sessions (45 min.)**
#B1-#B8
- Parallel BarCamp sessions (45 min.)**
#B9-#B16
- #W7 Set Workshop session (90 min.)**
Outside the box – How can we apply design thinking methods in STEM education for sustainable development?
Charlotte Høeg Andersen, Education Director, The Index Project, Denmark
Christine Niewöhner, Senior Project Manager, Siemens Stiftung, Germany
- #W8 Set Workshop session (90 min.)**
Promoting Sustainable Development – How can we tap into the full potential of student assessments and education monitoring?
Matthias Rumpf, Head of the OECD office in Berlin, Germany
- #W9 Set Workshop session (90 min.)**
How can we build consensus around a core set of indicators to evaluate effectiveness and goals according to the SDG 4?
Dr Silvia Montoya, Director, UNESCO Institute for Statistics (UIS)

* Do you want to continue to learn from your colleagues by attending an additional 90-minute workshop? Or, would you like to be actively involved in shaping an Optional BarCamp session? At the BarCamp, you are not only listeners but are also actively involved in shaping the sessions. Do you want to discuss the input of the first day further? Do you have other burning issues? You can turn them into a programme! The sessions will be created according to the participants' interests. Together with you, we will decide what will be put on the agenda for today's BarCamp sessions.

SPONSORED BY THE



Federal Ministry
of Education
and Research

PARTNERS

Helmholtz Association
Siemens Stiftung
Dietmar Hopp Stiftung
Deutsche Telekom Stiftung

CONFERENCE PARTNERS 2019



Federal Foreign Office



under the patronage of the
German Commission for UNESCO

- 12:30 p.m. **Lunchtime snack**
- 1:30 p.m. **The three horizons of change – What do we need to do after the conference to translate our visions into action?**
Representatives of the Programme Committee
- 3:00 p.m. **Coffee break**
- 3:30 p.m. **Keynote – Educating towards sustainability: Connecting to Self, Others and Nature**

Dr Ha Vinh Tho, Former Programme Director of the Gross National Happiness Centre Bhutan (GNHCB) and Co-Founder of Eurasia Foundation, Vietnam
- 4:30 p.m. **Conclusion and outlook**

Dr Nathalie von Siemens, Managing Director, Siemens Stiftung
Michael Fritz, Executive Director, “Haus der kleinen Forscher” Foundation
Representatives of the Programme Committee
- 5:00 p.m. **End**
- 6:00 p.m. **Optional:** Wind down the evening with food and a glass of mulled wine

SPONSORED BY THE



Federal Ministry
of Education
and Research

PARTNERS

Helmholtz Association
Siemens Stiftung
Dietmar Hopp Stiftung
Deutsche Telekom Stiftung

CONFERENCE PARTNERS 2019



Federal Foreign Office



under the patronage of the
German Commission for UNESCO