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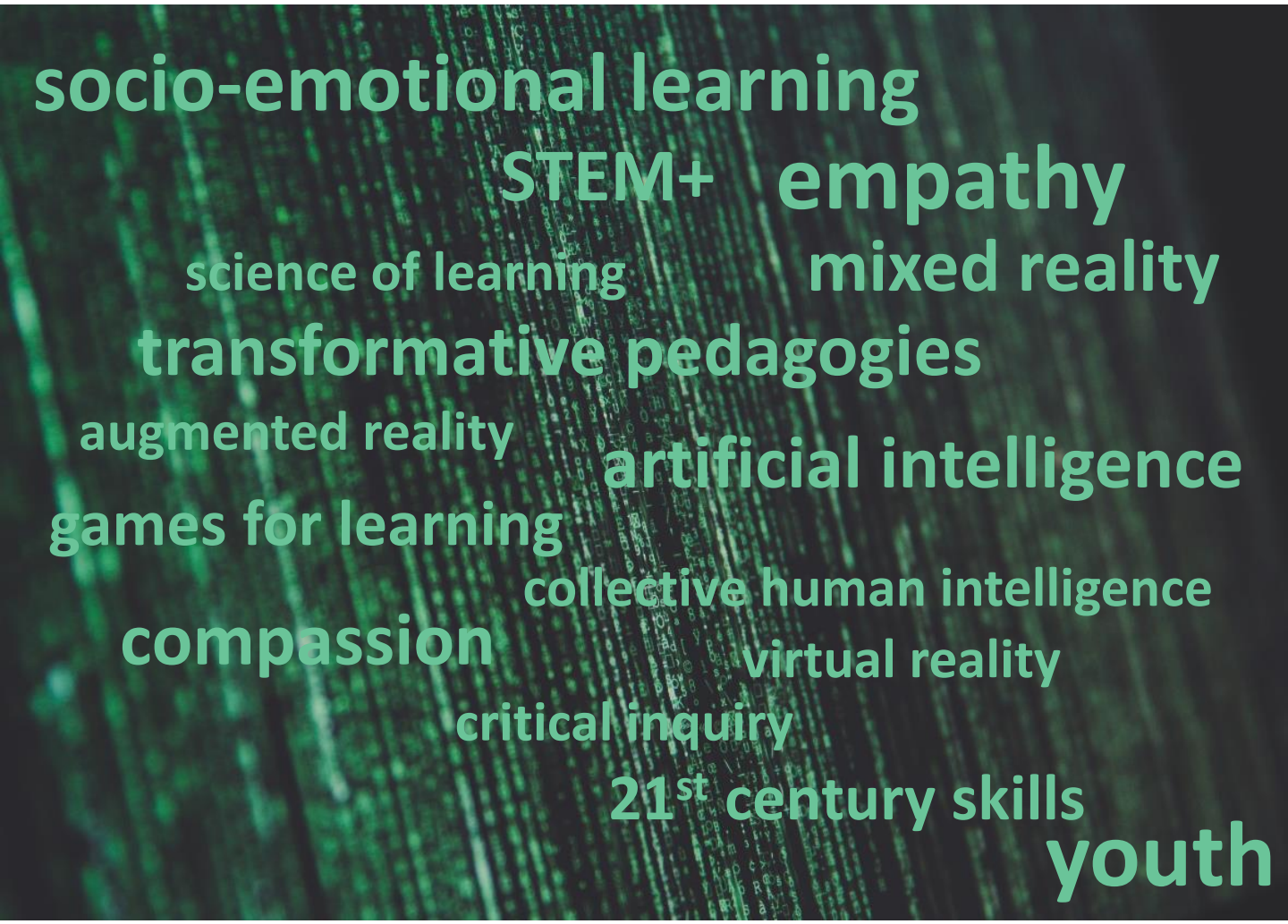
TECH
Transforming Education Conference for Humanity
2018
VISAKHAPATNAM

FROM TRANSMISSIVE TO TRANSFORMATIVE PEDAGOGIES: DIGITAL TECHNOLOGIES FOR FOSTERING 21ST CENTURY COMPETENCIES



TRANSFORMING EDUCATION CONFERENCE FOR HUMANITY

TECH 2018 | NOVEMBER 15 – 17, 2018

POST-EVENT REPORT

UNESCO MGIEP
35 Ferozshah Road, New Delhi – 110001, India.
T: +91 11 23072356-60 | W: mgiep.unesco.org/tech2018 | E: tech2018.mgiep@unesco.org

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TECH 2018 aimed to showcase the role of digital technologies in enabling a shift from "transmissive pedagogies" to "transformative pedagogies" to create peaceful and sustainable societies.

The challenges we face today are very different from those we faced in the last millennium. While experiencing the unprecedented interconnectivity created by the Internet, we are also witnessing persistent and new disparities and tensions, alarming illiberal and undemocratic trends, and uncertainties and risks about the future of the planet we share. Interconnected local to global challenges—ranging from climate change to violent extremism—call for education that enables learners to engage creatively and responsibly with the rapidly changing world.

In 2015, in their endeavour to work towards transforming our world, world leaders adopted the "2030 Agenda for Sustainable Development" and the accompanying Sustainable Development Goals (SDGs). Among the 17 SDGs and 169 targets, Target 4.7 specifically acknowledges the importance of holistic and transformative education, highlighting the importance of education for sustainable development, peace and global citizenship.

SDG Target 4.7

By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.

At the same time, digital technologies are beginning to transform traditional relationships of knowledge and learning, making it much easier to achieve many of the long-held pedagogical ideals such as ubiquitous learning, active knowledge making, dialogical and reflexive relationships, and personalised learning. Technological advances are also expanding the possibilities of 'gamifying learning', making learning fun, interactive, self-paced and engaging. Digital games have the advantage of combining immersive technology with good pedagogical practice. They are also helping educators answer ongoing assessment questions, develop children's intellectual and emotional intelligences, and break down the boundaries between disciplines and cultures. Digital technologies offer a huge potential, yet to be fully explored, for transforming education.

Conference Objectives:

1. Provide a platform for dialogue and capacity building across gaming, digital pedagogy and education stakeholders, including students, teachers and young people;
2. Showcase and demonstrate pedagogical possibilities opened up by gaming and digital technologies in enabling learners to develop 21st century skills and competencies to shape peaceful and sustainable societies;
3. Critically reflect upon and articulate institutional and ethical implications of embracing digital solutions to education.

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An Introduction

UNESCO MGIEP launched the second edition of its annual international conference titled the Transforming Education Conference for Humanity (TECH) 2018 in partnership with the State Government of Andhra Pradesh at the Novotel Varun Beach in Visakhapatnam City on November 15, 2018. TECH 2018, held over three days, showcased the role of games and digital learning in enabling a shift from "transmissive pedagogies" to "transformative pedagogies" to create peaceful and sustainable societies.

The conference saw participation by over 1,000 registered delegates from over 50 countries on a daily basis and witnessed highly engaging deliberations by experts in various domains related to education and technology such as games for learning, artificial intelligence for education, social and emotional learning and data privacy & ethics. **TECH comprised of 7 keynotes, 11 catalytic sessions and over 50 breakout presentations by more than a 100 presenters.**

The Conference was preceded by seven pre-conference workshops as well as a High Level Policy Forum with 70+ distinguished experts and policy-makers that focused on a comprehensive review of the Vizag Declaration on Guidelines for Digital Learning, followed by a keynote by Gregoire Borst, Professor of Developmental Psychology and Cognitive Neuroscience of Education, LaPsyDE on "The learning brain: A new perspective on education".

A key output of the conference was the adoption of the Vizag Declaration on Guidelines for Digital Learning as well as the signing of several Memoradums of Understanding (MOUs) and launch announcements.

TECH 2018 also took social media by storm, witnessing 75 million impressions - across Twitter, Facebook and Instagram.

1,000+ delegates daily

50+ countries

Adoption of Vizag Declaration calling for guidelines on digital learning

74,869,700 impressions on social media

7 MoUs, launches & key announcements

50+ speakers; 100+ presenters

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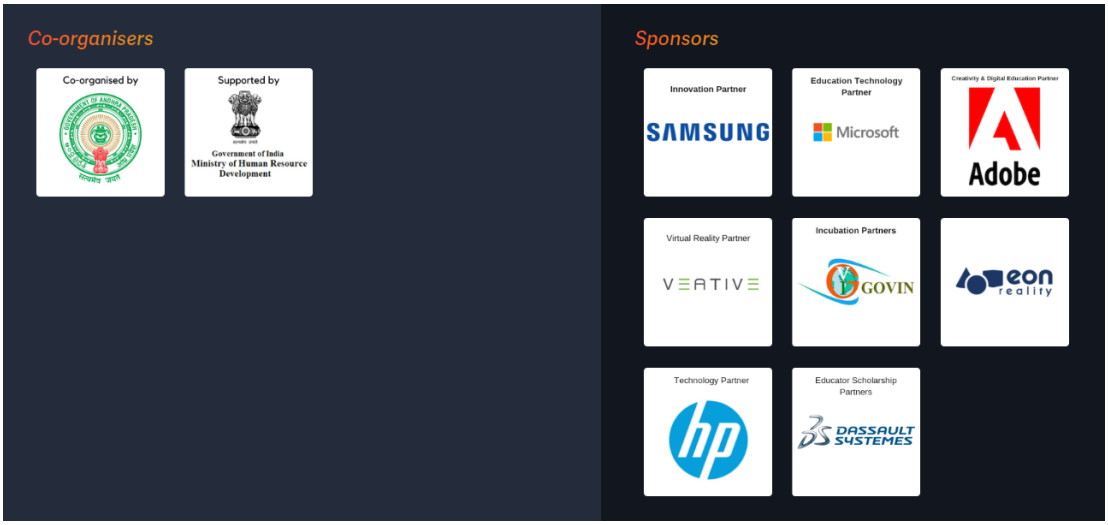
Key Highlights of TECH 2018:

S No.	Key Highlight	Details
1	Overall Conference Theme	The role of games and digital learning in enabling a shift from "transmissive pedagogies" to "transformative pedagogies" to create peaceful and sustainable societies
2	Sub-themes	• Theme 1: Transformative Gaming and Digital Pedagogies for SEL • Theme 2: Beyond Four Walls of the Classroom • Theme 3: Transformative Gaming and Digital Pedagogies for STEM+ • Theme 4: Artificial Intelligence and the Future of Education • Theme 5: The Institutional Framework for Application of Digital Technologies in Education: Towards Surveillance or Collaborative Intelligence?
3	Key Outputs	• Adoption of the Vizag Declaration calling for Guidelines on Digital Learning by the Minister of Human Resource Development, State of Andhra Pradesh • Announcement of the MyDream Project – A UNESCO MGIEP – Navodaya Vidyalaya Samiti – Samsung Collaboration • Launch of Samsung Smart Classes for Andhra Pradesh • Design University for Intelligent Global Hub for Digital Pedagogies by Rubika • Winners of the Games for Sustainable Development Hackathon Challenge – by Unity, HP, APITA, Andhra Pradesh Innovation Society and UNESCO MGIEP • Skilling Programme on Creative digital technologies for Andhra Pradesh by Adobe • Launch of the first global universal screening app for Dyslexia: DALI • Launch of Collective Human Intelligence (CHI), UNESCO MGIEP's indigenously developed artificial intelligence learning platform
4	Number of Delegates	1,000+ registered participants on a daily basis over 3 days
5	Delegate Profiles	Teachers, educators, school students, policymakers, youth, learners, academics, ed-tech organisations, game developers, digital education experts, Artificial Intelligence experts, data ethics experts, amongst others
6	Countries represented	50+ countries represented
7	Number of Speakers (Keynote)	7 Keynote Speakers: • Jessica Lindl, Global Head of Education at Unity Technologies • Dan Shefet, Lawyer, Paris Court of Appeal (France) • Peter Vesterbacka, Co-founder at Lightneer, Fun Academy. Formerly Mighty Eagle at Angry Birds • Gregoire Borst, Professor of Developmental Psychology and Cognitive Neuroscience of Education, LaPsyDE • Kenneth R. Pugh, President and Director of Research, Haskins Laboratories • Geoffrey Morson, Lawyer
8	Number of Speakers (Catalytic)	50+ Catalytic Speakers
9	Number of presenters and number of presenter sessions	100+ presenters 50+ presenter sessions

Our Partners



Knowledge Partners

EdTech Partners

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Key Highlights TECH 2018

7 pre-conference workshops

High Level Policy Forum with official representation from 10 countries

DALI app launch during the Opening Ceremony at TECH 2018

CHI platform launch during the Opening Ceremony at TECH 2018

Announcements / Memorandums of Understanding during the Opening Ceremony at TECH 2018

Learning Zone

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Key Highlights TECH 2018

Dr. N Sarvana Kumar – Indian Representation of MGIEP's Nodal Ministry at TECH 2018

Mr. JS Rajput – Indian Representation of MGIEP's Nodal Ministry at TECH 2018

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Key Highlights TECH 2018

Disruptors Panel on Artificial Intelligence in Education: WHO Owns and WHO Manages

Dr. Anantha Duraiappah's TECH talk

7 Keynote Sessions @ TECH 2018

11 Catalytic Sessions @ TECH 2018

50+ Presenter sessions by almost 150 presenters across 3 days

Adoption of the Vizag Declaration calling for Guidelines for Digital Learning

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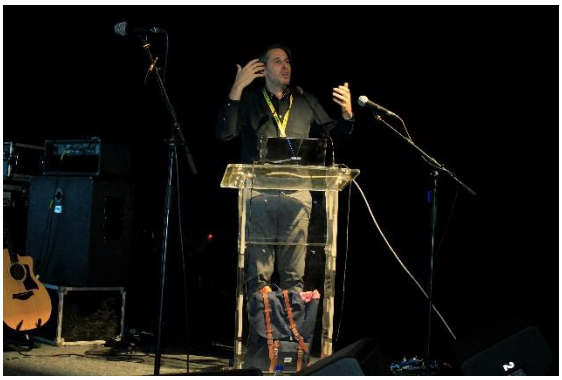
Key Highlights TECH 2018



First Keynote @ the Park

Music by the Sea – marking the opening of TECH

Cultural Performance

Tweet Cafe

Catch Box Questions

Photo-Op Wall

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UNESCO MGIEP supports 25 teachers from 6 countries to attend TECH 2018

UNESCO MGIEP brought together more than 25 teachers from Afghanistan, Bhutan, Bangladesh, Malaysia, Sri Lanka and India to attend TECH 2018. The teachers were exclusively introduced to MGIEP's flagship programmes on technology-oriented approaches towards socio-emotional learning. This was the first, small step towards Institute's endeavour to form a community of teachers who are trained in digital pedagogies for social and emotional learning. The teachers were exclusively introduced to UNESCO MGIEP's Libre and DICE (Digital Intercultural Exchange) programmes.

Going forward, a cohort of these teachers will be part of the UNESCO MGIEP's Libre and DICE projects and continue their support and participation in MGIEP's journey to develop a sustainable and peaceful society.

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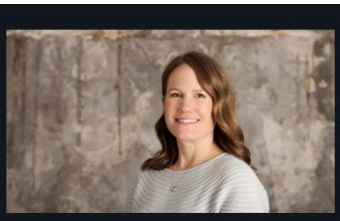
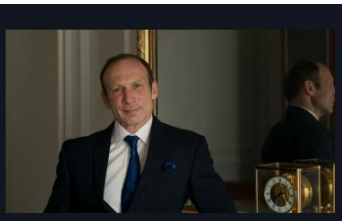
Keynote Speakers



Jessica Lindl

Global Head of Education at Unity Technologies

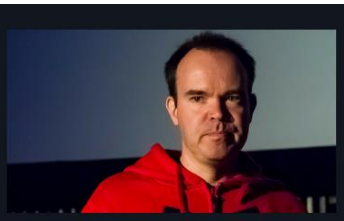
Jessica has spent over 15 years overseeing companies and teams that design, develop, market and distribute high impact learning offerings to the global education market.



Dan Shefet

Lawyer at the Paris Court of Appeal (France)

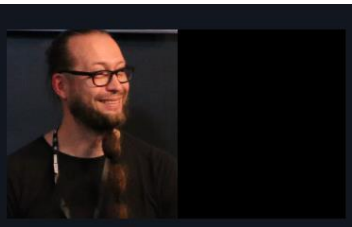
Dan Shefet is a frequent speaker at international conferences and academic venues on IT Law, Data Privacy Content Regulation and Human Rights on the Internet.



Peter Vesterbacka

Co-founder at Lightneer, Fun Academy. Formerly Mighty Eagle at Angry Birds

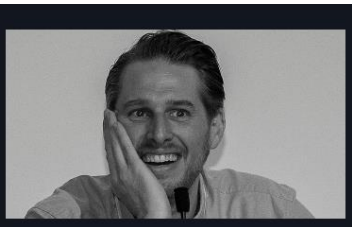
Peter Vesterbacka served as the Chief Marketing Officer and Mighty Eagle of Rovio Entertainment Oy. Mr. Vesterbacka manages the Rovio Entertainment's business strategy, including expanding Angry Birds into broader entertainment franchise.



Harri Ketamo

Founder & Chairman, Headai

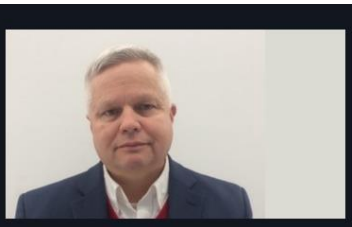
Harri Ketamo, Ph.D. is an entrepreneur with 20 years experience in learning sciences and artificial intelligence as science and as business. Currently he is founder & chairman of Headai, a jobTech company solving global talent mismatch and workforce re-skilling challenges with AI.



Gregoire Borst

Professor of Developmental Psychology and Cognitive Neuroscience of Education, LaPsyDE

Gregoire is a full Professor of Developmental Psychology and Cognitive Neuroscience of Education at the University Paris Descartes.



Kenneth R. Pugh

President and Director of Research, Haskins Laboratories

Dr. Pugh is the President and Director of Research at Haskins Laboratories, a Yale University and University of Connecticut affiliated inter-disciplinary institute, dedicated to the investigation of the biological bases of language.

Geoffrey Morson

Lawyer

Geoffrey Morson is a US lawyer with more than 45 years of international experience (Harvard Law School JD, 1969). Member of the Bar in California and New York, Geoffrey has substantial experience regarding US copyright law and international IP litigation. Formerly with Norton Rose Fulbright (in Texas, USA, and London, England).

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Disruptors Panel Speakers

Artificial Intelligence in Education: Who Owns and Who Manages

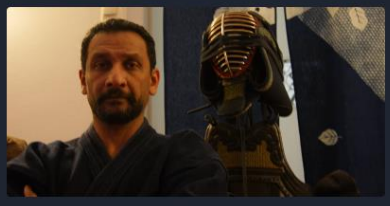
With the explosion of digital platforms, where much of the discussion has focussed on the ownership of content, the discussion on data generated by AI on student behaviour has not yet been discussed much. In most cases this ownership resides with the platform. As the generation of such data grows, its use for improving learning will be enormous and the access of companies and research to this information will be critical. Should the ownership of such data be managed or not? Should it reside in the realm of management by companies, the sovereign state or multilateral agencies?

Aarti Shahani

NPR correspondent

Dan Shefet

Lawyer at the Paris Court of Appeal (France)



Anantha K. Duraiappah | PhD

Director, UNESCO MGIEP

Shailesh Kumar

Chief Data Scientist, Jio

Geoffrey Morson

Lawyer

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TECH Talk:
'Education: From Predators to Nurturers'

"The digital revolution has opened up many doors"

DR. ANANTHA DURAIAPPAH, Director, UNESCO MGIEP

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Conference Themes

Theme 1: Transformative Gaming and Digital Pedagogies for SEL

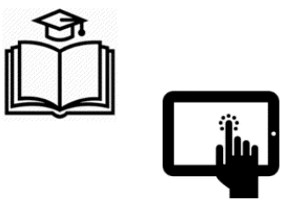
The need for individuals, resilient and adaptive to rapidly changing environments, is the order of the day. The need for building not only intellectual intelligence but also emotional intelligence has never been greater. Recent research increasingly demonstrates what supporters of SEL have long advocated that students need to be "socially aware" and "emotionally-connected" for them to learn and for societies to flourish. In recent years, it has been demonstrated that SEL skills such as empathy, mindfulness and compassion can be explicitly taught and learned. Indeed, research suggests that SEL skills impact positively both academic performance and behavioural outcomes. UNESCO MGIEP promotes the idea that building both emotional and intellectual intelligence is key to achieving peaceful and sustainable societies and this can be delivered to all learners through the use of innovative technologies.

Theme 2: Beyond Four Walls of the Classroom

Rather than embracing everything digital, participants are invited to explore how digital technologies can overcome constraints imposed by highly institutionalised features of modern schooling, including assessment of learning as memory of textbook knowledge. Experts and practitioners of education for sustainable development (ESD), global citizenship education (GCED), global learning, peace education and education in general are invited to examine, together with ed-tech stakeholders, the role of digital technologies in whole-school approaches and other holistic efforts to build a culture of peace and sustainability at the school and community levels.

Technologies can be used to:

"mediate or supplement relationship between teachers and learners"



"present and assess learnable content"

"provide spaces where students do their work"

"mediate peer-to-peer interactions"

Source: Created based on the conceptualisation of e-learning by Bill Cope and Mary Kalantzis, *e-Learning Ecologies: Principles for New Learning and Assessment,* Routledge, 2017, p.1.

Conference Themes

Theme 3: Transformative Gaming and Digital Pedagogies for STEM+

Core subjects such as Mathematics, Science, and Languages often occupy a privileged place in the school curriculum in terms of time allocation and mandatory and examinable status. These subjects are usually taken seriously by students, parents, teachers and policymakers alike as they are assumed to enhance economic competitiveness—both at the individual and national levels. In fact, many digital learning management systems focus on delivering content on Mathematics, Science and English. Given the status of these subjects, it is important to understand: What do transformative digital pedagogies for STEM+ subjects look like? How can digital technologies contribute to building problem solving and creative, critical and systemic thinking skills? How can they facilitate issue-based or thematic approaches in the teaching of core subjects? How can they combine learning of the content prescribed by the curriculum with creative expressions? How can new, innovative and fun ways be used through games and digital learning for assessment of knowledge?

Theme 4: Artificial Intelligence and the Future of Education

Artificial Intelligence (AI) has caught the imagination of the world and has been gaining popularity in the business sector. To date, the use of AI in education has been limited and at times contested; most arguments against it centre on how it will make teachers redundant and learning more automated than it is currently. Rather than replacing teachers and making learning impersonal, AI could take learning to a completely new level. It could instantly generate an astounding amount of information, curate supplementary learning resources to meet individual student interests and needs, provide teachers with a virtual teaching assistant, and allow students to connect with peer learners as well as a virtual peer or tutor wherever and whenever needed. In the classroom, this could increase valuable time for more teacher-student and student-student interaction and more engaging and immersive learning experiences. The collective wisdom of teachers and students could be garnered to expand the realm of possibilities for education. What are the implications of AI for the future of education? UNESCO MGIEP embraces the need for education to prepare learners for the world profoundly changed by new frontiers in AI.

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Conference Themes

Theme 5: The Institutional Framework for Application of Digital Technologies in Education: Towards Surveillance or Collaborative Intelligence?

Learning Analytics, enabled by increasingly sophisticated data collection and information retrieval techniques, holds a great promise for optimising learning. At the same time, it raises concerns about privacy and data protection that need to be addressed by normative frameworks and policy guidelines. A major challenge concerns the ethical implications of data surveillance. Digital technologies are making personalised learning more practical and opening up a myriad of pedagogical possibilities. They are, however, also enhancing the capacity of governments, companies and individuals to undertake surveillance, which may violate or abuse human rights, in particular the right to privacy. In addition to privacy, data protection and surveillance issues, the use of digital media to transform information to knowledge and then to intelligence also raises issues related to intellectual property rights and the ownership of intelligence. The question of what constitutes a private good and a public social good is critical in determining how education systems evolve in the future.

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Catalytic Session Themes & Speakers

Catalytic Session 1 - Can social and emotional learning be taught by digital games played on machines?

Recent neuroscience research has brought social and emotional learning to the centre stage of education. While education systems struggle to find ways to bring these into classrooms, we propose digital games as uniquely posed to build such competencies. Using the power of immersive and experiential experiences provided by digital games, speakers will discuss how empathy, pro-social behavior and citizenship can be successfully used to build social and emotional skills in children.

Session Speakers:

- **Nandini Chatterjee Singh** | PhD Programme Specialist - Science of Learning
- **Shawn Young**, Co-founder & CEO, Classcraft
- **Kelli Dunlap**, Manager, Mental Health Research and Design, iThrive Games
- **Susanna Pollack**, President - Games for Change
- **Matthew Farber**, Assistant Professor in Technology, Innovation, and Pedagogy, University of Northern Colorado

Catalytic Session 2 - Reimagining Education for the Future: Taking the Planetary Imperatives of Sustainability and the Digital Revolution Seriously

If we look back from our vantage point in 2030, when we successfully met the SDGs, what will we see as the key transformative changes that formal education underwent? What sorts of transformative shifts (in terms of goals, core competencies, curriculum, pedagogy etc.) were needed to secure meeting of the 2030 Agenda for Sustainable Development and, more generally, to prepare young people to play meaningful roles in what became a new global aspiration to advance well-being for all? What was the role of digital technology in enabling such transformative shifts? How did we learn to teach key sustainability issues such as climate change and biodiversity in ways that empowered young people to take action? How did schools prepare young people for a dynamic, climate-changing world?

Session Speakers:

- **Harold Glasser,** Professor, Environmental and Sustainability Studies & Developer of 'Catch'
- **Mary Kalantzis,** Co-author, New Learning: Elements of a Science of Education
- **Mila Thomas Fuller,** President, Board of Directors, International Society for Technology in Education (ISTE)
- **Gaëll Mainguy,** Director of Development and International Relations, CRI
- **Bill Cope,** The Department of Education Policy, Organization & Leadership, University of Illinois

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Catalytic Sessions 1 & 2

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Catalytic Session Themes & Speakers

Catalytic Session 3- Digital Games Good or Bad? Debating the WHO release

In June 2018, gaming was included as a disorder by the International Classification of Diseases released by WHO. If this is to be taken at face value, it is time to also discuss how peer pressure imposed by society is leading to anxiety and depression among students. Experts from gaming, psychology, neuroscience, education, and policy will discuss and debate the myths and realities of digital games and provide guidelines on how moderation is key to well-being, be it stress and expectation at home or gaming in the classroom.

Session Speakers:

- **Avery Rueb,** Cofounder, Affordance Studio
- **François Boucher-Genesse,** Gameplay Designer
- **Shawn Young,** Co-founder & CEO, Classcraft
- **Santeri Koivisto,** CEO and co-founder, TeacherGaming
- **Kelli Dunlap**, Manager, Mental Health Research and Design, iThrive Games

Catalytic Session 4 - AI For Education - Teachers vs. Teaching Machines: Symbiosis or Competition

This is an extremely exciting time when Artificial Intelligence & Machine Learning are starting to alter the education paradigm in a significant way. What does this change exactly mean from the Teachers' perspective is what we want to explore in depth. While most experts still believe the critical presence of teachers is irreplaceable, where does the technology (especially AI) in a teaching role fit in is a question that the panelists will try to put in perspective. The relevant questions that gain focus are as follows: - What role would AI play in EdTech? - Which teachers' pain-points is AI well suited to address? - How will the hybrid model play out? - Should teachers fear or welcome AI based EdTech?

Session Speakers:

- **Anantha K. Duraiappah |** PhD, Director, UNESCO MGIEP
- **Shailesh Kumar,** Chief Data Scientist, Jio
- **Srujana Merugu,** Machine Learning Researcher and Consultant
- **Sridhar Chimalakonda,** Assistant Professor, Department of Computer Science & Engineering, IIT Tirupati
- **Jessica Lindl,** Global Head of Education at Unity Technologies

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Catalytic Sessions 3 & 4

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Catalytic Session Themes & Speakers

Catalytic Session 5 - Managing the Commons, Institutional Frameworks for equity and efficiency in education

Education in many ways can be considered as a commons that exhibits both the properties of private and public good characteristics. This requires some novel institutional framework that manages this commons to ensure quality and equitable access to education while maintaining economic efficiency. What could this model be?

Session Speakers:

- **Aarti Shahani,** NPR correspondent
- **Dan Shefet,** Lawyer at the Paris Court of Appeal (France)
- **Bijay Kumar Sahu,** Head - WIP-TISC & IPFC, NRDC, Govt of India
- **Anantha K. Duraiappah** | PhD, Director, UNESCO MGIEP
- **Gaurav Kumar,** Head - Strategy for Special Initiatives, Jio

Catalytic Session 6 - Transformative Digital Pedagogies for Global Citizenship: Multimodal Storytelling and Design Thinking

In our globalized and interconnected world, digital technologies are opening up new possibilities for creative expressions and meaning making. This catalytic panel explores imaging arts, 360-degree video-making and viewing, social media, and digital storytelling and dialogues as avenues for students across the globe to interact with one another and experience the world in new ways. In what ways can digital technologies enable students to develop stories aimed at transforming themselves, their communities and the broader world?

Session Speakers:

- **Garima Babbar,** Head Programs, South Asia (Education and Skill Development), Adobe Inc
- **Manoj K. Singh** | PhD, Senior Vice President-Global Development & Partnerships, RUBIKA Group
- **John McIntosh,** Vice Dean, School of Creative Arts, ShanghaiTech University
- **Kevin M Leander,** Associate Professor of Language, Literacy, and Culture, Peabody College of Vanderbilt University (USA)
- **Aditi Pathak,** Digital Intercultural Exchange Specialist

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Catalytic Sessions 5 & 6

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Catalytic Session Themes & Speakers

Catalytic Session 7 - Harnessing the power of digital games to unify social-emotional learning with math and science

The human brain is rational, social and emotional. Yet, education systems so far have focused only on building rational skills. To build global citizens, education systems need to nurture rational, social and emotional competencies. This session will discuss the unique role played by digital game play to bring STEM and SEL to the classroom and highlight how embedding SEL improves STEM skills.

Session Speakers:

- **Chris 'Wombat' Crowell,** Game Designer
- **Matthew Farber,** Assistant Professor in Technology, Innovation, and Pedagogy, University of Northern Colorado
- **Sabina Jain,** Co-founder, Callystro Infotech
- **François Boucher-Genesse,** Gameplay Designer
- **Cathleen Norris,** Professor & Chairperson, Department of Learning Technologies, University of North Texas

Catalytic Session 8 - AI For Education - Personalization at Scale: How AI is Poised to Disrupt Education

The biggest advantage of digital pedagogy is the promise it offers to understand student-learning patterns. The digital transactions that a learner undertakes leave a digital footprint that can be used to understand both individual learning that can be used for intelligent personalized learning as well as tutoring. Artificial Intelligence is being touted as our best bet to achieving this. This session will try to address the following questions: - What role will AI play in personalized education? - How will it benefit teachers do their job better? - What gaps do we have currently that prevent us from realizing this? - What are the potential benefits of personalized learning? - What policy or curriculum changes we might need to realize this? - Are there privacy concerns we should worry about?

Session Speakers:

- **Harri Ketamo,** Founder & Chairman, Headai
- **Boris Yarmakov,** CEO, Russian National Association for Technology in Education
- **Kalidas Yeturu,** Assistant Professor, Department of Computer Science and Engineering, Indian Institute of Technology Tirupati
- **Avik Sarkar,** Officer on Special Duty, NITI Aayog
- **Vinnie Jauhari**, Director, Education Advocacy, Microsoft

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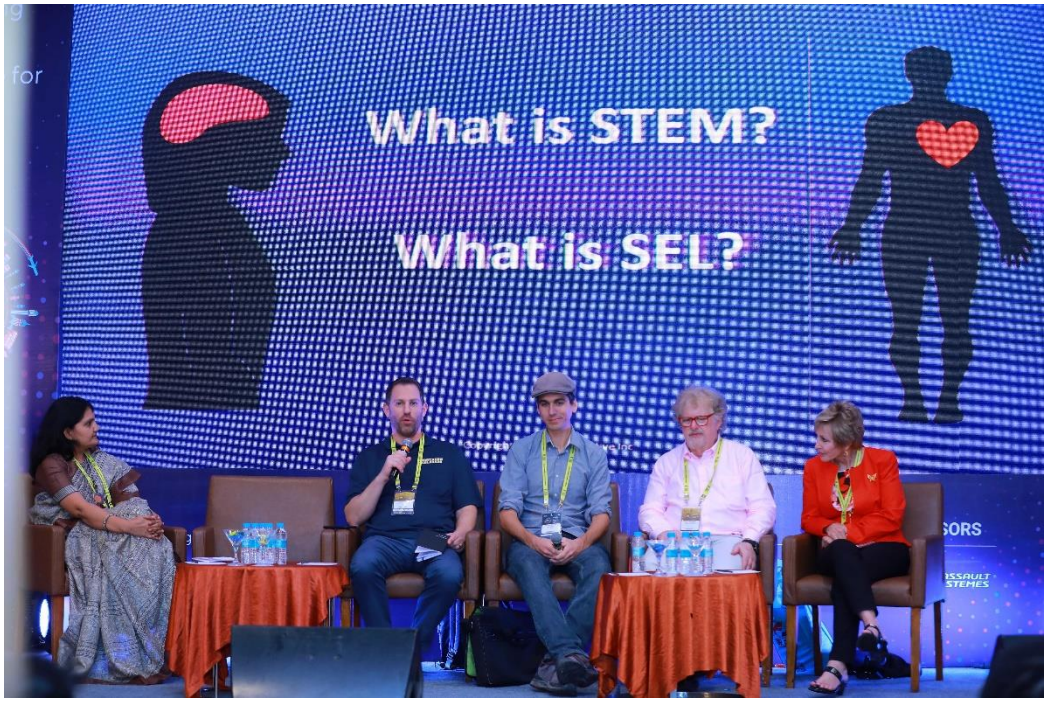
Catalytic Sessions 7 & 8



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Catalytic Session Themes & Speakers

Catalytic Session 9 - Can games replace textbooks and exams?

Is there a divide between the design of digital learning tools and the needs of a classroom? Where do digital games stand in bridging that divide? Digital games are beginning to come up as highly effective learning and even assessment tools. They provide an engaging, immersive and multi-modal learning environment placing the learner at the centre. What roles can digital games play in the teaching-learning process? Can they replace textbooks and exams?

Session Speakers:

- **Elliot Soloway**, Professor, Department of Computer Science & Engineering, University of Michigan
- **Cathleen Norris**, Professor & Chairperson, Department of Learning Technologies, University of North Texas
- **Santeri Koivisto**, CEO and co-founder, TeacherGaming
- **Yasmin Kafai**, Professor of Learning Sciences, University of Pennsylvania
- **Caroline Julien**, President and Founder, CREO
- **Dhiraj Jeyanandarajan**, Founder & Chief Executive Officer, Qneuro

Catalytic Session 10: Intelligent Global Hub for Digital Pedagogies (IGHDP)

A strategic project between the government of Andhra Pradesh and UNESCO MGIEP; the IGHDP envisions a collaboration between multi stakeholders that includes intergovernmental organisations, government institutions, research centres, education technology companies, game designers, design experts, educators and entrepreneurs to respond to the ever growing demand of certified, quality digital learning resources. The hub will also respond to the need for capacity building for digital instruction and cross sectoral skilling requirements. The research evidence from the Centre of Excellence in the Science of learning at the hub will provide guidance in the creation of pedagogical models based on evidence for how the brain can learn efficiently providing inputs to the incubators and companies in planning, designing and developing games and digital learning products. What will it take to make such an ecosystem feasible and operable? What are the key challenges that might stand in its way to success?

Session Speakers:

- **Vinnie Jauhari,** Director, Education Advocacy, Microsoft
- **Deepak Bhardwaj**, VP Strategy – Samsung
- **Sri Aditya Nath Das**, Special Chief Secretary to Government, Department of School and Higher Education, Government of Andhra Pradesh
- **Anantha K. Duraiappah** | PhD, Director, UNESCO MGIEP
- **Vipin Goyal**, Director, Strategy & Operations, Veative
- **Sridhar Chimalakonda**, Assistant Professor, Department of Computer Science & Engineering, IIT Tirupati
- **Manoj K. Singh** | PhD, Senior Vice President-Global Development & Partnerships, RUBIKA Group
- **Anand Govindaluri**, Founder & CEO, Govin Capital, Singapore & Startup Accelerator India Pvt Ltd
- **Anupam Jalote**, CEO, iCreate

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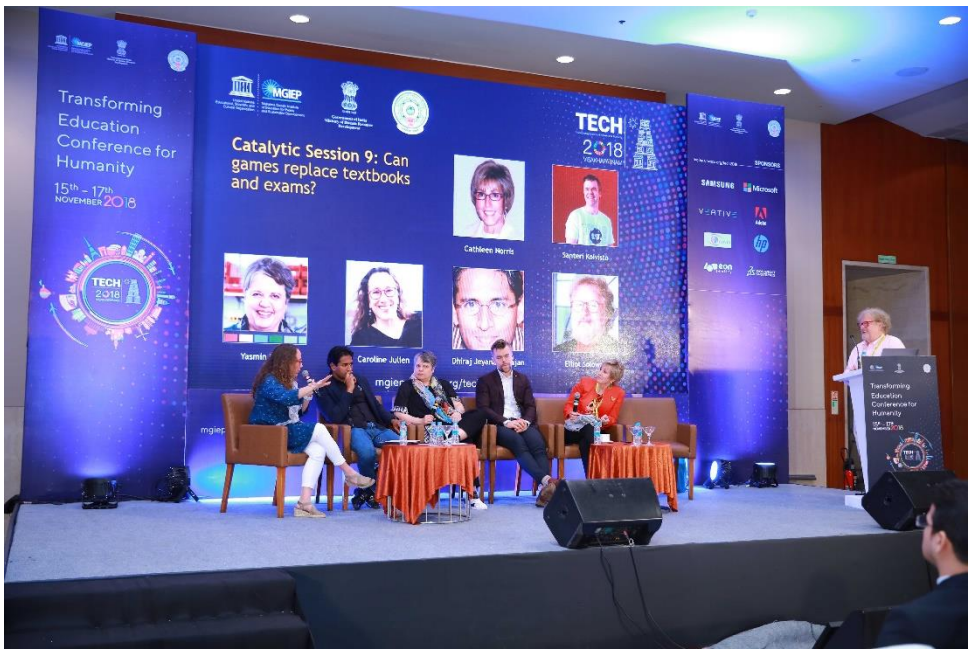
Ministry of Human Resource Development

Catalytic Sessions 9 & 10



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Catalytic Session Themes & Speakers

Catalytic Session 11: Guidelines: What, Why, How?

With the education market flooded with learning games and other forms of digital learning tools, so comes the problem of quality control and suitability. Teachers and parents often find it hard to make a decision about which learning game or digital learning product is appropriate for their children. There is a lack of a credible process validating the scientific rigor applied in measuring the extent to which it produces a desirable learning outcome. Do products meet the learning outcomes for learners and are they pitched to the appropriate groups? Is there a continuity of the product for the learning that aligns well with school curriculums? The panelists discuss the vision of having in place a set of guidelines to address these issues.

Session Speakers:

- **Anantha K. Duraiappah |** PhD, Director, UNESCO MGIEP
- **Zigor Hernandorena,** Senior Project Manager – Fun Learning Department, Ubisoft
- **Prof V. Valli Kumari,** Professor, Andhra University
- **Susanna Pollack,** President - Games for Change
- **Avery Rueb**, Cofounder, Affordance Studio

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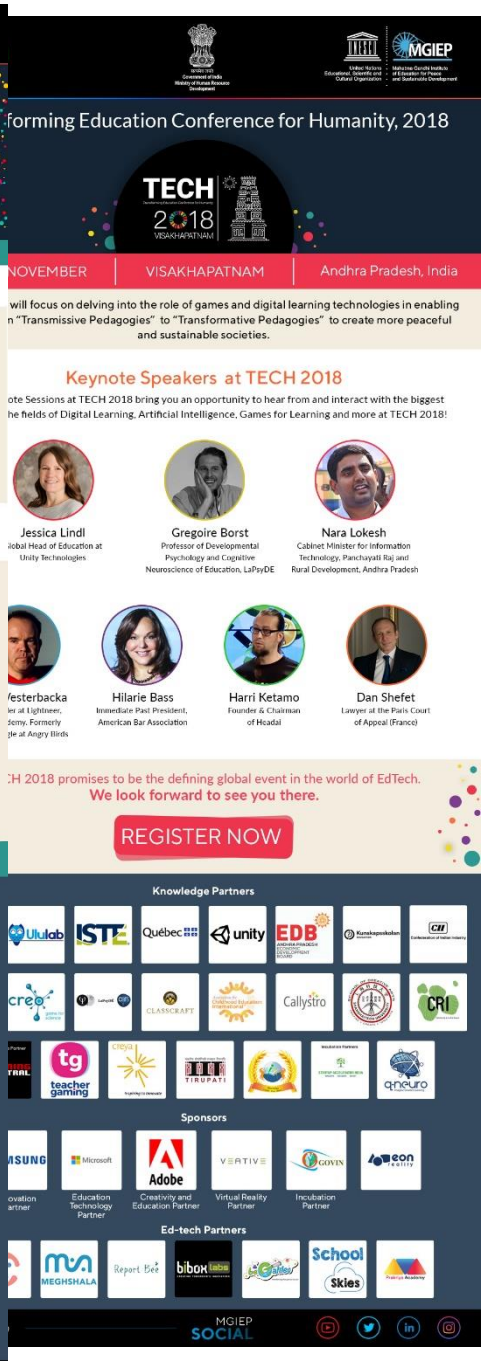
Promotion: Email Marketing



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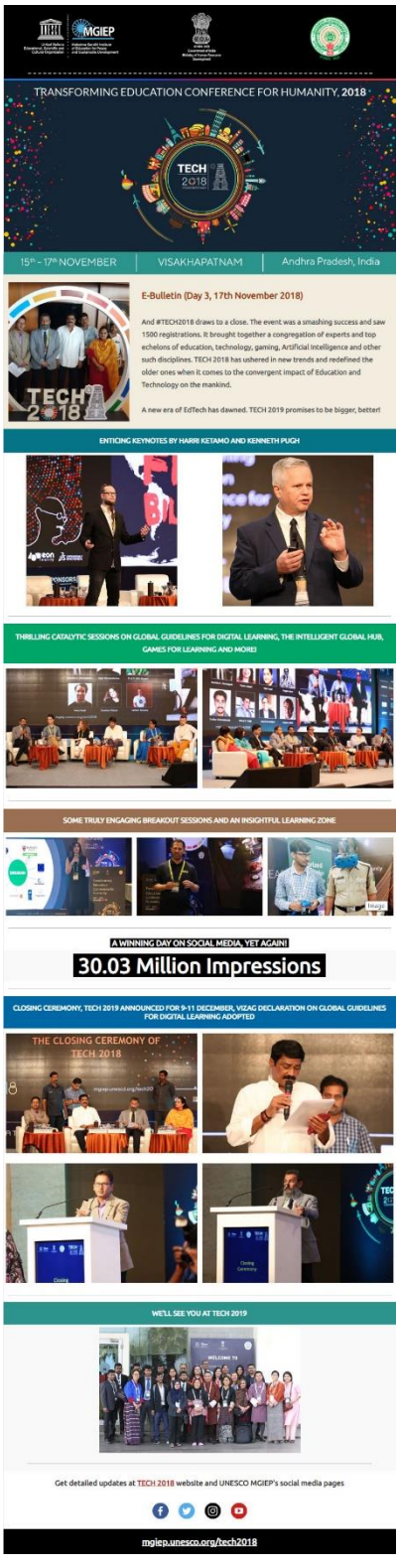
Promotion: Daily E-bulletin during TECH 2018



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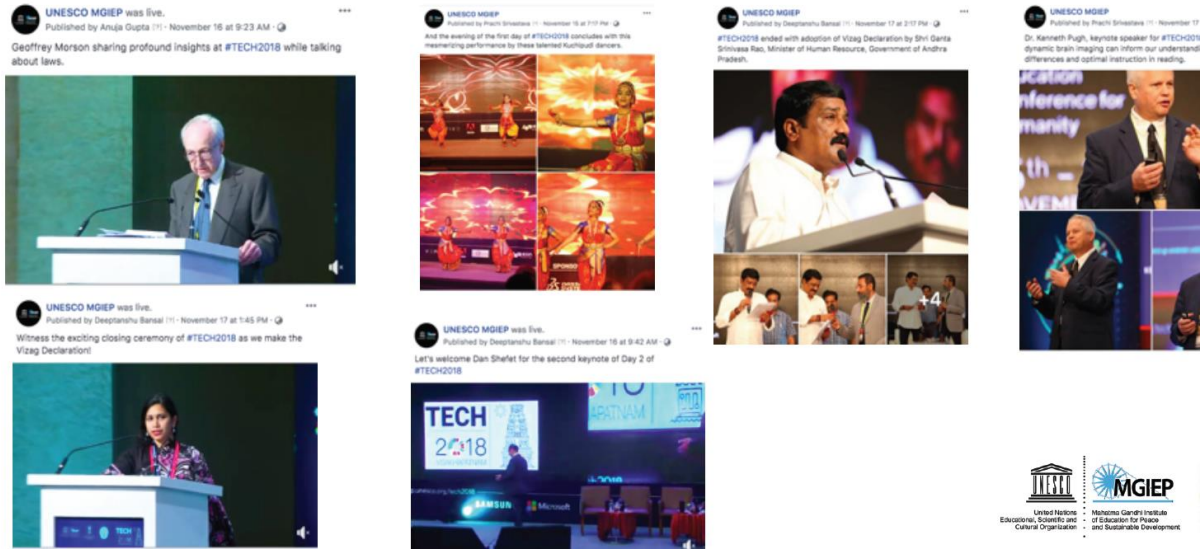
Promotion: Social Media

No. of impressions received across all platforms

74,869,700

FACEBOOK LIVE

#TECH2018



TECH Transforming Education Conference for Humanity 2018 VISAKHAPATNAM

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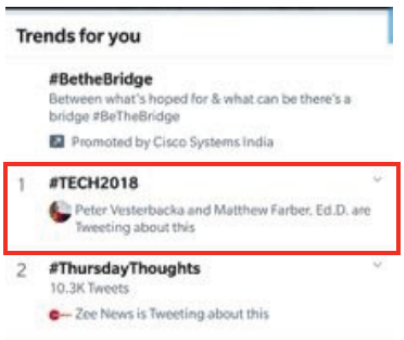
Promotion: Social Media

TRENDING HASHTAGS

#TECH2018



#TECH2018 trended
at the time of the event for **3 days** regionally.

SUPPORT FROM THE GOVERNMENT

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Promotion: Social Media

SUPPORT FROM THE SPEAKERS

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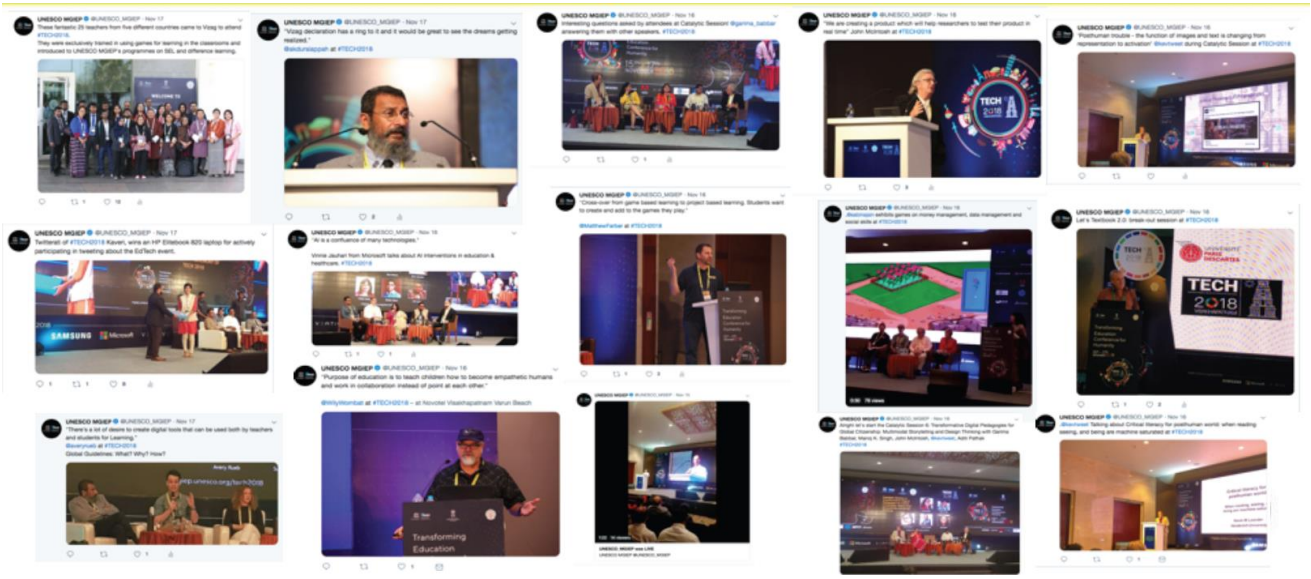
Promotion: Social Media



Speaker Interviews & #HumansOfTECH

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Promotion: Videos & Event Photographs

Pre-event Video

- https://www.youtube.com/watch?v=RBgxwaUpIgA

Some on event videos (live streamed recordings)

- Geoffrey Morson's Keynote @ TECH 2018
- Dan Shefet's Keynote @ TECH 2018
- Disruptors Panel
- Catalytic Session 5 @ TECH 2018

Event photographs

- Day 1 @ TECH 2018
- Day 2 @ TECH 2018
- Day 3 @ TECH 2018

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Mobile App – TECH 2018

750+ DOWNLOADS

25,000+ SESSIONS

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Promotion: Media Coverage

Official Post event Article:
Adoption of the Vizag Declaration on Guidelines for Digital Learning as TECH 2018 draws to a close

Related articles:
Highly educational pre-conference workshops to kick-off TECH 2018
A Call for Guidelines on Digital Learning at the High Level Policy Forum

External News: Key Coverage:

High Level Policy Forum
ANI News
Business Standard
NDTV
Yahoo
Sify
India
HTSyndication
FreePressJournal
VarIndia

Opening Ceremony
The Times of India
Business Standard
India.com
New Indian Express
NDTV
The Hindu Business Line
The Indian Express
The Hindu
TECH in News
News Buzz Info

Closing Ceremony
Education Times
Daily Hunt
The Hans India

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Ministry of Human Resource Development

Media Coverage

Andhra Pradesh CM Naidu highlights efforts to promote digital learning

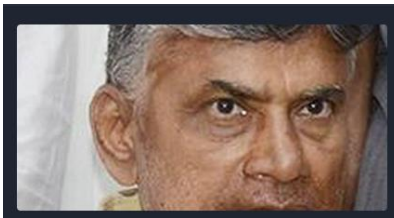
Devdiscourse, November 15: Addressing delegates at UNESCO-MGIEP's Tech 2018 conference here, Naidu said the government has established 5,000 digital classrooms and 4,000 virtual classrooms in the state and the number would be increased soon

UNESCO MGIEP conducts a high-level policy forum as a prelude to TECH 2018

ANI, November 15: The distinguished group gathered to discuss the commencement of a dialogue on the development of guidelines for digital learning resources. The discussion brought together policy makers, domain experts from AI, education, neuroscience, developmental psychology, data scientists and legal experts; digital instruction designers, game designers; industry representatives from education technology companies and Ed. tech startups.

Intelligent global hub to be set up in Vizag

The New Indian Express, November 16: Speaking after inaugurating the second edition of a three-day TECH-2018 here, the Chief Minister said 50 acres of land would be allotted for the gaming university.



I-hub coming up in Visakhapatnam: AP CM

The Hindu Business Line, November 15: Digital education should be encouraged and must be taught to students in a fun-filled atmosphere and this can be done by taking boredom and drudgery out of conventional teaching methods, according to Andhra Pradesh Chief Minister N. Chandrababu Naidu.

AP govt to set up I-Hub in Vizag to promote digital learning

Press Trust of India, November 15: Andhra Pradesh Chief Minister N Chandrababu Naidu Thursday said the state government has accorded highest priority for education, particularly digital learning, to make it stress-free.

UNESCO MGIEP and Andhra govt launch second edition of 'Tech 2018' in Vishakhapatnam

The Indian Express, November 15: The three-day education conference was inaugurated by AP CM N Chandrababu Naidu who said that he wants to make technological advancements in education a reality.

TECH AND HOW

The New Indian Express, Monday, November 12, 2018: The second of five great TECHs to be conducted over a period of five years is a few days away. Seema Rajpalgives you the lowdown about what you can expect from the conclave.

En india Conferencia Transformando la Educación para la Humanidad

Nueva Delhi, 3 nov (PL) La Conferencia Transformando la Educación para la Humanidad (TECH 2018) mostrará próximamente en la ciudad india de Visakhapatnam el rol de los juegos y el aprendizaje digital en la creación de sociedades pacíficas y sostenibles.

EN INDIA CONFERENCIA TRANSFORMANDO LA EDUCACIÓN PARA LA HUMANIDAD

Asia/India/08 Noviembre 2018/Fuente: Prensa Latina La Conferencia Transformando la Educación para la Humanidad (TECH 2018) mostrará próximamente en la ciudad india de Visakhapatnam el rol de los juegos y el aprendizaje digital en la creación de sociedades pacíficas y sostenibles.

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Government of India
Ministry of Human Resource Development

Media Coverage

Dam politics

Vijaya Sai Reddy says TD is doing drama, YSR had laid foundation stone for Sujala Sravanthi in 2009

State

DECCAN CHRONICLE FRIDAY | 16 NOVEMBER 2018 | VISA

Vizag declaration to set new bar in education

Need to reduce school curriculum, says Union minister

DC CORRESPONDENT
VISAKHAPATNAM, NOV. 15

The declarations made in the International Conference on Transforming Education Conference on Humanity in Vizag city today by UNESCO's MGIEP will be the basis for the development of education technology guidelines on the design and implementation of digital learning products.

Joint secretary to the HRD ministry Dr N. Saravana Kumar said the Vizag declaration calls for UNESCO MGIEP to initiate a process to develop the guidelines for digital learning that can be submitted to the 2019 UNESCO General Conference in Paris.

Union human resource development minister Prakash Javadekar through a video message at the inaugural of the international conference (TECH-2018), said education should have comprehensive knowledge, physical education and, should be enriched with experiential learning as well as analytical abilities.

Mr Javadkar said that due to an overloaded syllabus, most of the children felt that education was nothing but an overburden and that there was no fun in learning. "There is a need to reduce the curriculum. Union government will reduce the school syllabus (NCERT) by half from next year" he added.

The minister has also sought suggestions from the participants of TECH-2018.

Mr Javadekar said he could not make it to the conference because of his prior engagements in the ensuing Rajasthan elections. "The Union government will be introducing operation Digital Board from the next academic year. 10,000 classrooms in all states will get digital boards for effective digital learning," he added.

Delivering the inaugural address at TECH 2018, Chief Minister N Chandrababu Naidu said that education should be fun and not a punishment. Mr Naidu said that he was a strong believer in technology which brought transparency, accountability and speed in the administration. There was a need to streamline the education system using modern technology he said.

"Andhra Pradesh is rich in human resources which would be utilised to strengthen the education sector which in turn would be helpful for the future generations," he added.

Andhra Pradesh was the first to set up a rooftop corporation and content for several government departments were provided and put to use, the CM said.

He also said that the state was ready to take up content marketing in case anyone amongst the gathering had developed some useful content through technology

Chief Minister N. Chandrababu Naidu has a word with former president of Kyrgyzstan and UNESCO MGIEP board member Roza Otunbayeva at the inaugural session of Transforming Education for Humanity' (TEH-2018) conference at Novotel Hotel in — DECCAN CHRONICLE

Chief Minister N. Chandrababu Naidu said that education should be fun and not a punishment. Mr Naidu said he was a strong believer in technology which brought transparency, accountability and speed in the administration.

Delegates attend the opening of the Transforming Education for Humanity Conference in Visakhapatnam on Thursday. — DECCAN CHRONICLE

NCERT syllabus to be reduced, says Javdekar

DC CORRESPONDENT
VISAKHAPATNAM, NOV. 15

Chief Minister N. Chandrababu Naidu said that the AP Government will set up an iHub (the intelligent hub), a first-of-its-kind global research centre for scientific learning in Vizag city.

Welcoming the HRD minister, Mr Prakash Javdekar's statement that the NCERT syllabus will be reduced by half from the 2019 academic year is a bid to provide relief to school students, Mr Naidu said. "There should be a total change in curriculum and re-orientation of the education system was important. Virtual classrooms should be set up and integrated with field work. Life skills should also be imparted. And inter-personal relations should be improved for better learning in education."

Sources said that the government will provide a demand from the schools for trainees. Additionally, the educational institutions will also be able to procure learning products from the iHub.

Kodandaram temple EO c

DC CORRESPONDENT
VISAKHAPATNAM, NOV. 15

On coming to know that vague and false reports pertaining to temple affairs were submitted by the executive officer of Kodandaramaswamy temple in Nellore district, the Andhra Pradesh High Court on Thursday warned him not to do so further.

A division bench comprising Chief Justice Prabhakar Thottathil B. Radhakrishnan and Justice S.V. Bhatt was dealing with a petition by K. Sridhar Reddy, Nellore Reddy and two others from Nellore district, challenging the proceedings of the Andhra Pradesh government in allotting government land, including land belonging Sri Kodandarama-swamy temple, to IPPCO.

The bench, hailing from the Thirumala Tirupati Devasthanams (TTD), observed that it appeared that the government was controlling the affairs of the temples in the state.

Expressing anguish at the EO's act, the bench pulled him up asking him how he dared to produce a

Smugglers carr in devotees' att

DC CORRESPONDENT
NELLORE, NOV. 15

Officials of red sanders task force were baffled when they found some smugglers, transporting red sanders, in the guise of Lord Ayyappa's devotees between Yerpedu and Renigunta on Thursday.

A task force team, led by RSI Vijaya Narasimhulu, noticed the movement of these smugglers during a routine check in Krishnapuram forest area. The team got divided into small groups to nab the smugglers but the smugglers managed to give a skip after noticing the officials before they came anywhere near to them.

They left some sandalwood logs as well as the devotees' dress behind as they fled from the scene. There was an Ayyappa temple near to the site. Based on the dress, the task force officials believe that smugglers have chosen a new get up to carry out their illegal operations.

In another incident, a

...Admiral Amit Bose during a formal ...at the Naval Dockyard on Friday | EXPRESS

...trict | EXPRESS

...o offe ...orks

Quebec to help State in digital pedagogy

EXPRESS NEWS SERVICE
@ Visakhapatnam

CONSUL Director of Quebec Dominic Marcottee, who is leading a delegation of educators, designers and researchers from Quebec to the ongoing TECH 2018, said here on Friday that the international conference aims to showcase the role of games and digital learning in enabling a shift from 'transmissive pedagogies' to 'transformative pedagogies'.

He said that Quebec video game industry has international reputation. The province is known for its innovation and expertise. The industry is a comprehensive and diverse ecosystem made up of companies of all sizes. It handles production and development for all platforms: PC, console, mobile, online, augmented reality and video game competitions. Quebec's favourable tax environment and economic opportunities in related digital fields resulting in substantially lower operating costs, giving Quebec a competitive advantage, he said.

He said that they had invited Chief Minister N Chandrababu Naidu and CEO of AP Economic Development Board J Kishore Krishna to visit Quebec to explore opportunities and study the ecosystem. Dominic said that the CM had responded positively and shown interest in learning AI industry and electrification of transport projects in Quebec.

He said that Quebec had many internationally recognised training institutions in the fields of digital media design, animation, video game development and visual effects. There are 45 colleges and professional training courses, as well as 16 university courses that can lead to employment in the industry. It also has world-renowned research centres in digital arts.

He said representatives of 4 Quebec companies and 1 Quebec institute are taking part in discussions of various panels at the conference. He said that India's diverse and innovative economy makes it a prime partner for Quebec. He said both India and Quebec would benefit from business and partnership opportunities in the fields of trade, culture, science, technology and education. He said that India is the fourth largest trading partner in Asia and 10th largest in world. He said that it had signed an agreement with Maharashtra in 2010 to promote collaboration in economy, higher education, health and culture.

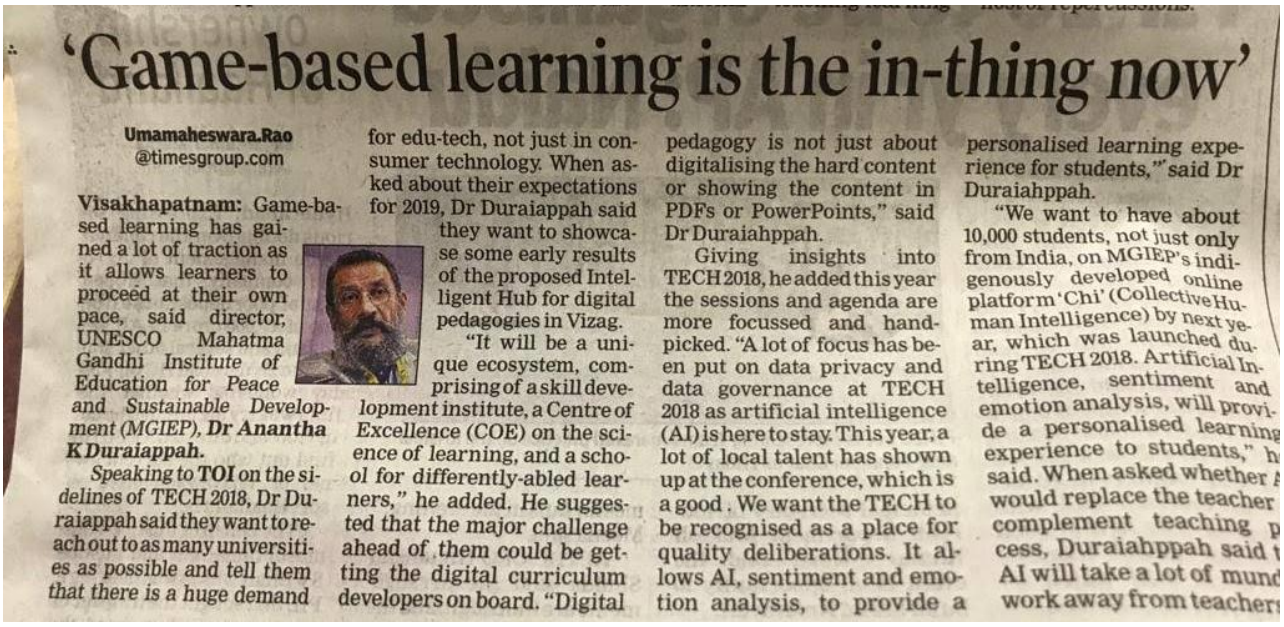
Dominic said that they are planning to set up a research centre at the proposed I-Hub in Visakhapatnam.

...stricted from 3 am to 11 a... NTR statue near KK B... Chepala Uppada on th... Road under the Bheemi... Sunday," said K Prabhi... ACP (Traffic), on Friday...

The Eastern Naval C... (ENC) in association wi... Tourism department a... Authority of Andhra P... hosting the Marathon w... to to bring Vizag as the... destination for the... across India and take ... thon as the best expe... the runners. Around 1... ple, including the nav... and several governmer... will be taking part in... 2018 which is going to ... ed in four categories. ... age Run (42.2 km) will

Sikhs to ho...

Visakhapatnam... celebrate bir... Guru Nan... Seetammadh... organise 'na... the occasion... president Sa... (Shahji) said t... start from ... pass throu... Complex, LI... Jagadamba Ju... Sin... Karachiw... Junction. Arc... will par...



'Game-based learning is the in-thing now'

Umamaheswara.Rao
@timesgroup.com

Visakhapatnam: Game-based learning has gained a lot of traction as it allows learners to proceed at their own pace, said director, UNESCO Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP), **Dr Anantha K Duraiappah.**

Speaking to **TOI** *on the sidelines of TECH 2018, Dr Duraiappah said they want to reach out to as many universities as possible and tell them that there is a huge demand for edu-tech, not just in consumer technology. When asked about their expectations for 2019, Dr Duraiappah said they want to showcase some early results of the proposed Intelligent Hub for digital pedagogies in Vizag.*

"It will be a unique ecosystem, comprising of a skill development institute, a Centre of Excellence (COE) on the science of learning, and a school for differently-abled learners," he added. He suggested that the major challenge ahead of them could be getting the digital curriculum developers on board. "Digital pedagogy is not just about digitalising the hard content or showing the content in PDFs or PowerPoints," said Dr Duraiahppah.

Giving insights into TECH 2018, he added this year the sessions and agenda are more focussed and handpicked. "A lot of focus has been put on data privacy and data governance at TECH 2018 as artificial intelligence (AI) is here to stay. This year, a lot of local talent has shown up at the conference, which is a good . We want the TECH to be recognised as a place for quality deliberations. It allows AI, sentiment and emotion analysis, to provide a personalised learning experience for students,'" said Dr Duraiahppah.

"We want to have about 10,000 students, not just only from India, on MGIEP's indigenously developed online platform 'Chi' (Collective Human Intelligence) by next year, which was launched during TECH 2018. Artificial Intelligence, sentiment and emotion analysis, will provide a personalised learning experience to students," h... said. When asked whether ... would replace the teacher ... complement teaching p... cess, Duraiahppah said ... AI will take a lot of mund... work away from teacher...

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Ministry of Human Resource Development

Media Coverage

Quebec keen on gaming, AI centres in AP

PNS ■ VISAKHAPATNAM

Canada's Quebec province, popular for its video game industry with most popular game like Assassin's Creed Odyssey and its knowledge in Artificial Intelligence (AI), may set up its centres in Andhra Pradesh. And to explore the collaborations, Quebec has invited Chief Minister of Andhra Pradesh N Chandrababu Naidu to visit their city and see the works there.

The delegates have also met the AP Economic Development Board to explore business opportunities.

The gaming industry in Quebec is developing best educational video games and the game developers from there are interested in working with local gamers too. This apart, Transportation Electrification, Maritime Strategy and Climate Change are also the sectors where Quebec is exploring business collaborations.

Delegates from Quebec are participating in the TECH-2018 being held in Vizag as knowledge partner. Their suggestions assume significance as Quebec education technology ecosystem is one of the most vibrant ones in the world. With over 65 companies and organizations developing unique solutions to the modern problems in education, Quebec is one of the great leaders in education innovation worldwide, said Director of Quebec Government Office in India.

Quebec is developing quality educational video games. Its developers are interested in working with local gaming talent

Interestingly, the Quebec video game sector welcomes a total of 450 graduates each year thanks to these training courses. It has 150 video game studios. If any MoU with AP is signed following CM Naidu's visit than gaming industry here may get the much desired thrust.

Indeed, the province has a history of pedagogical innovation, having had a competency and project based educational system in place for the past 20 years. By combining this educational expertise with its prevalent technical talent, the Quebec edtech innovation ecosystem is both robust and unique.

Four Quebec companies and 1 Quebec institute- Ululab, Classcraft, Affordance Studio,Creo and Montreal Museum of fine Arts spoke to media on the sidelines of Tech-2018.

ULULAB, recognized several times as a world leader in the educational video games industry specializes in creating educational video games that are fun, pedagogically sound and focused on conceptual learning. Coming to CLasscraft, it is the motivation management system for education, providing school administrators with crucial data about school climate and student development in their school.

Affordance Studio is a company founded in 2013 by design experts and veterans of the video game industry in Quebec. It has completed serious game projects and training solutions for academic institutions, hospitals and banks. It has developed Dokoma and Global Impact Trivia.

CREO, has been stimulating curiosity since 16 years. It has partnered with cultural, educational and corporate organizations to inform, captivate and engage their target audiences by creating memorable digital experiences.

UNESCO BOOST FOR INTELLIGENT GLOBAL HUB FOR DIGITAL PEDAGOGY

World's first Science of Learning Research Centre in city

SUMIT ONKA
■ VISAKHAPATNAM

A major development that could make the port city a familiar name on the world map will be the proposed Science of Learning Research Centre, a one-of-its-kind in the world, which is coming up in the city.

Intelligent Global Hub for Digital Pedagogy (IGHDP) or I-Hub will house this centre where the world's best minds in the field of neuron-science and psychology will work to understand how students or people learn things and what sort of games or education technology could supplement it.

This will be one of the seven major components of the I-hub proposed in the city by UNESCO's MGIEP. This centre may act as the nucleus of all other projects in the hub.

Chief Minister N Chandrababu Naidu was so much impressed with Centre that he urged MGIEP officials to make it a reality at the earliest. Naidu wants to move away from cloud technology and adapt new emerging technologies.

In line with its vision of Transforming Education for Humanity, MGIEP will bring in the best neuron scientists and psychologists brains. Neuron science and behaviour may help to develop suitable games and use technologies to create digital learning equipment. Game developers could also incorporate the research outputs when the develop games for education.

Respresentatives from UNESCO's MGIEP interacting at the Science of Learning Research Centre meet in Visakhapatnam on Friday

UNESCO MGIEP Director Prof Anantha Duraiappah confirmed that the Centre will make its global debut here.

"Socio-Emotional Learning in education systems is important. The way we learn varies in different stages of our life: Early childhood, adolescence and adulthood. The Centre will help us to know how people learn in different stages of life and frame plans or develop education technology accordingly. I-Hub is multi-stakeholder unit. Policy makers, knowledge & research partners, educators, learning science specialists, psychologists, technology providers, financial investors, established and start-up companies come together to work towards rolling out digital products for learning that build critical inquiry, cognitive skills, and social-emotional skills," Prof Duraiappah added.

I-Hub at Anandapuram

Meanwhile, HRD Minister Ganta Srinivasarao reviewed the availability of land to set up I-hub.Special Chief Secretary Aditya Nath Das and Commissioner, collegiate education Sujatha Sarma and Tehsildar Anandapuram were present.

The Minister, emphasizing on the importance of I-hub, said this would change the face of the area where it will be allocated. Around 100 acres of suitable land is in Jagannadhapuram in Anandapuram mandal for the hub and public there are also eager to have it in their area, he explained.

He also discussed with Joint collector to explore some beachfront area or otherwise to finalise in Jagannadhapuram of Anandapuram mandal. Naidu will lay the foundation stone next month.

Pedagogy of happiness and well-being

If schools are to be true centres of learning, they must move away from the present assessment-obsessed structure to a system that rewards kindness and consideration for social good

ANANTHA DURAIAPPAH | NANDINI CHATTERJEE SINGH

The Mental Health Status of Adolescents in South-East Asia: Evidence for Action' report published by the World Health Organisation (WHO) in 2012 stated that 86 million people in South-East Asia suffered from depression and that 25 per cent of all children between 13-15 years of age suffered from this disease in India. The report further said that India has the highest suicide rate among 10 South-East Asian nations. The most common reported reason for teen depression was anxiety and stress due to academic performance, peer pressure and poor self-esteem.

Given that depression can lead to suicide, which is the second highest cause of death among people in 15-29 age group in the region, it is essential that the school curricula be revised so as to ensure proper mental health and well-being of people.

Recent brain research has exposed the vulnerability of the adolescent brain. During adolescence, the brain undergoes tremendous neural growth and pruning, leading to massive re-organisation of connections between different brain areas.

During teenage brain development, prefrontal cortex, which is responsible for executive decisions, begins to connect with other parts of the brain, primarily those connected with emotion. This connection between the prefrontal cortex and the emotion areas (the limbic cortex) regulate reward, risk, problem solving, planning and regulation. Short-cutting of neural networks from external receptors to the limbic cortex in some way explains irrational decision-making among teenagers.

But we must return to brain science for answers. Drawing from research on doctors, nurses and Army veterans, who have long been vulnerable to stress, fatigue and depression, neuroscientists recently showed that focused and explicit training in mindfulness, empathy and compassion can provide solutions for better mental health. Research from the laboratories of Richard Davidson at the university of Wisconsin, Madison and Tania Singer at the Max Planck Institute in Leipzig showed that each of these competencies employ a distinct neural circuit and build new connections between the prefrontal cortex and limbic cortex.

Mindfulness is the conscious paying of attention to experience and life that is unfolding right now and to cultivate conscious regulation of attention, emotion, thought and belief. This allows responses to be made as opposed to just reacting to them. Empathy and compassion need to work in synchrony and are particularly helpful in handling anxiety and peer pressure. While empathy is our general capacity to share emotional states of others, compassion ensures that we are not swayed by them and, instead, handle them with kindness and positive action.

Importantly, the practice of self-compassion has emerged as a powerful antidote to handle anxiety. When faced with life challenges or while confronting failure, if adolescents respond with compassion and kindness to self, rather than inflicting harsh punishment, they accept and recognise that limitation and weakness is a part of the human experience. This process not only allows students to handle academic pressure but also builds a healthier and realistic representation of self — a process now acknowledged to be critical for good mental health.

The process of building these networks has been coined as Firing Gandhi Neurons, which is inspired by the seminal work of Neuroscientist VS Ramachandran's work on mirror and empathy neurons. The difference between this approach and conventional approaches is that rather than focusing purely on building intellectual knowledge, of why reducing stress is good and its benefits, focus is on building emotional resilience to stress.

The key here is to create a neural network across the intellectual and emotional such that these neural networks can in actuality produce the virtues and values that drove Gandhi to practice empathy, kindness and compassion to all beings, irrespective of religion, gender, ideology, and caste.

The good news: Recent studies involving adolescents in schools show similar promise. Initial results point towards more pro-social behaviour on the part of the students who were exposed to mindfulness and empathy cum compassion training. The research and experiences are still at an infancy stage but the science suggests promise.

Therefore, if schools are to be 'true' centres of learning, they need to be able to empower our youngsters to not only acquire intellectual and technical skills, as required by the job markets, but also provide them a better understanding of themselves, their identities and relationship with other beings. But there is a dichotomy here that we must address and alert all stakeholders in the education chain; this includes not only the teachers, school administrators, and education policy-makers but also parents.

We all must move away from the present assessment-obsessed system to a structure that rewards kindness and consideration for social good. If not then we can expect learners to be in a state of perpetual cognitive dissonance, which might even cause further discomfort, stress and anxiety, wondering which path they should take.

With that sobering warning, we see optimism for the future as the younger generation do begin to question values and beliefs of the past and explore new multivariate identities that emerge from a system that encourages understanding the self, understanding and helping others but with a critical eye to facts and evidence. Once they do, then what they think, what they say and what they do is in harmony. And that according to the Mahatma is the secret to creating happy schools.

(Anantha Duraiappah is Director, UNESCO MGIEP. Nandini Chatterjee Singh is Cognitive Neuroscientist at UNESCO MGIEP)

United Nations Educational, Scientific and Cultural Organization

Mahatma Gandhi Institute of Education for Peace and Sustainable Development

Government of India
Ministry of Human Resource Development

Media Coverage

THE TIMES OF INDIA, VISAKHAPATNAM
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TIMES

'Vizag Declaration' to frame global digi-learning norms

Guidelines Can Help Regulate Digital Content

Umamaheswara.Rao
@timesgroup.com

Visakhapatnam: The 'Vizag Declaration for Digital Learning' will take the first step towards developing a set of guidelines on quality and content of digital learning solutions for all member states of UNESCO at TECH 2018 on November 17, according to Anantha K Duraiappah, director of the Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP).

The declaration will be a resultant of a two-week long online consultation and deliberations at the High-Level Policy Forum which was conducted here on November 14.

Speaking to **TOI**, he said, the Vizag Declaration calls for urgent and effective global action to develop a set of guidelines to keep the quality and content of digital learning in check, taking into consideration diverse local contexts and learners' needs.

"The guidelines would be characteristic in nature, not necessarily prescriptive. They will touch upon various aspects of digital learning solutions, delivery systems and platforms. These will include age-appropriateness of the content, alignment with expected learning outcomes, quality of digital pedagogical properties and whether they truly contribute to learning, misuse of data etc," Dr Duraiappah said.

The Vizag Declaration will be the first draft of the guidelines. The final guidelines might be completely different or be framed with minor changes. The expert committee will prepare draft guidelines to be flexible and adapted to diverse local contexts and learner's needs. After the draft guidelines are approved by the MGIEP Governing Board, they will be tabled before the member states at the 206th session of the UNESCO Executive Board and the 40th session of the UNESCO General Conference in 2019 for endorsement and approval.

A Sarath Kumar

'AI use in teaching but teachers are her

TIMES NEWS NETWORK

Visakhapatnam: A panel discussion on 'teachers versus teaching aides' was one of the main discussions conducted during the second day of the Tech-2018 meet, here on Friday. Panellists' spoke about the usefulness of teaching aids, including AI (artificial intelligence) but said that a human teacher was irreplaceable. However, they pointed out that teachers must also get rid of their bias against using such technology.

C Sridhar, an assistant professor at IIT-Tirupati, and data scientists Sailesh K, Srujana Meru, Jessica Linde and Catherine Norris debated on the use of AI and modern technological tools to create a personal curriculum and taking the process from scaffold learning to collaborative learning.

The panellists' said that the use of such tools would help remove the unwanted personal singular approach that comes with bias in a traditional teaching-learning

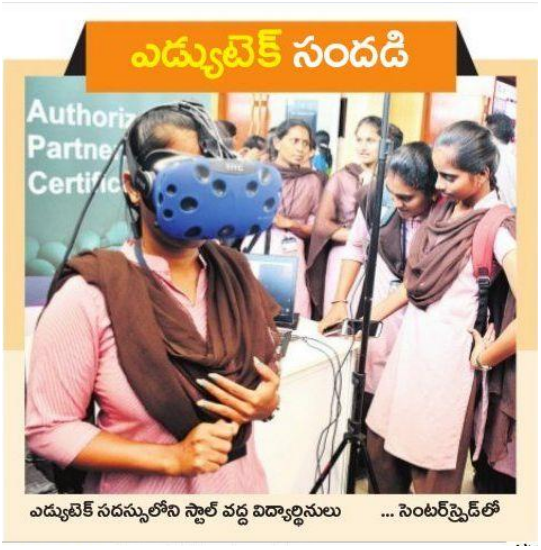
Finnish firm seeks to invest in AP

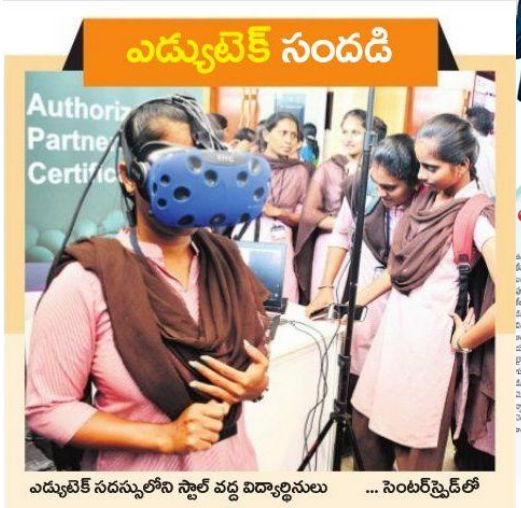
Venkatesh.Bayya
@timesgroup.com

Visakhapatnam: Hatch Entertainment, a Finland-based mobile gaming company, sees India as a growing market according to Gunjan Garg, director, commercial relationships.

Talking to **TOI** here on Friday, Garg said Hatch—is focussed on developing educational games in partnership with UNESCO. "India has a growing number of gaming enthusiasts so there is greater awareness and the traditional bias towards gaming is giving way to a more acceptable approach," he said.

Garg said her company





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Some Testimonials

"What is distinctive about this Summit (TECH 2018), is that it brought together voices that cut across geographies, diverse socio-economic and cultural settings to examine the transformations we are witnessing in this dynamic, technology-enabled environment of the present. Comprising of keynotes, catalytic and breakout sessions, it endeavored to present a 360° perspective that also addresses the bias that we often risk bringing to such a dialogue. " - Arundhati Mitter, Executive Director, Flow India and Presenter at TECH 2018

"TECH 2018 was an excellent Conference devoted to a topic of supreme importance: Education for Humanity. There were expert speakers on a variety of pedagogical and technology issues and solutions and very interactive uptake by delegates attending from the general public, including many teachers and student groups, whose enthusiasm for edu-tech was unmistakable. Importantly, the Conference adopted the “Vizag Declaration” as a global roadmap for best practices in digital learning." - Geoffrey Morson, US Lawyer and Keynote Speaker at TECH 2018

"TECH 2018 was one of the best conferences I've attended on games and education in my career. I had the chance to network and establish partnerships with the highest caliber developers, educators and researchers in our field. We also had the amazing opportunity to work with UNESCO MGIEP to create the Vizag Declaration, a set of guidelines for the development and use of educational games internationally. This is the real and lasting change our field has desperately needed. The organizers behind TECH 2018 made it all happen ... in the beautiful oceanside city of VIzag to boot! I'd recommend this conference to anyone working in or interested in educational games!" - Avery Rueb, Cofounder, Affordance Studio

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International Advisory Board TECH 2018

Sri Aditya Nath Das

Special Chief Secretary to Government, Department of School and Higher Education, Government of Andhra Pradesh

Mr. Das joined Indian Administrative Services (I.A.S.) in 1987 as Assistant Collector, Vizianagaram and Vijayawada.

Vera El Khoury Lacoeuilhe

Diplomat

Vera El Khoury Lacoeuilhe is a diplomat with over two decades of in-depth experience in multilateral diplomacy and international relations.

Peje Emilsson

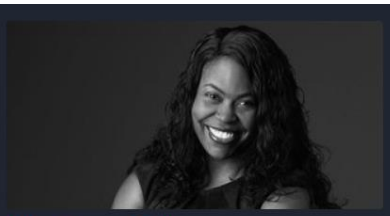
Executive Chairman - Kunskapsskolan Education AB

Mr. Peje Emilsson founded Kunskapsskolan Education AB in 1999 and serves as its Executive Chairman. Mr. Emilsson also serves as the Chief Executive Officer and Chairman of Magnora AB and has been active in the educational sector for a number of years.

Roza Otunbayeva

Former President, Kyrgyzstan

Roza Isakovna Otunbayeva served as the President of Kyrgyzstan from 7 April 2010 until 1 December 2011. She previously served as Minister of Foreign Affairs and as Deputy Head of Government of the Soviet Kyrgyz Republic before being invited to the Soviet Foreign Ministry in Moscow and later working as President of the Soviet National Commission of UNESCO. She currently heads The Roza Otunbayeva International Foundation.



Mila Thomas Fuller

President, Board of Directors, International Society for Technology in Education (ISTE)

Dr. Mila Thomas Fuller is the President of the Board of Directors for the International Society for Technology in Education (ISTE).

Peter Vesterbacka

Co-founder at Lightneer, Fun Academy. Formerly Mighty Eagle at Angry Birds

Peter Vesterbacka served as the Chief Marketing Officer and Mighty Eagle of Rovio Entertainment Oy. Mr. Vesterbacka manages the Rovio Entertainment's business strategy, including expanding Angry Birds into broader entertainment franchise.

H.E. Mame Baba CISSE

Ambassador, General Secretary Foreign Ministry and Senegalese Abroad

H.E. Mame Baba CISSE is currently the Ambassador, General Secretary Foreign Ministry and Senegalese Abroad. H.E. has expertise in Multilateral diplomacy, especially in International Environmental Governance. He was previously Ambassador, Permanent Representative of Senegal to the United Nations Office in Geneva, to WTO and to the Conference of Disarmament as well as Ambassador of the Republic of Senegal to Malaysia.

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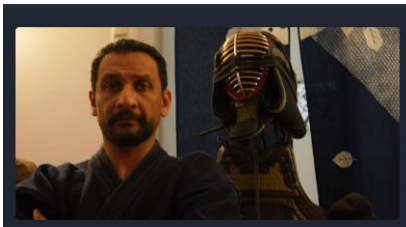


Anantha K. Duraiappah | PhD

Director, UNESCO MGIEP

Anantha Duraiappah took the position as inaugural Director of the UNESCO Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP) based in New Delhi, India in 2014. A science-policy pacesetter, with over 33 years' experience, he now plays a key role in positioning UNESCO MGIEP as a leading research institute on education for peace, sustainable development and global citizenship.

Nandini Chatterjee Singh | PhD

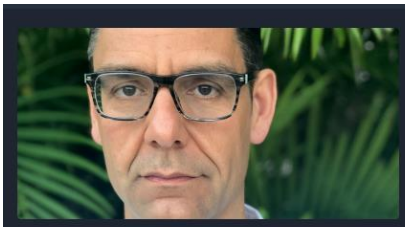
Programme Specialist - Science of Learning

Nandini is a cognitive neuroscientist and leads the Rethinking Learning programme. She is passionate about translating neuroscientific evidence on learning and education from laboratory to classroom. She is currently designing a programme for socio-emotional learning in school classrooms using interactive digital technologies. Nandini also leads the Difference Learning project at UNESCO MGIEP towards achieving 'inclusive' education.

Zigor Hernandorena

Senior Project Manager – Fun Learning Department, Ubisoft

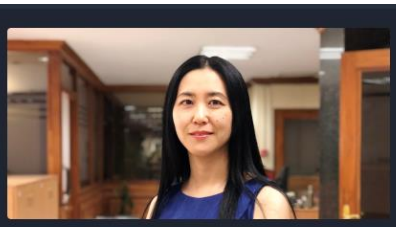
Armed with a PhD in law, Zigor went straight into video games, helping to create the Third Party Development department at Ubisoft. Back at Ubisoft since 2016, he is Senior Project Manager of the newly created Fun Learning department and is in charge of developing games that will provide the player with actionable knowledge and/or expertise.



Paul Darvasi

Educator, Writer, Game Designer

Paul Darvasi is an educator and researcher who keynotes, lectures, writes and consults on the intersection of digital games, simulations, narrative, social justice, culture and learning.



Yoko Mochizuki | PhD

Programme Specialist - Education for Sustainable Development

Yoko Mochizuki heads the Review & Assessments for SDG 4.7 and Embedding projects at UNESCO MGIEP. Additionally, she is currently working on a literature review focused on socio-emotional learning. Prior to joining UNESCO MGIEP, she was a Programme Specialist at the Education for Sustainable Development (ESD) section of UNESCO Paris and ESD Specialist at the United Nations University. She has a PhD in Comparative Education and Sociology from Columbia University, New York, USA.

Harold Glasser

Professor, Environmental and Sustainability Studies & Developer of 'Catch'

Harold Glasser is Professor of Environmental and Sustainability Studies and was the founding Executive Director of Western Michigan University's (WMU) nationally recognised Office for Sustainability (2010-2018). Glasser has published widely in the areas of social learning, learning for sustainability core competencies, and learning for transformative change. He co-leads an international Sustainability Key Competencies consortia and is the developer of a new, face-to-face renewable natural resource decision-making simulation game called Catch, which explores the role of open choice architectures on gameplay.

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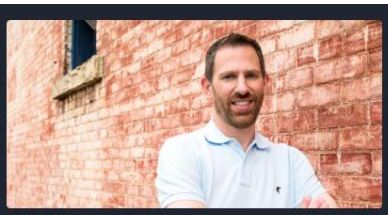
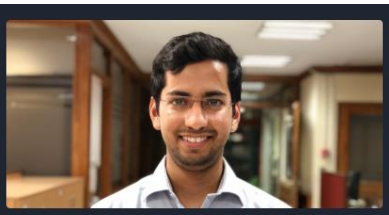


Matthew Farber

Assistant Professor in Technology, Innovation, and Pedagogy, University of Northern Colorado

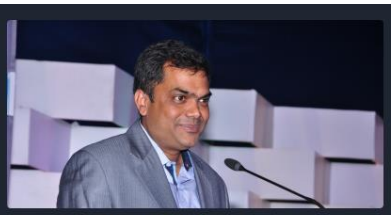
Matthew Farber, Ed.D., is an Assistant Professor in the Technology, Innovation, and Pedagogy Programme at the University of Northern Colorado. He has been invited to the White House and to keynote twice for UNESCO, and has been interviewed about games and learning by NPR, Fox News Radio, USA Today, and The Wall Street Journal.



Robin Sharma

Gaming Curriculum Developer

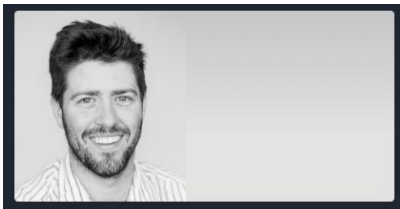
Robin did his Bachelors degree in Mathematics and Masters in Mathematics Education. He is passionate about teaching and developing tools and resources for teaching mathematics. Previously, he has worked as a teacher and as a curriculum designer. At MGIEP, Robin works as implementer of the Gaming Programme, which focuses on supporting research and developing curricular products for integration of digital games-based learning for EPSG and socio-emotional learning within and outside the classroom.



Manoj K. Singh | PhD

Senior Vice President-Global Development & Partnerships, RUBIKA Group

Dr. Manoj K. Singh is currently the Senior Vice President-Global Development & Partnerships for RUBIKA Group, a French grande école of design management located in Valenciennes (Northern France), Montreal (Canada) and Pune (India).



Shawn Young

Co-founder & CEO, Classcraft

Shawn Young is a co-founder and CEO of Classcraft, a platform that gamifies education, from classroom management to curriculum.

Cathleen Norris

Professor & Chairperson, Department of Learning Technologies, University of North Texas

Cathleen Norris is a Regents Professor & Chairperson, in the Department of Learning Technologies at the University of North Texas, Denton, TX.

Elliot Soloway

Professor, Department of Computer Science & Engineering, University of Michigan

Elliot Soloway is an Arthur F. Thurnau Professor, in the Department of Computer Science and Engineering at the University of Michigan, Ann Arbor, MI. In 2001, the UMich undergraduates selected him to receive the "Golden Apple Award" as the Outstanding Teacher of the Year at the University of Michigan. In 2004 and in 2011, students in the College of Engineering HKN Honor Society selected Dr. Soloway to receive the "Distinguished Teacher of the Year Award." Soloway's educational vision is that mobile, low-cost, networked devices are the only way to truly achieve universal 1:1 in schools – all across the globe.

Mitja Jermol

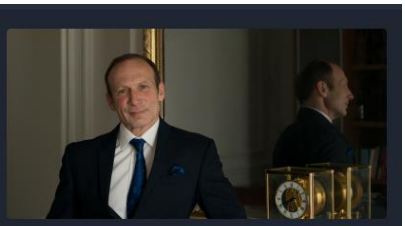
UNESCO Chair, Slovenia

Mitja Jermol has been doing research and development on AI, cybernetics, cognitive systems and e-learning. He is mainly focused on developing concepts and AI based methods and tools for business intelligence, e-learning, intelligent environments, smart devices and improved business processes for emerging organisational forms. Besides that, he is particularly interested in contemporary models and theories of knowledge, complex systems and knowledge technologies. Mitja Jermol is the holder of UNESCO Chair on Open Technologies for Open Educational Resources and Open Education and Head of the Centre for knowledge Transfer at Jozef Stefan Institute in Slovenia.

Shailesh Kumar

Chief Data Scientist, Jio

Shailesh has over seventeen years of experience in applying and innovating machine learning, statistical pattern recognition, and data mining algorithms to hard prediction problems in a wide variety of domains. These include remote sensing, text mining, bio-informatics, computer vision and image understanding, transaction data mining, retail analytics, neurological data, risk analytics in financial domain,and web analytics.



Dan Shefet

Lawyer at the Paris Court of Appeal (France)

Dan Shefet is a frequent speaker at international conferences and academic venues on IT Law, Data Privacy Content Regulation and Human Rights on the Internet.

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