



Thursday 21 March

Friday 22 March

Room A	Room B	Room C
9:35 – 11:15	9:35 – 11:15	9:35 – 11:15
Science and	Educational	Curriculum
Engineering	Strategies	Development

Room A	Room B	Room C
9:10 – 11:15	9:10 – 11:15	9:10 – 11:15
Health Education	STEM Education	Scientific Research and Social Development

Coffee Break 11:15 - 11:25

Coffee Break 11:15 - 11:25

Poster Session: 11:25 - 11:45

Poster Session: 11:25 - 11:45

Room A	Room B	Room C
11:45 – 13:00	11:45 – 13:00	11:45 – 13:00
Educational Strategies	Workshop Science Education and European Projects: The ZOE Case Study	Pre-Service Teachers' Professional Development

Room A	Room B	Room C
11:45 – 13:00	11:45 – 13:00	11:45 – 13:00
New Technologies in Science Education	Workshop QUAL4T2: Effective Team Work as the Trigger to Quality Improvement in Education	Students' Assessment

Lunch 13:00 - 14:30

Lunch 13:00 - 14:30

Room A	Room B	Room C
14:30 – 16:10	14:30 – 16:10	14:30 – 16:10
Chemistry Education	Science Teachers' Training	Pre-Service Teachers' Professional Development

Room A	Room B	Room C
14:30 – 16:10	14:30 – 16:10	14:30 – 15:45
Chemistry Education and Environment	Studies in Science Education	Science Teachers' Training

Coffee Break 16:10 - 16:20

Coffee Break 16:10 - 16:20

Poster Session: 16:20 – 16:40

Poster Session: 16:20 – 16:40

Room A	Room B	Room C
16:40 – 18:20	16:40 – 18:20	16:40 – 18:20
Preschool and Primary Education	Science Education and Special Needs	Enhancing Students' Motivation

Room A	Room B
16:40 – 17:55	16:40 – 17:55
New Technologies in Science Education	Students' Assessment



Thursday 21 March 2019

Morning Session: 9:00 – 13:00

Room A 9:00 - 9:10

Introductory Speech and Practicalities

Room A: Opening Speech 09:10 – 09:30

Whither Science Education

Mary Oliver, University of Nottingham (United Kingdom)

Room A 9:35 – 11:15	Room B 9:35 – 11:15	Room C 9:35 – 11:15
Science and Engineering Thomas Waitz, Georg-August-University Göttingen (Germany)	Educational Strategies Martin Musumeci, University of Malta (Malta)	Curriculum Development Masao Mori, Tokyo Institute of Technology (Japan)
Interdisciplinary Educational Experiences for	Qatari Teachers and Students' Views and Experiences	Attractiveness of Programs for Students, Heterogeneity
Engineering Students	of Inquiry-Based Learning through "WebQuests and	of Higher Educational System, Typology and Efficiency
Craig Gelowitz, University of Regina (Canada)	Exploratory Talk" in Science	of Universities
	Nasser Mansour, University of Exeter (United Kingdom)	Fuad Aleskerov, National Research University - Higher
Changes in Working Life Create Challenges to		School of Economics and Institute of Control Sciences of
Engineering Education	Reframing Classroom Discourse through the Lens of	Russian Academy of Sciences (Russian Federation)
Lea Mustonen - Susan Heikkilä, Häme University of	Benefit to Cost Ratios	
Applied Sciences (Finland)	Andy Cavagnetto, Washington State University (United States)	Scientific Literacy: Who Needs it in a 'Black Box' Technological Society?
Using Low-Cost Hardware to Teach Mechatronics in a	Brian Hand, University of Iowa (United States)	Nikolaos Fotou - Ian Abrahams - Marina Constantinou
Project-Based University Course		University of Lincoln (United Kingdom)
Jörn Kretschmer, Furtwangen University (Germany)	Underlying Frameworks in Academic Education	
	Edwin Koster, Vrije Universiteit Amsterdam (The	Creating Better Science General Education Courses
Study of Tuned Mass Damper for Attenuating	Netherlands)	through a Comprehensive Curricular Redesign
Skyscraper Oscillations through Project-Based Learning		Amy Young, Dominican University of California (United
Dante Jorge Dorantes - Gonzalez, MEF University	Problem-Based Learning: ProLearn4ALL Project	States)
(Turkey)	Contributions	
	Carla Freire, Politécnico de Leiria (Portugal)	The Self-Domain in Science as a Means of Critical
		Thinking Development
		Carloalberto Petti, Institute of Technology Carlow (Ireland)

Coffee Break 11:15 - 11:25

Poster Session: 11:25 - 11:45

Room A 11:45 – 13:00	Room B 11:45 – 13:00	Room C 11:45 – 13:00
Educational Strategies Susan Heikkilä, Häme University of Applied Sciences (Finland)	Workshop Science Education and European Projects: The ZOE Case Study	Pre-Service Teacher's Professional Development Anne Henderson, Florida Atlantic University Center for Environmental Studies (United States)
Does it really Work then? Practical Work in Undergraduate Science Education Ian Abrahams - Marina Constantinou, University of Lincoln (United Kingdom) Prism - To View Science from Different Aspects Oshrit Navon - Man, Davidson Institute of Science, Weizmann Institute of Science (Israel) Reconsidering Spontaneous Analogical Reasoning through the Knowledge in Pieces Mechanism Nikolaos Fotou - Ian Abrahams, Lincoln University (United Kingdom)	Introduced by: Ombretta Pediconi, Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise (IZSAM) (Italy) Antonio Giordano, Pixel (Italy) Science Education and European Projects: an Introduction to the ZOE Project The Role of Scientific Partners in European Projects: Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise "G. Caporale" within the ZOE Project The Advantages of the E-Learning: The ZOE Online Courses Questions and Answers' Session The specific topics will be identified with reference to the participants' suggestions posted on the conference pinboard available in the poster session area.	Pre-Service Teachers' Challenges and Affordances in Implementing Inquiry-Based Science Teaching at Lower Primary Maria I. Maya Febri - Ragnhild Lyngved Staberg, Norwegian University of Science and Technology (Norway) Prospective Primary School Teachers' Difficulties when Dealing with Multiplying Fraction Word Problems Alberto Arnal-Bailera, University of Zaragoza (Spain) Escape Rooms as a Way to Teach Magnitudes and Measure in Degrees in Education Mónica Arnal-Palacián, Universidad Rey Juan Carlos (Spain)



Thursday 21 March 2019

Afternoon Session: 14:30 – 18:20

Room A 14:30 – 16:10	Room B 14:30 – 16:10	Room C 14:30 – 16:10
Chemistry Education Devin Latimer, University of Winnipeg (Canada)	Science Teacher Training Rachael Sharpe, University of Lincoln (United Kingdom)	Pre-Service Teacher's Professional Development Nikolaos Fotou, University of Lincoln (United Kingdom)
Professionalization of Tutors in Chemistry: Conceptual Perspectives for the Design of a Tutor School Nele Milsch - Thomas Waitz, Georg-August-University Göttingen (Germany)	Development of Creativity Using a Method of "Intuitive Aesthetics": Results of En Plein Airs (Vilnius, Lithuania, 2018) Tatiana Kharitonova, The State Hermitage Museum	How to Form Creative Learners in Science Ann Mutvei, Södertörn University (Sweden) Evaluation of Educational Digital Stories Prepared by
Dealing with Students' Undesired Responses to	(Russian Federation)	Science Pre-Service Teachers Zeynep Yurtseven-Avci - Munise Seckin-Kapucu,
Teachers' Oral Questions in Chemistry Classrooms: Exploring Effective Feedback Practices	Science Teachers and Technology - Be Aware or Beware? Nitzan Koren, Tel Aviv University (Israel)	Eskisehir Osmangazi University (Turkey)
Festo Kayima, Norwegian University of Science and Technology (Norway)	Levels of Teacher Self-Efficacy and Emotions Expressed by Teachers in Training STEM Areas	Training Pre-Service Teachers to Connect Biology Teaching to Daily Life: Role of Positive Emotions José María Marcos-Merino - Rocío Esteban Gallego,
Spectroscopy in a Suitcase: A Model for Implementing and Coordinating a National Chemistry Education and	Guadalupe Martínez Borreguero - Milagros Mateos- Núñez, University of Extremadura (Spain)	University of Extremadura (Spain)
Public Engagement Programme in Ireland John O'Donoghue, Trinity College Dublin (Ireland)	Inter-University Project on Collaborative Physics Workshops: An Ibero-American Experience	Digital Story-Telling to Improve 21st Century Skills: Pre-Service Science Teachers' Reflections Munise Seckin-Kapucu - Zeynep Yurtseven-Avci,
A Comparative Analysis of the High School Chemistry Curriculum Objectives in Czechia and Turkey Based on	Iñigo Rodríguez-Arteche, Universidad Rey Juan Carlos (Spain)	Eskisehir Osmangazi University (Turkey)
the Revised Bloom's Taxonomy Ridvan Elmas - Martin Rusek - Martin Bilek, Charles University (Czech Republic)		
Koray Kasapoglu, Afyon Kocatepe University (Turkey)		

Coffee Break 16:10 - 16:20

Poster Session: 16:20 – 16:40

Room A 16:40 – 18:20	Room B 16:40 – 18:20	Room C 16:40 – 18:20
Preschool and Primary Education	Science Education and Special Needs	Enhancing Students' Motivation
Maria I. Maya Febri, Norwegian University of Science and Technology (Norway)	Festo Kayima, Norwegian University of Science and Technology (Norway)	Marie Walsh, Limerick Institute of Technology (Ireland)
Interactions between Learning and Emotions in	Inclusive Pedagogical Books: Strategies and Options to	Using Photos to Elicit Secondary Students'
Prospective Primary Teachers towards an Active Practice	Build Accessible Resources	Perspectives of Connecting Science with the Real
of Biology	Nuno Fragata – Carla Freire, Politécnico de Leiria	World
José María Marcos-Merino - Rocío Esteban Gallego, University of Extremadura (Spain)	(Portugal)	Samar Albalawi, University of Manchester (United Kingdom)
	Inclusive Biology Education - What Do Pre-Service	
Aesthetic Expression in Science Education Enhances	Teachers Think about it?	Talkin' about the Resolution
Knowledge of Concepts and Phenomena	Nina Holstermann, University of Vechta (Germany)	Alessandra Zanazzi, INAF - Osservatorio Astrofisico di
Ulrika Tobieson - Ann Mutvei, Södertörn University		Arcetri, Firenze (Italy)
(Sweden)	BLIC & CLIC: Bringing Life into the Classroom. Use of	
	Mind Maps on the Chemistry Class	A Martian Adventure: An Interactive Geo-
Why Do Students Focus and Enjoy Carring out Tasks?	Isabel Allen - Luísa Santos, Agrupamento Escolas da	Edutainment Tool
Developing Procedural Scientific Knowledge of Pre-	Maia (Portugal)	Zsuzsanna M. Császár - János Varjas, University of
Service Primary School Teachers		Pécs (Hungary)
Francisco Castillo-Hernández, University of Almería	Does Paired Mentoring Work? A Study of the	
(Spain)	Effectiveness and Affective Value of Pairing Students	The Impact of Conducting Youth Scientific Research
	Aged 16 with Undergraduate Students in England	Camps within the Academic Institute
Implementation and Didactic Validation of STEM	Nikolaos Fotou - Ian Abrahams - Rachael Sharpe,	Dorit Granot - Esther Etty Haramaty, Davidson
Workshops in Primary Education	University of Lincoln (United Kingdom)	Institute of Science Education at the Weizmann
Guadalupe Martínez Borreguero - Milagros Mateos- Núñez, University of Extremadura (Spain)		Institute of Science (Israel)

End of Conference Day One



Friday 22 March 2019

Morning Session: 9:10 – 13:00

Room A 9:10 – 11:15	Room B 9:10 – 11:15	Room C 9:10 – 11:15
Health Education Mary Oliver, University of Nottingham (United Kingdom)	STEM Education Dante Jorge Dorantes - Gonzalez, MEF University (Turkey)	Scientific Research and Social Development Nasser Mansour, University of Exeter (United Kingdom)
Health Education and the Future of Natural Resources: Food Safety, Food Waste and the Culture of Sustainability Ombretta Pediconi - Giancarlo Pichillo, Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise (IZSAM) (Italy) Argumentation about Antibiotic Resistance in	E-Learning from Nature: Irish Experience and Results of an Erasmus+ Project Collaboration Marie Walsh, Limerick Institute of Technology (Ireland) Costs and Benefits to Implement STEM Programs in Schools: The Stimey Project Alecia Adelaide May Reid, University of Cádiz (Spain)	Regional Strategies for the Development of Higher Education and Human Capital Upbuilding Evgeny Kolbachev, Platov South-Russian State Polytechnic University (Russian Federation) 4th Industrial Revolution: Friend or Foe? Fatima Fernandes, University of South Africa (South Africa)
Secondary School Biology: The Role of Skills, Knowledge and Learning Environments Susanne Rafolt - Julia Thaler, University of Innsbruck (Austria)	Development of STEM Outreach Material that Incorporates Argumentation for Science Classrooms Laurie Ryan, University of Limerick (Ireland) STEM Education Strategies within the Sporting Context	Educational Connections to Ongoing Research Projects (E-CORP) Alana Edwards - Anne Henderson, Florida Atlantic University - Pine Jog Environmental Education Center
STEM Molecular and Cellular Neuroscience Didactics for Human Health in High School Marina Minoli, High School Marconi - National Biologists Order - Royal Society of Biology (Italy)	Isabel Urbano - Igone Guerra, Sinnergiak - Social Innovation (Spain) Xabier Barandiarán, University of Deusto (Spain)	(United States) International Funding Programmes for Scientific Research and Science Education
Secondary School Students' Evaluation of Vaccinations Susanne Rafolt - Julia Kohler, University of Innsbruck (Austria)	Development of Learning Skills in Medical Students through PBL-STEM Vasilka Krumova, Sofia University "St. Kliment Ohridski" (Bulgaria)	Elisabetta Delle Donne, Pixel (Italy) Analysis of the Influence of Learning State before University Admission to College Dropout Using Hierarchical Bayesian Model
Children's Perceptions on Cancer: Digital Storytelling as Means of Education Hernani Oliveira - Helena Lima, University of Porto (Portugal)		Naruhiko Shiratori, Kaetsu University (Japan)

Coffee Break 11:15 - 11:25

Poster Session: 11:25 – 11:45

Room A 11:45 – 13:00	Room B 11:45 – 13:00	Room C 11:45 – 13:00
New Technologies in Science Education Pier Luigi Gentili, University of Perugia (Italy)	Workshop QUAL4T2 - Effective Team Work as the Trigger to Quality Improvement in Education	Students' Assessment Ian Abrahams, Lincoln University (United Kingdom)
Measuring Technology Integration in Science Classrooms Caroline Parker, Education Development Center (United States) Cathlyn Stylinski, University of Maryland Center for Environmental Science (United States)	Introduced by: Margrieta Kroese-Zoet, Landstede Groep (The Netherlands) Anabel Menica, Politeknika Ikastegia Txorierri (Spain) Francesca Di Paolantonio, Associazione CIOFS-FP (Italy)	Understanding the Impact of Teaching Strategies, Engagement and Interest in Science: An Analysis of the English PISA Cohort Mary Oliver, University of Nottingham (United Kingdom)
Virtual Reality Explorers Joseph Walsh, Institute of Technology Tralee (Ireland)	 Culture of quality improvement Effective planning by educator teams 	UAE Students' Value for Learning Science for their Future Careers Dean Cairns, Emirates College for Advanced Education (United Arab Emirates)
Using Video-Based Methods to Teach Rational Number to Prospective Primary School Teachers Alberto Arnal-Bailera - Carmen Julve-Tiestos, University of Zaragoza (Spain)	 Bottom-up approach in education Sharing of Method and tools, presentations and activities 	A Clear and Present Trust: Distance Learning Assessment and the Academia Perspective Ana S. Moura, Universidade do Porto (Portugal)
	The specific topics will be identified with reference to the participants' suggestions posted on the conference pinboard available in the poster session area.	



Friday 22 March 2019

Afternoon Session: 14:30 – 19:00

Room A 14:30 – 16:10	Room B 14:30 – 16:10	Room C 14:30 – 15:45
Chemistry Education and Environment Marina Minoli, High School Marconi - National Biologists Order - Royal Society of Biology (Italy)	Studies in Science Education Ann Mutvei, Södertörn University (Sweden)	Science Teacher Training David Gonzalez Gomez, University of Extremadura (Spain)
Grassroots Green Schools: A Model Program for Increased Local Participation Alana Edwards - Anne Henderson, Florida Atlantic University Center for Environmental Studies (United	An Interdisciplinary Investigation into Complex Systems Pier Luigi Gentili, University of Perugia (Italy) Kaibara Ekken and Virtue in Science	Development of Leadership Mindset Using a Method of "Live Living" Tatiana Kharitonova, The State Hermitage Museum (Russian Federation)
States)	Maji Rhee, Waseda University (Japan)	Situation and Structural Framework of Competence:
Educational Concept for Hands-On Energy Science Workshops	Trends and Patterns in Subject Choice by Science Students at Sixth Form Level in Malta	Action Logic, Curriculum Logic, Logic of Education Argentina Chiriac, State University of Medicine and
Mona-Christin Maaß - Thomas Waitz, Georg-August- University Göttingen (Germany)	Miriana Magro, St Clare College Pembroke Secondary School (Malta)	Pharmacy "Nicolae Testemiţanu" (Moldova)
Greening the Organic Chemistry Laboratory: Comparing	Martin Musumeci, University of Malta (Malta)	Which Resources for School Situations Involving Religious Matters?
Synthetic and Purification Techniques in Organic Process Development Devin Latimer, University of Winnipeg (Canada)	The Application of Binary Logistic Regression Analysis on Transferability of Mathematical Knowledge amongst Science Students	Gabriela Abuhab Valente, Universidade de São Paulo and Université Lumière Lyon 2 (Brazil)
H2O to Go! Connecting Youth to Research in	Nora Zakaria, UiTM (Malaysia)	
Environmental Issues		
Alana Edwards - Anne Henderson - Loisa Kerwin, Florida Atlantic University Center for Environmental Studies (United States)		

Coffee Break 16:10 - 16:20

Poster Session: 16:20 - 16:40

Room A 16:40 – 17:55	Room B 16:40 – 17:55
New Technologies in Science Education Jin Su Jeong, University of Extremadura (Spain)	Students' Assessment Andy Cavagnetto, Washington State University (United States)
Investigation of Students' Chemistry Problem Solving Approach with the Use of Eye Tracking-Enhanced Retrospective Think-Aloud Martin Rusek – Ridvan Elmas, Charles University (Czech Republic)	Subject Choice and Performance in SEC Biology: Patterns According to Gender and School Type in Malta Jacob Azzopardi, San Ġorġ Preca College Middle School (Malta) Martin Musumeci, University of Malta (Malta)
Using Eye Tracking Technology in Design - Possibilities and Limitations Ali Daryusi - Grit Köhler, University of Applied Sciences Offenburg (Germany) Fusionopolis - The most Decisive Economic Power	Multiple Choice Tests with One vs. More Correct Answers – Which Are Better Predictors of Students' Knowledge and Interest in Biology? Jan Mourek - Radim Kuba, Charles University (Czech Republic)
Centers of the 21st Century Norbert Csizmadia, Pallas Athene Innovation Geopolitical Foundation (Hungary)	Evaluations of Interns' Performances after Intervention Program Using Hierarchical Fuzzy Conjoint Analysis Model Nora Zakaria, UiTM (Malaysia)

Closing Speech: 18:10 - 18:30

Science Education for STEM Thinkers in the Knowledge-Based Society

Nasser Mansour, University of Exeter (United Kingdom)

Cocktail 18:30 - 19:00

End of Conference



Virtual Presentations

(available on the conference website)

A Certification Framework for Managing Digital Skills According to DIGCOMP2.1 Aliki Panagiotarou, Hellenic Open University - University of Patras (Greece) Bill Vassiliadis - Achilles Kameas, Hellenic Open University (Greece)	Made by them to them: The Students in the Learning Process Paula Flores, Polytechnic Institute of Porto - High School of Education (Portugal)
Access to Information for People with Special Needs: Experience from Academic Course Tania Todorova - Sabina Eftimova, State University of Library Studies and Information Technologies (Bulgaria)	Misconceptions in Quantum Mechanics through Double Slit Experiment Matúš Sitkey, Constantine the Philosopher University in Nitra (Slovakia)
Affordances and Constraints of Meaning-Making in Multimodal Science Classrooms Lilian Pozzer - Elvina Mukhamedshina, University of Manitoba (Canada)	Reflexion of STEM Implementation in Ukraine Oksana Buturlina - Tatyana Lysokolenko - Sergey Dovgal, Dnipro Academy of Continuing Education (Ukraine)
Changes in Students' Nature of Science Conceptions upon a HOS and NOS-Enriched PBL Intervention Cristina Sousa, University of Porto (Portugal) Isabel Chagas, University of Lisbon (Portugal)	Self-Regulation of Pedagogy Students Dominika Hosova - Jana Duchovicova, Constantine the Philosopher University in Nitra (Slovakia)
Comparative Study on the Sources of Information Contributing to the Cancer's Representations on a Public of Pupils and Students Sébastien Malpel - Emmanuella Di Scala, Laboratoire CIMEOS - Université de Bourgogne (France) Robert Andres - Natalie Pinsard, ESPE Bourgogne (France)	Space Representation and Gender Differences: A Flipped Approach to Geography Teaching Tonia De Giuseppe - Pio Alfredo Di Tore - Felice Corona, Università degli Studi di Salerno (Italy)
Conceptual Maps as the Lucrative Way Showing Integrate Characteristic of the Energy Concept In School Environment Terezia Jindrova, Constantine the Philosopher University in Nitra (Slovakia)	STEM Education Strategies within the Sporting Context Isabel Urbano - Igone Guerra - Alfonso Unceta, Sinnergiak – Social Innovation (Spain) Xabier Barandiarán, University of Deusto (Spain)
Features, Mechanisms, Evidences: A Path through the Scientific Theory of Evolution Ninfa Radicella, Liceo Scientifico "Filippo Silvestri" (Italy)	STEM Education: Future and Current Challenges for the Preparation of STEM Educators Natalia Spyropoulou - Achilles Kameas, Hellenic Open University & Computer Technology Institute and Press (Greece)
Formation and Control of Skills Listening and Pronunciation in Teaching Russian as a Foreign Language Nina Khamgokova, RUDN University (Russian Federation)	Studying Space with Social Networks Paola Caradonna, ITT Panetti Pitagora Bari (Italy)
Influence of Motivational, Attitudinal and Metacognitive Skills in the Academic Achievement of Freshman Science and Engineering Students Patricia Morales Bueno - Rosario Santos Rodas, Pontificia Universidad Católica del Perú (Peru)	Technology and Human Education Klaudius Hartl, Private University of Education Diocese of Linz (Austria)
Investigating the Laboratory Experiences of Chemistry Teachers Johnson Upahi - Arafat Asake Abdussalam, University of Ilorin (Nigeria) Umesh Ramnarain, University of Johannesburg (South Africa)	The Development of Non-Native Speech Based on Linguistic Isomorphism Madina Tsalikova, North-Ossetian State University (Russian Federation)
Intellectual Property Problems on Photographic Information Analysis in University Environment Stoyan Denchev - Tereza Trencheva - Kamelia Planska, State University of Library Studies and Information Technologies (Bulgaria)	The MathE Project: Teaching Mathematics Effectively Anca Colibaba, GR.T.Popa University - EuroED Foundation (Romania) Irina Gheorghiu, Albert Ludwigs Freiburg University (Germany) Cintia Colibaba, University of Life Sciences and Veterinary Medicine Iasi (Romania) Loredana Danaila, EuroEd Foundation Iasi (Romania) Anais Colibaba, Trinity College Dublin (Ireland)
Mathematical Modeling in Object Localization Based on Signal Strength Tanja Van Hecke, Ghent University (Belgium)	Water Education in the Context of Environmental Education. The Views of Private School Teachers Spyridon Xagoraris - Anna Thysiadou - Vassilios Tsiantos, Eastern Macedonia and Thrace Institute of Technology (Greece)



Posters

A Comparative Study of Leaving Certificate and Advanced Placement Chemistry Programmes Niamh McGoldrick, Trinity College Dublin (Ireland)	On FAIR Data Principles of Institutional Data and Information of Universities Masao Mori, Tokyo Institute of Technology (Japan) Naruhiko Shiratori, Kaetsu University (Japan)
Active-Learning Strategies to Increase the Students' Engagement to an Environmental Science Course in a Distance-Learning Program David Gonzalez Gomez - Jin Su Jeong - Florentina Cañada, University of Extremadura (Spain)	Pedagogical Content Knowledge: The Case of Simple Machines Lina Melo, University of Extremadura (Spain)
An Experimental Conception to Catalysis in Context of an Education for Sustainable Development Thomas Waitz - Stefanie Waitz, Georg-August-University Göttingen (Germany)	Project Based Learning, its Realization and Influence on Pupil's Learning Jiřina Rajsiglová - Barbora Škarková, Charles University (Czech Republic)
Analysis of First Aid Misconceptions among Teachers at Elementary and Grammar Schools in the Czech Republic Radim Kuba - Gabriela Zvěřinová, Charles University (Czech Republic) Roman Říha, Czech Technical University in Prague (Czech Republic)	Short Courses: Sharing Knowledge with Students, from Students Marta Daniela Santos, cE3c - University of Lisbon (Portugal)
Application of Principal Component Analysis to the Interpretation of the Emotional Dimension of Secondary Students towards Learning Physics and Chemistry Florentina Cañada - Miriam Hernández, University of Extremadura (Spain)	Teaching Evolution with Austrian Biology Textbooks Martin Scheuch, University College for Agricultural and Environmental Education (Austria)
Developing Problem-Oriented Worksheets for Improving Science Latency Zsuzsanna M. Császár - János Varjas, University of Pécs (Hungary)	The Chemistry of Remembering Nele Milsch - Thomas Waitz, Georg-August-University Göttingen (Germany)
Engage and Elicit: Formative Assessment Practices of Elementary Educators Nicholas Bourke, Auburn University at Montgomery (United States)	The Effect of Birth Order on the Probability of University Enrolment Radim Kuba, Charles University (Czech Republic)
Evolution and Perspectives of Science Curriculum in the Czech Republic Hana Ctrnactova, Charles University (Czech Republic)	The QUAL4T2 Method - Improving Quality in Teacher Teams Margrieta Kroese, Landstede Groep (The Netherlands) Francesca Di Paolantonio, Associazione CIOFS-FP (Italy) Anabel Menica, Politeknika Ikastegia Txorierri (Spain)
Examining Adult Learner and Lecturer Perspectives and Experiences Using Audience Response Systems (Clickers) in Higher Education Maeve O'Reilly, Athlone Institute of Technology (Ireland)	The Training for Patients in Magic Project Funded by European Commission - Horizon 2020 Program Sabrina Grigolo, Project Manager Aslto3 Piedmont Region - Expert Patient 3 Course, Eupat (Italy)
Feel and Imagine Arithmetic with their Ears and Hands Masao Mori, Tokyo Institute of Technology (Japan) Mayumi Ueno, Home-Education-Laboratory (Japan)	The Work-Related Stress among Members of Integrated Rescue Service and Influence of this Stress to Couple Relationship Roman Říha, Czech Technical University in Prague (Czech Republic)
Flipping a Science Course: Influence in the Students' Cognitive and Affective Performance David Gonzalez Gomez - Jin Su Jeong - Florentina Cañada, University of Extremadura (Spain)	Using Board Games for Collecting Emotional Data on Science and Technology Issues Florentina Cañada - Miriam Hernández, University of Extremadura (Spain)
Implementing the Topic of Sustainable Nutrition In and Outside the Classroom Based on an Inquiry-Based-Teaching Approach	



Konstantin Sagmeister, University of Innsbruck (Austria)

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