SHARING INSPIRATION 2019
THE POWER OF REALIZATION

Teachers Teaching with Technology™

Sharing Inspiration 2019: The Power of Realization
…for Policy Makers

Conference Program

European Committee of the Regions, Jacques Delors Building, Rue Belliard 99-101, B-1040 Brussels

2019, March 28

t3europe.eu/sharing-inspiration

Conference partners in alphabetical order

Sharing Inspiration – The Power of Realization

Sharing Inspiration – The Power of Realization is the 2019 edition in tradition of a biennial conference format of an educator network named **T³ Europe** [T-cubed]. The conference focusses on sharing best practices across Europe regarding curriculum aligned STEM education.

The 2019 conference theme is "The Power of Realization". The conference theme has a double meaning: "to realize" in the sense of "**to understand**" and also in the sense of "**to make something concretely happen**". This tackles the pedagogical efforts in the classroom as much as the efforts of policy makers and alike to set the right conditions.

Day 1 of the conference is specifically designed for **policy makers, industry stakeholders, key decision makers and leading educators** from across Europe. We expect 100+ participants exchanging about **classroom implementation** and structural questions **setting the context** regarding further improved **STE(A)M education**.

Venue: European Committee of the Regions, Jacques Delors Building, Rue Belliard 99-101, B-1040 Brussels

09.00-09.30	Registration

09.30-09.55 *Auditorium JDE52*	**Welcome** Jiři Buriánek (Secretary General, European Committee of the Regions (CoR)) **Inspiration Space – A journey to the Stars** **Dr. Insa Thiele-Eich** (Initiative „Die Astronautin", University of Bonn, Germany)

09.55-10.30 *Auditorium JDE52*	**Round 1: Classroom Implementation** – Warm-up **Setting the Scene** Moderator: **Dr. Helmut Heugl** (Head of ACDCA (Austrian Center for Didactics of Computer Algebra), T³ Austria) *Curriculum*: **STEM-inspired evolution of the French senior high school's curriculum: how will the teachers handle the challenge?** **Robert Cabane** (former General Math Inspector MoE France) *Content*: **Common Framework: Which natural science and mathematics competences need to be found in our society?** **Jürgen Langlet** (former chairman of MNU and school principal) *Classroom Practice*: **Innovating STEM classroom practices** **Dr. Agueda Gras-Velazquez** (Science Programme Manager, European Schoolnet)

10.30-10.50	Coffee break

10.50-12.10	**Round 1: Classroom Implementation** – Deep Dive
Split in parallel workshops	
JDE52	*Curriculum*: **New generation of STEM integrated curricula**
	Moderator: **Robert Cabane** (former General Math Inspector, MoE France)
JDE53	*Content*: **Common Framework: Which natural science and mathematics competences need to be found in our society?**
	Moderator: **Jürgen Langlet** (former chairman of MNU and school principal)

- *GeRRN - Common Framework of Reference for the Natural Sciences*
  Jürgen Langlet
- *Basic competencies in mathematics education*
  Dr. Hubert Langlotz (vice-principal, MNU, T³ Germany)
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JDE70 *Classroom Practice*: **Innovating STEM classroom practices**
Moderator: **Dr. Agueda Gras-Velazquez** (Science Programme Manager, European Schoolnet)

- *STEM education policy in action: a didactic model for STEM Education*
  Marie-Paule Buyse (KU Leuven)
- *Resources and materials: Teaching STEM with bioeconomy: the BLOOM School Box*
  Adina Nistor (European Schoolnet)
- *Approaches: Leonardo4Children – STE(A)M approaches*
  Leonardo Lorusso (Carano 4 children" foundation, Regione Lombardia - Presidency Delegation to the EU)
- *Citizenship and development:* Education for sustainability at the crossroads of science, technology and humanities: the example of the Portuguese national curriculum
  Alexandre Fernando (Directorate-General for School Administration, Portugal)
- Innovating STEM classroom practices: the way forward Open discussion with the panelists moderated by **Dr. Agueda Gras-Velazquez**

| 12.10-13.10 | Lunch |

13.10-13.45	**Round 2: Connecting to the Wider Context** – Warm-up
Auditorium JDE52	**Setting the Scene**
	Moderator: **Marc Durando** (Managing Director, European Schoolnet)

Policy: **Promoting STEM and digital competences in the EU**
Dr. Ana-Maria Grigore (European Commission - DG RTD)

Outreach: **The Role of and expectations to the European Regions in Strengthening STE(A)M Education**
Csaba Borboly (European Committee of the Regions - Commission for Social Policy, Education, Employment, Research and Culture (SEDEC) – Rapporteur Education, President of Harghita County Council)

Industry Role: **Technology Supplier and Employer – Industry between all chairs in STE(A)M?**
Emir Demircan (Senior Manager Advocacy and Public Policy, SEMI Europe)

13.45-14.10	Break

14.10-15.30	**Round 2: Connecting to the wider Context** – Deep Dive

Split in parallel workshops

JDE52

Policy: **Promoting STEM and digital competences in the EU**
Moderator and Impulses: **Dr. Vladimir Garkov** (European Commission - DG EAC) and **Annika Östergren Pofantis** (European Commission – DG CNECT)
- **Liisi Hakalisto** (Finnish Department for Early Childhood Education, Comprehensive School Education and Liberal Adult Education)

JDE53

Outreach: **The Role of and expectations to the European Regions in Strengthening STE(A)M Education**
Moderator: **Béatrice Taulègne** (Deputy Director, Directorate C - Legislative Work 2, European Committee of the Regions)
Impulses:
- *New roles for LRAs in education policy*
Dr. László Csák (expert of the rapporteur CoR, Babeș-Bolyai University)
- *From the lessons to the high school graduation exam – using digital media in Saxony's high schools*
Frank Liebner (Saxon State Ministry of Education and Cultural Affairs)
- *Professionals go Back to School*
Jeannette Axisa (Transport Malta)

JDE70

Industry Role: **Technology Supplier and Employer – Industry between all chairs in STE(A)M?**
Moderator: **Emir Demircan** (Senior Manager Advocacy and Public Policy, SEMI Europe)
- *Modernise National Curricula by Embracing Digital Education*
Helena Lovegrove (DIGITAL EUROPE)
- *Technology Supplier and Employer – Industry between all chairs in STE(A)M*
Dr. Friederike Soezen (WKO)

15.30-15.50	Break

15.50-16.50	**Reports & Discussion**

Auditorium JDE52

Moderator: **Alexandre Titin-snaider** (Director Education Technology Europe, Texas Instruments)
Reports from deep dive sessions
Moderators from previous deep dive sessions

Digital skills: challenges, opportunities, initiatives and the Digital Europe programme
Alexander Riedl (Deputy Head of unit - Digital Economy and Skills at DG Connect)

Discussion

16.50-17.00	**Summary & End**

Auditorium JDE52

Summary & End
Ian Galloway (Chairman T³ Europe)

17.00-19.00	Networking

Round 1 – Classroom Implementation
Abstracts

Dr. Helmut Heugl (T³ Austria): ***The role of the STEM subjects in the age of Technology***

> We live in the age of technology and digitalization and automation are changing the world of work and society to a degree never seen before. Not a day goes by without new application scenarios. How can schools prepare their students for the ongoing changes in the world? Which professions and skills will be in demand in the future?
>
> What we need is not a revolution of the STEM-subjects but rather an evolution meaning, we need to reflect on the past and to think of the future.
>
> Let us look at two examples indicating such evolutionary changes in teaching and learning strategies in the STEM subjects. We will start with mathematics, the language of science and technology. The second example should show a new orientation of science, technology and engineering.

Robert Cabane (former MoE France): **STEM-inspired evolution of the French senior high school's curriculum: how will the teachers handle the challenge?**

> Since 8 years, STEM-oriented courses in the French educational system "grow and multiply" slowly but regularly. It happened for first time in 2010 as an optional grade 10 all-sciences discovery course and later in 2016 as a standard "sciences and technology" course for all grade 6 pupils (partly due to the influence of the PISA study). Soon will emerge other such courses in grades 11 and 12, mixing either mathematics and physics or physics, chemistry, biology and geology. Other STEM-related courses deal with the introduction to computer science (algorithms, digital creation, etc.), interfacing with the mathematics and technology courses.
>
> In the workshop, after a brief presentation of these various courses, we will mainly discuss the teacher-related problem that arises with the emergence of such new courses: how to train the existing teachers so they will to be able to deliver efficiently the courses, how to develop the interactions between teachers of very different scientific cultures ?

Jürgen Langlet (MNU): ***GeRRN - Common Framework of Reference for the Natural Sciences***

> These days, the statement that natural sciences education, as is music, literature or philosophy, is part of general knowledge is agreed. As part of our cultural heritage, the natural sciences lay the foundations for the future of humanity. Pending difficult decisions regarding climate policy, medicine, digital technology, call for the scientifically mature citizen.
>
> Against the background of the European Commission's Qualification Framework (2006) for lifelong learning we will discuss what it means to be able to explain the natural world on the basis of existing knowledge and be able to ask questions and to draw conclusions based on evidence.
>
> Following a presentation of the Common Framework we will discuss its implications for the whole of Europe.
>
> https://www.mnu.de/publikationen#gerrn

Dr. Hubert Langlotz (MNU, T³ Germany): **Basic competencies in mathematics education**

> To master mathematics means to possess mathematical competencies. But what are they? There is a gap between the competencies we try to teach in school and the competencies universities require. How can we reduce this gap and what has to be changed according to mathematical contents and structures in higher education as well as in university education? We want to discuss different approaches to these problems.

Dr. Agueda Gras-Velazquez (Scientix): **Scientix – Innovating STEM classroom practices**

Increasing the motivation of students towards studying Science, Technology, Engineering and Mathematics (STEM) subjects and raising achievement in these areas are important challenges faced by European education systems. The school environment is key to addressing these challenges and teachers, their training and knowledge of innovative tools and materials are essential elements in the mix.

Together with guest speakers and session participants, Scientix will explore the conditions for an effective STEM education and will bring forward STEM education initiatives that work towards improving STEM classroom practices.

http://www.scientix.eu/

Round 2 – Connecting to the wider Context

Abstracts

Marc Durando (European Schoolnet): **Connecting to the wider context – Warm up.**

At the policy level, STEM education reform is intricately connected to the wider, societal, context. According to a report published by Scientix, European Schoolnet and Texas Instruments, there are two main reasons behind STEM reform in the European countries analysed: [1] the rise of the digital economy, the pace of technological change, and the need to prepare the citizens of the future, and [2] labour market demands predicting STEM skills shortages in various sectors. This session provides an opportunity to explore some of the main STEM education actions and motivations behind these initiatives, supported by industry and policy-makers at the European and regional level.

Dr. Vladimir Garkov (DG EAC), Dr. Dr. Ana-Maria Grigore (DG RTD), Annika Östergren Pofantis (DG CNECT) (all European Commission): **Policy: Promoting STEM and digital competences: The role of the European Commission**

STEM and digital competences play an important role in the European Education Area. Numerous existing as well forward-looking initiatives at EU level focus on STEM education and the development of digital competences to better prepare people for changing labour markets and active citizenship in more diverse, mobile and digital societies.

The Commission champions the so-called STEAM approach to STEM education, which embraces the creative potential of linking the arts, scientific inquiry, the humanities, and the social sciences. It also puts a strong focus on development of basic skills, which includes literacy, numeracy and digital skills as well as other key competences such as creativity, problem solving, critical thinking and communication.

The Erasmus+ programme and other financial instruments have supported a variety of projects in the area of STEM education, e.g. the Scientix network, the STEM Alliance, and the EU STEM Coalition. The Commission sets out 11 actions to develop digital skills in the Digital Education Action Plan. One of the actions is EU Code Week. Another action is SELFIE – a self-assessment tool developed by the Commission to help schools better use technology for teaching and learning.

The goal of the session is to explore new avenues for support at EU level to Member States in their efforts to increase the levels of achievement and interest in STEM disciplines and digital skills.

Csaba Borboly (European Committee of the Regions): **The Role of the European Regions in Strengthening STE(A)M Education**

>Based on the scene being set by the impulse talk, participants to this workshop are invited to discuss the particular role European regions have in fostering STEM education. This role is explicitly linked to several dimensions where regions are key-enablers for the success of STE(A)M education. This is predominately supported by the fact that the regulatory and financial competence for education is in many cases a prerogative of regional policy makers. Against this background the workshop will focus on a stocktaking of impactful initiatives that exist on regional level already today and to identify needs and tools to improve the sharing of best practices and enabling cross-learning.

>The structure of a SWOT analysis can be applied to this session in order to identify currently already well-established strengths of regional activities. This is to be complemented by analyzing improvement areas and opportunities that can arise from closer, more substantial and more structured collaboration among regions. The particular role of the CoR should be at the center of deliberations and first thoughts on a EU regions STE(A)M roadmap could be at the end of this workshop.

Emir Demircan (SEMI): **Technology Supplier and Employer – Industry between all chairs in STE(A)M?**

>Industry has an important role to play in strengthening STE(A)M education is Europe. The role of industry is twofold – on the one hand the competitiveness and potential for future job creation depends on a highly skilled workforce of all levels and ages. Therefore deliberations on employability in the digital age are to be addressed, as well as questions which skills are needed and how they are best taught. Moreover the challenge for to increase the interest for STE(A)M in schools and to close the gender gap are to be addressed. This with the aim to better integrate STE(A)M in future curricula and to work towards a more holistic approach.

>On the other hand industry provides for a lot of technologies that can be used to support STE(A)M education in schools and in the academic field. It is crucial to address the question which kind of technology should be used and in which framework to achieve best results for European students.

>The workshop will aim at discussing the items outlined above and to collect input that allows to be translated in concrete policy recommendations for decision makers in the EU, member states and regions. It is aimed at fostering a trustful and unbiased relationship between policy makers and industry representatives for the benefit of European students.

Dr. László Csák (expert of the rapporteur CoR, Babeș-Bolyai University): **New roles for LRAs in education policy**

>For decades the decentralization process was the main line to follow in analyzing the role of different levels of government in any policy area. In our time formal, top-down approaches to policy formulation and application do not offer a full picture, and partnership based communicative processes took the lead. Education policy can be seen as a public state policy put into practice at local/regional level following the curricula set by the state, but it is clearly only one function of it. What is more and more important is how education fits into the framework of employment and economic growth, so successful regions and cities now play a major role in education policy, well beyond their legally binding role, so they can attract people and businesses. As STEM is evidently the most powerful tool to make education more fit for purpose in the context of competitiveness, LRAs should enforce their competencies and skills in this area, and streamline sources to education. What are these skills, how does it work, and what are the challenges here - these are the questions I would like to present.

Frank Liebner (Saxon State Ministry of Education and Cultural Affairs): **From the lessons to the high school graduation exam – using digital media in Saxony's high schools**

> Digital media in the high school graduation exam – how does it work?
>
> Based on concrete examples the presentation will highlight the added value of digital media in mathematics and science education.
>
> In addition requirements for the use of digital tools in examination situations are discussed.

Jeanette Axisa (Transport Malta): **Professionals go back to School**

> On the example of Transport Malta I will speak about how professionals can contribute in the classroom to instigate interest in STEM careers; I will illustrate how mobile application TMCAREERS is being of assistance to students, educators and guidance in promoting awareness in STEM careers; I will explain the initiatives Transport Malta is undertaking to educate the educators and other initiatives being pursued with other industry partners to promote STEM careers and build the future workforce.

Helena Lovegrove (Digital Europe): **Modernise National Curricula by Embracing Digital Education**

> DIGITALEUROPE is committed to supporting public and private policies that help people develop the digital skills necessary to flourish on a professional and personal level. In the past year alone we have taken part in several projects, from mobilising stakeholders to take joint action on bridging the digital skills gap in our secretariat role in the Digital Skills and Jobs Coalition, to helping to define new digital jobs profiles, building on the eCompetence Framework and DigComp, in the Women4IT project. We also aspire to modernise national education curricula by embracing digital education, supporting initiatives, partnering more broadly with the digital sector, and orchestrating dialogue with stakeholders.

Dr. Friederike Soezen (WKO): **Technology Supplier and Employer – Industry between all chairs in STE(A)M**

> Businesses presently experience massive changes through digitization and globalisation. Increased demands on the innovative power of companies make education a key resource. The momentum will increase sharply and our education system must be able to provide the right answers. New activities emerge, existing occupations change. More and more jobs require higher levels of cognitive, social, technological and manual skills as well as the 21st Century skills (communication, collaboration, critical thinking, and creativity). The Austrian Federal Economic Chamber's education strategy puts a focus on the following: Deployment of individual talents. Alignment of education offers to the needs of the future. Integration of education paths and lifetime career prospects. Systematic support for training companies (dual system). Implementation of business and entrepreneurial skills into the education system.

About the partner organizations (in alphabetical order)

Digital Europe

DIGITALEUROPE is the leading trade association representing digitally transforming industries in Europe. We stand for a regulatory environment that enables European businesses and citizens to prosper from digital technologies. Our membership represents over 35,000 businesses who operate and invest in Europe. It includes +60 corporations which are global leaders in their field of activity, as well +40 national trade associations from across Europe.

digitaleurope.org
@DIGITALEUROPE

European Commission

The European Commission is an institution of the European Union, responsible for proposing legislation, implementing decisions, upholding the EU treaties and managing the day-to-day business of the EU.

ec.europa.eu
@EU_Commission

European Committee of The Regions (CoR)

The EU's Assembly of Regional and Local Representatives

The European Committee of the Regions is the EU's assembly of regional and local representatives from all 28 Member States. Created in 1994 following the signing of the Maastricht Treaty, its mission is to involve regional and local authorities in the EU's decision-making process and to inform them about EU policies. The European Parliament, the Council and the European Commission consult the Committee in policy areas affecting regions and cities. To sit on the European Committee of the Regions, all of its 350 members and 350 alternates must either hold an electoral mandate or be politically accountable to an elected assembly in their home regions and cities. Click here for more details on your national delegation.

The CoR is currently drafting in the SEDEC Commission an own-initiative Opinion on "Strengthening STE(A)M education in the EU", rapporteur Csaba Borboly (RO/EPP). The draft Opinion will be discussed in SEDEC meeting of 2 April 2019 and then voted on during the CoR Plenary session of 26-27 June 2019.

cor.europa.eu
@EU_CoR

European Schoolnet (EUN)

European Schoolnet (EUN) is the network of 34 European Ministries of Education, leading educational innovation at European level. EUN operates key European services in education on behalf of member Ministries of Education, the European Commission, and industry partners. EUN acts as the interface between education policy and practice, and as a facilitator, bringing Ministries of Education, schools, research and industry together.

eun.org
@eu_schoolnet

Harghita County

Haghita county is renowned for its rich traditions, popular art, unique and beautiful landscape and natural environment. It is predominantly a rural area since the relief is mostly determined by mountains, gorges and beautiful lakes giving an evergreen aspect to our region. This amazing environment is the place where the brown bear, the red deer, the wolf and trout can flourish.

The county is split in the middle by the Giurghiu and Harghita Mountains, the sacred mountain of the Seklers, which is also the youngest member of the volcanic mountain range of Eastern Carpathians. Its highest peak is Harghita Mădăraș, with a height of 1801 meters. West of it lies the region of Odorhei, and streching eastwards there are a series of closed.

For those who are looking for amazing sights and memories of times long past, Harghita County is definitely a place to see. Subsequently, we would like to provide an insight into the following touristic attractions and natural endowments that are worth to mention:

- 35 protected areas and national parks;
- More than 2000 mineral springs due to volcanic activity;
- Flourishing mountain tourism and skiing possibilities in the picturesque Harghita Mountains and constant flow of tourists increasing year by year;
- Șumuleu Ciuc is considered the main spiritual and sacred center of the county since during the Pentecost Pilgrimage thousands of people come from all over the world to pay homage to the Holy Virgin;
- The folk culture of the county has roots that go back several hundreds of years. The art of spinning and weaving, woodcarving, and pottery have been preserved and passed from generations to generations;
- The county is rich in several historical sites and legends, while numerous institutions endorse the preservation of local traditions and folk dances.

Information Technology Industry Council (ITI)

itic.org
@ITI_TechTweets

ITI is the global voice of the tech sector, and advocates for public policies that advance innovation, open markets, and enable the transformational economic, societal, and commercial opportunities that its member companies are creating. ITI's members represent the entire spectrum of technology: from internet companies, to hardware and networking equipment manufacturers, to software developers. ITI's diverse membership and expert staff provide a broad perspective and intelligent insight in confronting the implications and opportunities of policy activities around the world. Visit http://www.itic.org to learn more. Follow on Twitter for the latest ITI news @ITI_TechTweets.

MNU

mnu.de
@MNU_BUND

German Association for the Advancement of Mathematical and Science Teaching
MNU is the only organisation for (all subjects of) MINT/STEM in Germany. With approximately 6.000 Members from school and university its main goal is to improve STEM-teaching for the young generation. Organizing further educations everywhere in Germany.

Saxon State Ministry of Education and Cultural Affairs

The Saxon State Ministry of Education and Cultural Affairs is an executive institution of Saxony. The Ministry is responsible for education policy, including early education in nursery schools. It provides the structures, human resources and budget and is also in charge of lifelong learning and political education. The Term "Ministry of Cultural Affairs" contains the historically grown connection between education and church: it also deals with the general affairs of church and religious communities.

smk.sachsen.de
@Bildung_Sachsen

Scientix

Scientix (http://scientix.eu), the Community for Science Education in Europe, promotes and supports a Europe-wide collaboration among STEM teachers, education researchers, policymakers and other STEM education professionals. Scientix has been running since 2010 organizing teacher-training activities, dissemination conferences and events, and supporting the exchange of knowledge and experiences in STEM Education via its portal, publications and events. Scientix is funded by the European Union's Horizon 2020 research and innovation programme, and coordinated by European Schoolnet.

scientix.eu
@scientix_eu

SEMI

SEMI is the global industry association serving the manufacturing supply chain for the electronics industry. SEMI connects over 2,000 member companies and 1.3 million professionals worldwide to advance the technology and business of electronics manufacturing. SEMI members are responsible for the innovations in materials, design, equipment, software, devices, and services that enable smarter, faster, more powerful, and more affordable electronic products. Since 1970, SEMI has built connections that have helped its members prosper, create new markets, and address common industry challenges together. SEMI workforce development program and advocacy collectively addresses common skills-related challenges faced by the industry; promotes good talent practices globally; and inspires young people's interest in STEM and electronics manufacturing. SEMI maintains offices in Bangalore, Berlin, Brussels, Grenoble, Hsinchu, Seoul, Shanghai, Silicon Valley (Milpitas, Calif.), Singapore, Tokyo, and Washington, D.C. For more information, visit www.semi.org .

semi.org
@SEMIconex

SMEunited

SMEunited, formally known as UEAPME, is the association of crafts and SMEs in Europe with around 70 member organisations from over 30 European countries. SMEunited is a recognised employers' organisation and European Social Partner and acts on behalf of crafts and SMEs in the European Social Dialogue and in discussions with the EU institutions.

smeunited.eu
@SMEunited

T³ Europe

T³ Europe is the European branch of a worldwide educator network. T³ [T-cubed] stands for Teachers Teaching with Technology.

T³ Europe is an association of ~250 STEM (Science, Technology, Engineering and Mathematics) teachers that serves as an umbrella body for 12 country organizations to provide quality professional development, classroom-proven content and integrated state-of-the-art classroom pedagogy. For more than 20 years, T³ Europe has fostered a culture of cooperation, collaboration and sharing of expertise among

t3europe.eu
@T3Europe

educators from classroom teachers to policy makers.

Texas Instruments (TI)

education.ti.com
@ticalculators

For more than 30 years, TI has been an active member of classrooms around the world, empowering teachers and inspiring students to succeed in mathematics and science. Through our calculators, coaching and classroom resources, TI Education Technology is transforming the way teachers teach and students learn STEM (science, technology, engineering and mathematics) subjects.

Texas Instruments has a 75-year history of innovation with a strong commitment to education. Our corporate commitment to STEM education started with the company's founders and remains stronger than ever today. We believe in investing in education in order to fuel the talent base needed to continue advancing engineering innovation across the world.

Transport Malta (TM)

transport.gov.mt

The Authority for Transport in Malta (aka Transport Malta) is the national port authority, the Malta Register of ships, the Malta Register of aircraft and the regulator of land transport.

As the national port authority, it is responsible for preserving good order in internal and territorial waters, safety of navigation, overall control of port work, provision of port workers, prevention and control of pollution, provision of pilotage, fire fighting facilities, supplies and other ship requirements, regulating, controlling and promoting yachting centres.

As the Malta Register of ships, it is responsible for ship, boat and yacht registration, the provision of ancillary services and the promotion of Malta as an international maritime centre.

As the Malta Register of aircraft, it is responsible for all matters connected with civil aviation, including air navigation, the registration of aircraft and aircraft mortgages, the provision of ancillary services and promotion of Malta as an international centre for aircraft registration and ancillary services.

The national regulator of land transport is responsible for management of traffic, the policy making and promotion of road safety, ensuring that properly integrated, safe, economical and efficient public transport system is in place, the licensing and regulation of vehicles and drivers thereof and commercial road transport operators

wko.at

The **Austrian Federal Economic Chamber** (**Wirtschaftskammer Österreich** or **WKO**) is the federal parent organization for the nine State Chambers and 110 trade associations for different industries within Austria's system of economy. The membership of 517.477 active businesses includes diverse sectors such as trade and craft, commerce, industry, transportation, tourism, services industries, finance and insurance. Main tasks and activities of the Chamber is the representation of membership interests at all levels of government. Further tasks are information and advisory services to members regarding taxation, labor law, vocational training (dual system), industry-specific legislation, industry-wide advertising and market research.

zvei.org/en

Zentralverband Elektrotechnik- und Elektronikindustrie (ZVEI)
ZVEI: Manufacturer´s Association of Germany´s Most Innovative Industry

The 'ZVEI - German Electrical and Electronic Manufacturers' Association' promotes the industry's joint economic, technological and environmental policy interests on a national, European and global level. The ZVEI represents more than 1,600 companies, mostly SMEs.

The sector has round about 889,000 employees in Germany plus 736,000 employees all over the world. In 2018 the turnover was Euro 195 billion.

The electrical and electronics industry is the most innovative industry sector in Germany. One-third of the industries sales are based on new products. Every third innovation in Germany´s manufacturing sector stems from solutions of this sector. More than 20 percent of all industrial R+D spending comes from this industry.

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Sharing Inspiration 2019: The Power of Realization
…for Educators

Day 2-4 of the conference **Sharing Inspiration – The Power of Realization** target educators and teacher trainers. From Friday March 29 to Sunday March 31, around 180 T³ instructors from Europe, Australia and US and guests from other educational organizations will meet for 3 days and exchange ideas in various presentation and workshop formats on math, science and STEM education.

From the program:

- Basics of autonomous driving
- The development of concepts by using prefabricated applets
- Forensic science
- Linear programming; Python; et sim.
- STEM Camps & Projects
- M and S side by side
- Who Is Drowning in Our Trash? – STEM and Environmental Solutions
- How can physics and maths help each other

- Promoting Productive Struggle to Enhance Student Learning
- Engineering Practices in STEM Education
- Creating instructional videos
- The STEM debate from the Science perspective
- Pioneering the Future of Work in Teaching and Learning
- Next Generation Science Standards - 3-Dimensional Learning

More information: t3europe.eu/sharing-inspiration

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