Education for the Unknown: How the Educational Reforms Help to Avoid a Paradox that Future is Behind Us?

Challenges and Opportunities

We live in an amazingly interrelated world full of new normalities that bring a profound level of complexity and uncertainty into all aspect of our life. The global character of information, work and the environment has had a tremendous impact on society and on the type of education needed to meet pressing challenges and avail of emerging opportunities.

Technology and education are complementary drivers of social development. Each plays an essential role in supporting advances of the other. Technological advances have been a principle catalyst for development of professional and scientific education, while advances in education have been essential to prepare youth to understand and utilize full capabilities generated by technological advances. Both have had a profound impact on the general progress of our work, society and culture. Globalization has magnified that impact and accelerated the pace of change.

Our present system of education was born at a time when information and knowledge were scarce and the means to acquire and disseminate them were slow and laborious. It was a time centuries before the inventions of printing, newspapers, textbooks, radio, motion pictures, television and the Internet, when oral instruction by a teacher was the only feasible method for knowledge sharing and the accumulated knowledge of humanity was extremely limited. However, this is no longer the case. Today, we live in a world of information glut. The average citizen has more information available at his fingerprints than the most knowledgeable and informed expert had access to just a few decades ago. Current knowledge is changing so rapidly that much of what was taught a few years ago is no longer up-to-date or even relevant. In order to handle the surplus of knowledge, the number of subjects taught has multiplied from a handful to nearly a thousand disciplines and sub-disciplines. At the same time, the rapid technological advances of the fourth industrial revolution are placing new demands on the way we think, organize and work. Yet our basic method and system of education remains the same. In spite of rapid advances in technology, the impact of emerging technologies in the field of education has been relatively small.

As a consequence, there is an ever widening gap between the education the world needs and the education our present pedagogies and learning technologies are able to offer to students. The gap is also widening between society and individuals that are able to adapt quickly to the demands for educational leadership, innovation and creativity, and those that lag behind. Education has become a critical competitive factor for both the individual and the society. Addressing these issues offers unprecedented opportunities for those who evolve more effective ways to equip the next generation for life in an increasingly complex and globalized society. These challenges are central to the work of the World Academy of Art and Science and the World University Consortium.

Focus of the Fourth International Conference on Future Education

In the former international conferences on future education, the World Academy of Art and Science and the World University Consortium have examined in depth the nature of educational challenges confronting humanity today, the educational requirements imposed by emerging technologies and globalization, the need to break down the disciplinary silos of over-specialization that limit the practical relevance of education, and the need for changes in pedagogy and learning technologies to expand access, improve quality and reduce the cost of education. Most importantly, they have explored the need for a fundamental shift in purpose and strategy of education from the subject to the student, from transmission of information to development of capacities for independent thinking and problem solving, from development of mental capacities to development of full personality of the student, and from employees to creative thinkers, innovative entrepreneurs and true global citizens.
A new paradigm is urgently needed to shift emphasis to contextual, relational, human-centered and collaborative education that encourages critical thinking, creativity and technological entrepreneurship. Implementation of the new paradigm through strategy and policies will get effective answers through industrial policies supporting fully developed human potentials, primarily innovative breakthroughs that are multidisciplinary, applicable and value-based.

The Fourth International Conference on Future Education will examine effective strategies and policies required to accelerate this paradigm change in education. It will draw lessons, insights and practical approaches from successful innovations in education taking place around the world. It will examine ways to overcome disciplinary barriers in order to provide the integrated knowledge needed for achievement in our increasingly complex world. The Conference will explore methods to shift the focus from subjects to students and from academic to contextual knowledge. It will investigate emerging technologies and pedagogies that can shift the emphasis from teaching to active learning, from competitive to cooperative interaction, and from teacher-student to peer-peer learning environments. It will explore ways to promote development of the capacities for creative thinking, personality and individuality, which will prepare the next generation for high accomplishment in the years to come.
NOVEMBER 11, 2019, Day 0

14:00–16:45 Early Registration, Belgrade Art Hotel

17:00–18:00 Tour of the Permanent Exhibition, Ethnographic Museum in Belgrade

18:00–20:00 Welcome Chat, Ethnographic Museum in Belgrade

Platform for new education in the era of digital transformation
Vladimir Kostić, Garry Jacobs and Dragan Đuričin, Co-Chairs, Program Committee of the Conference
Mamphela Ramphele, Co-President, The Club of Rome
Fadwa El Guindi, Distinguished Alumna, The American University in Cairo, Egypt; Trustee, World Academy of Art and Science
Lisa Petrides, Chief Executive Officer, Institute for the Study of Knowledge Management in Education, Half Moon Bay, California, USA

NOVEMBER 12, 2019, Day 1

8:30–9:00 Registration

Challenges and Opportunities Impacted by New Normalities

INTRODUCTORY SESSION, Serbian Academy of Sciences and Arts, Grand Hall

9:00–9:40 Words of Welcome
Aleksandar Vlahović, President, Serbian Association of Economists
Heitor Gurgulino de Souza, President, World Academy of Art and Science

Opening
Mladen Šarčević, Minister of Education, Science and Technological Development of Serbia
Ana Brnabić, President, Government of Serbia

9:40–10:10 Inaugural Speeches
Chair:
Nebojša Nešković, Secretary General, World Academy of Art and Science; President, Serbian Chapter of the Club of Rome
Speakers:
Vladimir Kostić, President, Serbian Academy of Sciences and Arts
Garry Jacobs, Chief Executive Officer, World Academy of Art and Science; Board of Directors, World University Consortium

PLENARY SESSION 1, Serbian Academy of Sciences and Arts, Grand Hall

Strategic Audits of New Education Challenges and Opportunities

10:10–11:10 Speaker and Chair:
Mamphela Ramphele, Co-President, The Club of Rome
Education in an age of increased speed, interconnectedness and complexity
Speakers:
Ivanka Popović, Rector, University of Belgrade, Serbia
Higher education in a society in transition
Kakha Shengelia, President, Caucasus University, Tbilisi, Georgia; President, International Association of University Presidents

Challenges to higher education in the 21st century

Dragan Đuričin, Faculty of Economics, University of Belgrade, Serbia

Economic policy platform for future education: Impact of a paradigm change in economics

11:10–11:40 Coffee break

PARALLEL PANEL DISCUSSIONS 1, Serbian Academy of Sciences and Arts

11:40–12:55 Panel Discussion 1.1, Grand Hall

Rapid evolution of the educational system: Impacts of science, technology and politics

Speaker and Moderator:

Patrick Degeorges, Directeur de l’Anthropocene Curriculum, École Normale Supérieure de Lyon, France; Institut Michel-Serres, Lyon, France

Speakers:

Carlos Blanco-Pérez, Department of Philosophy, Humanities and Communication, Comillas Pontifical University, Madrid, Spain; The Altius Society, Oxford, UK (video record)

Momir Đurović, Montenegrin Academy of Sciences and Arts, Podgorica

Danijela Kirovski, Faculty of Veterinary Medicine, University of Belgrade, Serbia

Benno Werlen, UNESCO Chair on Global Understanding for Sustainability, Friedrich Schiller University in Jena, Germany

Panel Discussion 1.2, Hall 2

Educating culturally different, environmentally responsible and globally aware citizens

Speaker and Moderator:

Thomas Reuter, Asia Institute, University of Melbourne, Australia; Trustee, World Academy of Art and Science

Speakers:

Saulo Casali Bahia, Federal University of Bahia, Salvador, Brazil; Trustee, World Academy of Art and Science

Ljiljana Marković, Dean, Faculty of Philology, University of Belgrade, Serbia

Marco Vitiello, Department of Political Sciences, Roma Tre University, Italy; Italian Prosales, Rome

Vesna Vučinić, Faculty of Philosophy, University of Belgrade, Serbia

Panel Discussion 1.3, Hall 3

Getting out of the box in education: Fostering creative thinking and innovation

Speaker and Moderator:

Dragan Simeunović, Faculty of Political Sciences, University of Belgrade, Serbia

Speakers:

Carlos Alvarez-Pereira, President, Innaxis Foundation and Research Institute, Madrid, Spain

Nora Bateson, President, International Bateson Institute, Stockholm, Sweden (video record)

Tatjana Marković, Academy of Professional Business Studies, Belgrade, Serbia

Goran Pitić, Faculty of Economics, Finance and Administration, Metropolitan University, Belgrade, Serbia
PLENARY SESSION 2, Serbian Academy of Sciences and Arts, Grand Hall

Digital Opportunities at All Educational Levels

12:55–14:10
Speaker and Chair:
Carlos Alvarez-Pereira, President, Innaxis Foundation and Research Institute, Madrid, Spain

*Digital transformation: Opportunities and impact on education*

Speakers:
Mariana Bozesan, President, AQAL Foundation, Munich, Germany; The Club of Rome

*Education in the singularity era – an investor’s approach*

Rodolfo Fiorini, Department of Electronics, Information and Bioengineering, Polytechnic University of Milan, Italy

*Impact of digital transformation on creative leadership skills*

Alberto Foletti, Institute of Translational Pharmacology, Rome, Italy; Clinical Biophysics International Research Group, Lugano, Switzerland

*Impact of digital transformation on medical education and personal well-being*

Veljko Milutinović, Department of Computer Science, Indiana University, Bloomington, USA

*Digital disruption as opportunity for business development*


14:10–15:10 Lunch break

PARALLEL PANEL DISCUSSIONS 2, Serbian Academy of Sciences and Arts

15:10–16:10
Panel Discussion 2.1, Grand Hall

*Roles of academic mobility and digital tools in research and education*

Speaker and Moderator:
Dejan Popović, Serbian Academy of Sciences and Arts

Speakers:
Vladimir Bumbaširević, Serbian Academy of Sciences and Arts

Denis Gillet, Faculté des Sciences et Techniques de l’Ingénieur, École Polytechnique Fédérale de Lausanne, Switzerland

Danielle Sandi Pinheiro, Department of Administration, University of Brasilia, Brazil

Panel Discussion 2.2, Hall 2

*Hybrid and flipped educational models: Combining physical and virtual technologies*

Speaker and Moderator:
Branislav Vujović, President, New Frontier Group, Vienna, Austria; IEDC – Bled School of Management, Slovenia

Speakers:
Vladan Devedžić, Faculty of Organizational Sciences, University of Belgrade, Serbia

Robert Hoffman, Principal, whatIf? Technologies, Ottawa, Ontario, Canada; The Club of Rome

Tibor Tóth, Executive Secretary Emeritus, Comprehensive Nuclear-Test-Ban Treaty Organization, Vienna, Austria

Panel Discussion 2.3, Hall 3

*Social and humanistic sciences in the era of the fourth industrial revolution*

Speaker and Moderator:
Goran Bašić, Director, Institute of Social Sciences, Belgrade, Serbia

Speakers:
Dejan Molnar, Faculty of Economics, University of Belgrade, Serbia
Paul Spierings, Directorate-General for Public Works and Water Management, Ministry of Infrastructure and Water Management of the Netherlands, Utrecht
Branko Urošević, Faculty of Economics, University of Belgrade, Serbia; CES Ifo, Munich, Germany

PLENARY SESSION 3, Serbian Academy of Sciences and Arts, Grand Hall

New Education: From Leadership in Thought to Effective Action

16:10–16:55
Speaker and Chair:
Anna Canato, Head, Education and Public Research Division, Innovation and Competitiveness Department, European Investment Bank, Luxembourg
Learning environments for effective education
Speakers:
Nebojša Laljić, Faculty of Medicine, University of Belgrade, Serbia; Serbian Academy of Sciences and Arts
Improvements of pedagogy in life sciences and medicine
Tibor Varadi, Serbian Academy of Sciences and Arts
Globalism, globalisation and academia

16:55–17:25
Coffee break

PARALLEL PANEL DISCUSSIONS 3, Serbian Academy of Sciences and Arts

17:25–18:40
Panel Discussion 3.1, Grand Hall
Impacts of research and innovation on education
Speaker and Moderator:
Zbigniew Bochniarz, Kozminski University, Warsaw, Poland; Evans School of Public Policy and Governance, University of Washington, Seattle, USA
Speakers:
Francesco Arcidiacono, University of Teacher Education BEJUNE, Biel/Bienne, Switzerland
Branislav Jelenković, Institute of Physics in Belgrade, Serbia; Serbian Academy of Sciences and Arts
Buyi Makhanya, Deputy Director, Teaching and Learning Development Centre, Mangosuthu University of Technology, Durban, South Africa
Vladimir Popović, State Secretary, Ministry of Education, Science and Technological Development of Serbia

Panel Discussion 3.2, Hall 2
Contextual knowledge: Building bridges between disciplines for relevant and effective learning
Speaker and Moderator:
Olivia Bina, Institute of Social Sciences, University of Lisbon, Portugal
Speakers:
Slobodan Grubačić, Serbian Academy of Sciences and Arts
Blagoje Paunović, Faculty of Economics, University of Belgrade, Serbia; Presidency, Serbian Association of Economists
Janani Ramanathan, The Mother's Service Society, Pondicherry, India; World Academy of Art and Science
Liora Weinbach, Interdisciplinary Center for Health, Law and Ethics, Haifa University, Israel

Panel Discussion 3.3, Hall 3
Effects of dual education at different levels
Speaker and Moderator:
Yi Heng Cheng, College of Design and Innovation, Tongji University, Shanghai, China
Speakers:
Sue Henderson, President, New Jersey City University, Jersey City, New York, USA
Mirjana Kovačević, Head, Center for Dual Education, Chamber of Commerce and Industry of Serbia
Mladen Stamenković, Vice-Dean, Faculty of Economics, University of Belgrade, Serbia
Matthias Straub-Fischer, Headmaster, KaosPilots, Bern, Switzerland (video record)

20:30–22:30 Concert and Reception, National Museum in Belgrade

NOVEMBER 13, 2019, Day 2

Core Solutions

PLENARY SESSION 4, Serbian Academy of Sciences and Arts, Grand Hall

Education for Full Employment

9:00–10:00
Speaker and Chair:
Garry Jacobs, Chief Executive Officer, World Academy of Art and Science; Board of Directors, World University Consortium

Full employment: Possibility or utopia?

Speakers:
Enrico Giovannini, Department of Economics and Finance, University of Rome Tor Vergata, Italy; Director, Italian Alliance for Sustainable Development, Rome

Education for a sustainable world

Marcel Van de Voorde, Delft University of Technology, The Netherlands

Closing the gap between education and future career

Erich Hoedl, Trustee, World Academy of Art and Science

Education and entrepreneurship for sustainability

PARALLEL PANEL DISCUSSIONS 4, Serbian Academy of Sciences and Arts

10:00–11:00
Panel Discussion 4.1, Grand Hall

Interdisciplinarity in digital scholarship

Speaker and Moderator:
Smiljana Antonijević, Institute of Design, Illinois Institute of Technology, Chicago, USA; BMC Software, Santa Clara, California, USA

Speakers:
Tijana Čolak-Antić Popović, Ana Novaković and Bojan Đokić, Ethnographic Museum in Belgrade, Serbia

Andreas Riepl, Head, Federal Center of eEducation Austria, Vienna

Milena Stanković, Faculty of Electronic Engineering, University of Niš, Serbia

Panel Discussion 4.2, Hall 2

Closing the skill gap through education: Roles of academia and unconventional forms of learning
Speaker and Moderator:  
**Dara Melnyk**, Skolkovo Education Development Centre, Moscow, Russia

Speakers:  
**Jasna Atanasijević**, Faculty of Science, University of Novi Sad, Serbia; Presidency, Serbian Association of Economists  
**Vladica Cvetković**, Faculty of Mining and Geology, University of Belgrade, Serbia; Serbian Academy of Sciences and Arts  
**Surendran Santhakumari Sreejith**, Chief Executive Officer, Global Institute of Integral Management Studies, Pulepady, Kochi, Kerala, India

**Panel Discussion 4.3, Hall 3**  
*Education for sustainability and inclusiveness for people and nature*

Speaker and Moderator:  
**Petar Bulat**, Vice-Rector, University of Belgrade, Serbia

Speakers:  
**Mariana Bozesan**, President, AQAL Foundation, Munich, Germany; The Club of Rome  
**Aleksandra Drecun**, President, Intersection – Centre for Science and Innovation, Belgrade, Serbia; Director for Europe, Harvard Alumni Association  
**Radmilo Pešić**, Faculty of Agriculture, University of Belgrade, Serbia; World Academy of Art and Science

**11:00–11:30**  
Coffee break

**PLENARY SESSION 5, Serbian Academy of Sciences and Arts, Grand Hall**

**Person-Centered Education**

11:30–12:30  
Speaker and Chair:  
**Alberto Zucconi**, Secretary General, World University Consortium; Trustee, World Academy of Art and Science  
*New pedagogy: Education focused on people*

Speakers:  
**Anne Snick**, Systems Approach of Public Innovation and Responsible Research, Brussels, Belgium; Board, EU Chapter of the Club of Rome  
*Shifts from passive to active and from competitive to collaborative learning*

**Anantha Duraiappah**, Director, Mahatma Gandhi Institute of Education for Peace and Sustainable Development, New Delhi, India  
*The alternative education: Predators to nurturers*

**Stefan Brunnhuber**, Medical Director, University of Applied Sciences, Mittweida, Germany; Trustee, World Academy of Art and Science  
*The future creativity response: Empirical evidence and update*

**PARALLEL PANEL DISCUSSIONS 5, Serbian Academy of Sciences and Arts**

12:30–13:45  
**Panel Discussion 5.1, Grand Hall**  
*Shift from subject-centered to student-centered education*

Speaker and Moderator:  
**Lisa Petrides**, Founder and Chief Executive Officer, Institute for the Study of Knowledge Management in Education, Half Moon Bay, California, USA

Speakers:  
**Jovan Despotović**, UNESCO International Research and Training Centre on Urban Drainage, Faculty of Civil Engineering, University of Belgrade, Serbia  
**Pericles Mitkas**, Department of Electrical and Computer Engineering, Aristotle University of Thessaloniki, Greece; President, Black Sea University Network
Davide Scalmani, Former Director, Italian Institute for Culture in Belgrade, Serbia
Vani Senthil, The Mother's Service Society, Pondicherry, India; Primrose School, Pondicherry, India

Panel Discussion 5.2, Hall 2
*Learning by collaborating*
Speaker and Moderator:
Aleksandar Baucal, Faculty of Philosophy, University of Belgrade, Serbia
Speakers:
Jorge Gimeno Pawlowski, Center for Innovative Education, Warsaw, Poland
Emily Caughman, InterEnvironment Institute, Claremont, California, USA
Regina de Dominicis, Head, United Nations Children’s Fund (UNICEF) in Serbia, Belgrade
Dmitry Kamanin, Joint Institute for Nuclear Research, Dubna, Russia

Panel Discussion 5.3, Hall 3
*Value-based education*
Speaker and Moderator:
Ullica Segerstrale, Department of Social Sciences, Illinois Institute of Technology, Chicago, USA; World Academy of Art and Science
Speakers:
Milena Dragičević Šešić, UNESCO Chair in Cultural Policy and Management, University of Arts in Belgrade, Serbia
Mila Popovich, World Academy of Art and Science; Board, Global Education Futures Foundation, Amersfoort, The Netherlands
Charis Psaltis, Department of Psychology, University of Cyprus, Nicosia
Oksana Sliusarenko, National Academy of Sciences of Ukraine, Kiev

13:45–14:45 Lunch break

PLENARY SESSION 6, Serbian Academy of Sciences and Arts, Grand Hall

*Chosen Themes of Interest for Future Education*

14:45–16:45 Speaker and Chair:
Nebojša Nešković, Secretary General, World Academy of Art and Science; President, Serbian Chapter of the Club of Rome
*Rainbows as complex phenomena*
Speakers:
Alexander Karpov, Flerov Laboratory of Nuclear Reactions, Joint Institute for Nuclear Research, Dubna, Russia
*Island of stability in the periodic table of chemical elements*
Fadwa El Guindi, Distinguished Alumna, The American University in Cairo, Egypt; Trustee, World Academy of Art and Science
*Multiculturalism or interculturalism?*
Chenyang Li, School of Humanities, Nanyang Technological University, Singapore
*Confucian philosophy and civic education*

16:45–17:15 Coffee break

CONCLUDING SESSION, Serbian Academy of Sciences and Arts, Grand Hall

17:15–18:15 Reports on Panel Discussions 1–5
Closing Remarks

Garry Jacobs, Chief Executive Officer, World Academy of Art and Science; Board of Directors, World University Consortium

Ivanka Popović, Rector, University of Belgrade, Serbia

Vladimir Kostić, President, Serbian Academy of Sciences and Arts