

The BlueDot

Exploring new ideas for a shared future

Rethinking Learning



Exploring Different Pedagogical Approaches to Transform Education For Humanity

Features

- Educating students for their future, not our past
- Bringing learning back into education - a foreword by the Former Minister of Education, Mali
- An interview with Nobel Laureate, Tawakkol Karman on Prevention of Violent Extremism and education
- Why Games can be Effective Pedagogy

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THE BLUE DOT features articles showcasing UNESCO MGIEP’s activities and areas of interest. The magazine’s overarching theme is the relationship between education, peace, sustainable development and global citizenship. THE BLUE DOT’s role is to engage with readers on these issues in a fun and interactive manner. The magazine is designed to address audiences across generations and walks of life, thereby taking the discourse on education for peace, sustainable development and global citizenship beyond academia, civil society organisations and governments, to the actual stakeholders.

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The image used on the cover of this issue of The Blue Dot is purely representational and conceptual in nature.



“Look again at that dot.
That’s here. That’s home. That’s us.

On it, everyone you love,
everyone you know, everyone you ever heard of,
every human being who ever was,
lived out their lives.
The aggregate of our joy and suffering,
thousands of confident religions,
ideologies, and economic doctrines,
every hunter and forager, every hero and coward,
every creator and destroyer of civilization,
every king and peasant, every young couple in love,
every mother and father, hopeful child,
inventor and explorer, every teacher of morals,
every corrupt politician, every superstar,
every supreme leader, every saint
and sinner in the history of our species lived there—
on a mote of dust suspended in a sunbeam.”

CARL SAGAN

PALE BLUE DOT: A VISION OF THE HUMAN FUTURE IN SPACE



Rethinking Education

Our world today is facing an increasing number of “wicked” problems— rising inequality, violent extremism, global warming and others to name a few. The challenge we have before us is that trying to solve our problems with the mindset that created the problems will just not work. We need innovative and out of the box thinking— and this can only come from our education systems. However, here is where we have a problem. The education systems we have now have not changed much over the past 300 years. In order to change and foster more peaceful and sustainable societies, there is definitely a strong need to re-think the future of education and re-think learning.

In 2015, 193 countries came together and agreed on 17 global goals. The uniqueness about these goals was that development was no longer an agenda for developing countries; instead the Sustainable Development Goals (SDGs) became a key goal for all countries. Amongst others, inclusive, quality and accessible education for all became a key goal for all countries. There was also a recognition by the community that education will be key to achieving all other SDGs. Despite this recognition, there is a serious dichotomy.

The education system we have now was

developed to meet the requirements of the industrial revolution. In other words, we’ve developed an assembly style of producing educated individuals capable of producing efficiently for the economy. The question we have to ask ourselves is if this system can provide the mindsets we need for building peaceful and sustainable societies across the world. I venture to say no.

In fact, what we have right now is orthogonal to the outcomes we want – we live in a predatory system that focuses on pitting individuals against each other in the name of competition and rewards only success in areas that make financial gains, not social or ecological. The weakest are left to perish and it is the survival of the fittest. We need to reinvent our education such that the well-being of the individual and the collective is the primary goal.

In the seventh issue of the Blue Dot, we focus on Rethinking Learning. The Issue includes a foreword by the Former Minister of Education of Mali, H.E. Adama Samassékou on how education systems need to be re-looked at to incorporate personalised learning and technology as an enabler and our Cover Story, which focuses on the importance of socio-emotional learning. Additionally, we feature opinions by specialists from academia, research, policymaking and the industry on the need to relook at education systems for the future. Amongst various experts, we hear from Andreas Schleicher, Director of Education and Skills and Special Advisor on Education Policy to the Secretary-General at the Organisation for Economic Co-operation and Development (OECD); Anneli Rautiainen from the Finnish National Agency for Education as well as Pratik Mehta, Head of Education & Skills, Microsoft India.

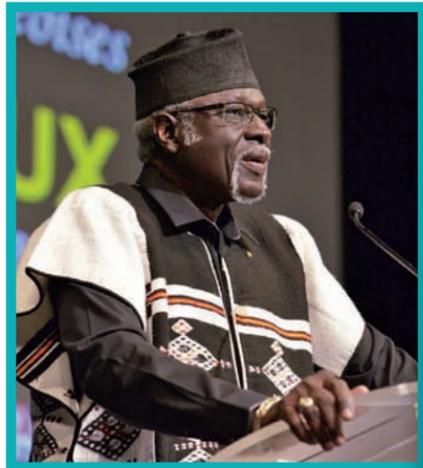
Further, we present short blogs from the youth about what future education systems mean to them and we hear from Nobel Laureate, Ms Tawakkol Karman on the importance of education for peace.

I hope you enjoy reading this issue of The Blue Dot.

ANANTHA KUMAR DURAIAPPAH
Director, UNESCO MGIEP



Bringing learning back into education



H.E. MR. ADAMA SAMASSÉKOU
Former Minister of Education and Former Spokesperson for the Government of Mali

Humanity today faces all sorts of challenges – an increasing gap between the rich and poor, global warming, rising violent extremism, growing nationalism and intensifying lack of understanding for diversity and culture. The divide between countries all over the world has never been greater.

The task of tackling these challenges appears rather daunting. However, we must together find a solution that can help these issues from mounting into a larger global crisis.

The future lies in the hands of the young, who offer a tremendous opportunity for solving the issues that face us. It is critical however that the young be provided with the right platform and be equipped with the right skills in order to collectively work towards achieving this and therefore bridging the increasing divide. In this, education will play a key role.

Over the years, a large difference has developed in what education traditionally set out to achieve and what it now provides. The goal of our present education systems has been driven by the need identified at the start of the industrial revolution – the need for skilled workers in

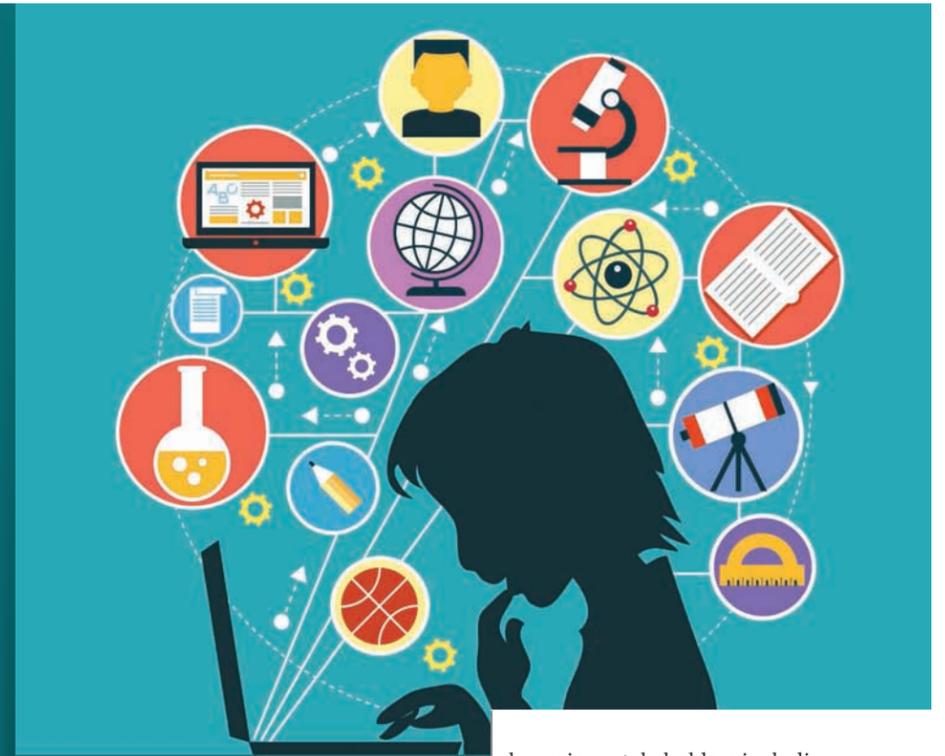
factories to contribute towards the growth of wealth measured in monetary terms. This means we measure the outcome of education not by ‘happiness’ or ‘well-being’, or ‘know-how’, instead by the amount of wealth that has been generated. This is in turn measured as the human capital of a country.

In order for future generations to be living in more peaceful and sustainable societies, the focus of education must go beyond facilitating development of human capital and instead focus on human flourishing. This will require an overall development of young people who are intellectually stimulated and are also ‘good’ human beings; individuals who are empathetic and compassionate, in a true spirit of solidarity.

Further, the focus needs to be brought back on ‘the learner’, wherein the learner’s individual strengths are recognised and pedagogies are designed to cater to individual learner needs. We need to shift the focus from creating factories of workers to empowering human beings, who work towards human flourishing. Learning should be personalised and self-paced instead of merely focus on drilling in the same type of information or ‘knowledge’ to everyone at an exogenously defined pace. Moreover, there is a crucial

“the focus of education must go beyond facilitating development of human capital and instead focus on human flourishing

“There is immense potential for technology to be used to make learning fun and accessible through games, interactive textbooks, e-publications and digital books



need to develop everywhere a mother-tongue-based multilingual education.

Technology can play an imperative role as a facilitator of this change and transform the traditional method of classroom training. Today, knowledge is accessible at the click of a button. There is immense potential for technology to be used to make learning fun and accessible through games, interactive textbooks, e-publications and digital books. Through assessments, analytics and artificial intelligence, learning can be customised to suit the learner’s pace and style and optimise learning pathways for a student. The interactive content, immersive experiences and collaborative tools the young are consuming are also being used by them to build content. The possibilities are limitless and technology will empower the learner in ways such that no child is left behind.

These changes are not simple to implement and involve re-looking at existing education systems in entirety. Since systemic change is required, a collaborative effort needs to be undertaken

“The possibilities are limitless and technology will empower the learner in ways such that no child is left behind.

by various stakeholders including educators, policymakers, curriculum designers, learners themselves as well as technology experts.

Many say that this is a rich country’s agenda. I would say otherwise. In fact, the equity gap between the haves and have-nots will increase even further if we do not embrace this technological revolution. The cost of technology is dropping exponentially. The penetration rate of mobile technology in Africa is a case in point. And what’s amazing is at which the speed the young absorb this new technology.

The Transforming Education Conference for Humanity (TECH), organised by the UNESCO MGIEP and the State Government of Andhra Pradesh, India held in December, 2017 provided one such platform, in which experts, policymakers and the youth congregated to discuss the future of learning. More such platforms need to be developed and lead to concrete actions that result in creating education systems that are more ‘learner centric’.

It is indeed the right time for us to work towards bringing back ‘learning’ to education. I hope UNESCO will take the lead on this in the near future.

Contents

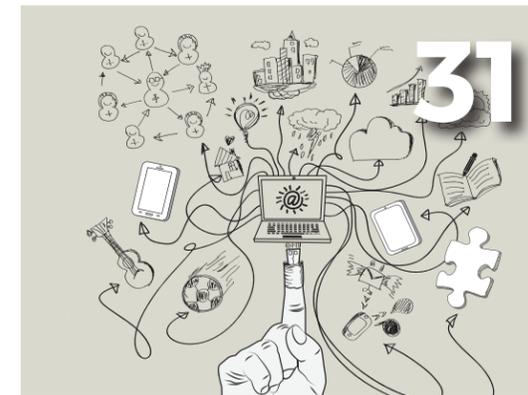
The BlueDot
ISSUE 7 . 2018

- 1 Director's Message**
Rethinking Education
By Anantha Kumar Duraiappah,
Director, UNESCO MGIEP

- 2 Foreword**
Bringing learning back into education
By H.E. Mr. Adama Samassékou,
Former Minister of Education and Former
Spokesperson for the Government of Mali



- OPINIONS**
-
- EXPERT PERSPECTIVES:
RETHINKING LEARNING**
- 7** • **Educating students for their future, not our past**
Andreas Schleicher on the need to provide people with a reliable compass to find their way through an increasingly complex world.
 - 11** • **Educational TV of violence: Efficiently training the youth in aggressive behaviours**
Helen Abadzi discusses how certain informal methodologies of education promote violent behaviours amongst the young.
 - 16** • **Why Games can be Effective Pedagogy**
Chris Crowell explains how games can facilitate learning.

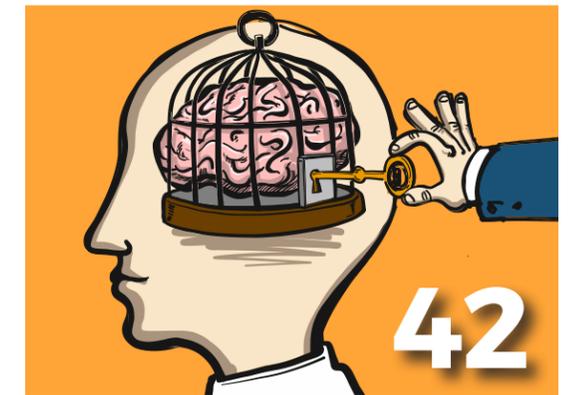


- 20** • **Higher Education as a Lever of Development in India**
Bhaswati Mukherjee discusses the critical need for policymakers to focus on higher education in the country.
- 24** • **Reimagining Globalisation and Education**
Fazal Rizvi describes the requirement to rethink the ideas of global learning and global citizenship education.
- 28** • **The Future of Education**
Anneli Rautiainen discusses the requirement to transform the education system in Finland.
- 31** • **Building a Technology-Driven Environment for Collaborative Learning at Schools**
Pratik Mehta on the role of technology for learning in education systems.
- 36** **FEATURE**



The Learning Labs
Aditi Pathak describes the importance of intercultural dialogue and the role of technology.

- 39** **TECH**
Transforming Education Conference for Humanity
2017
VISAKHAPATNAM
- TECH 2017**
Highlights of the Transforming Education Conference for Humanity held from December 16 -18, 2017 in Visakhapatnam.



- 42** **COVER STORY**
 - **Rethinking Learning**
Yoko Mochizuki and Nandini Chatterjee discuss a renewed focus on learning, the emergence of social and emotional learning as a focus area and UNESCO MGIEP's approach to rethinking learning.

- 50** **Interview**
Tawakkol Karman (Nobel Laureate, 2011) talks about how education is important for preventing violent extremism.

- 52** **Youth Voices**
Young people speak their mind as they respond to the question "What does the future of education mean to you."

- 57** **Crossword**
Follow the clues to find answers to the crossword on 'Rethinking Learning.'

- 58** **Activity Bulletin**
What we've been up to at UNESCO MGIEP.



EXPERT PERSPECTIVES

Rethinking Learning

Read about what academics, policymakers, researchers and practitioners have to say on 'Rethinking Learning'. From focusing on teaching skills such as empathy, compassion, mindfulness, collaboration to employing artificial intelligence and gaming in future learning systems, enjoy reading diverse and contradictory views on what future education systems should look like and how learning needs to be re-thought.



Andreas Schleicher is Director for Education and Skills, and Special Advisor on Education Policy to the Secretary-General at the Organisation for Economic Co-operation and Development (OECD). As a key member of the OECD's Senior Management team, he supports the Secretary-General's strategy to produce analysis and policy advice that advances economic growth and social progress. In addition to policy and country reviews, he oversees the Programme for International Student Assessment (PISA), the OECD Survey of Adult Skills (PIAAC), the OECD Skills Strategy, the OECD Teaching and Learning International Survey (TALIS), and the development and analysis of benchmarks on the performance of education systems (INES).

Mr. Schleicher is the recipient of numerous honours and awards, including the "Theodor Heuss" prize, awarded in the name of the first President of the Federal Republic of Germany for "exemplary democratic engagement". He holds an honorary Professorship at the University of Heidelberg.

Educating students for their future, not our past

Andreas Schleicher

How should countries equip people to understand, engage with and shape a changing world? This is the age of accelerations, a speeding-up of human experience through the compound impact of disruptive forces on every aspect of our lives. It is also a time of political contestation. The priority of the wider international community is to reconcile the needs and interests of individuals, communities and nations within an equitable framework based on open borders, free markets and a sustainable future. But where disruption has brought

a sense of dislocation, political forces emerge that are offering closed borders, the protection of traditional jobs and a promise to put the interests of today's generation over those of the future.

In these times, we can no longer teach people for a lifetime. In these times, education needs to provide people with a reliable compass and the navigation tools to find their own way through an increasingly complex and volatile world. As future jobs will pair computer intelligence with the human knowledge, skills, character qualities and values, it will be our capacity for innovation, our awareness, our ethical judgement and our sense of responsibility



... schools increasingly recognise the need for fostering ethics, character and citizenship and aim to develop ... empathy, compassion, mindfulness, purposefulness, responsibility, collaboration and self-regulation.

that will equip us to harness machines to shape the world for the better. This is the main conclusion OECD countries working on a new framework for curriculum design, referred to as 'Education 2030', have drawn. Not surprisingly then, schools increasingly recognise the need for fostering ethics, character and citizenship and aim to develop a range of social and emotional skills, such as empathy, compassion, mindfulness, purposefulness, responsibility, collaboration and self-regulation.

In their Education 2030 framework for curriculum design, OECD countries have put creating new value, dealing with tensions and dilemmas and developing responsibility at the center. Creating new value, as a transformative competency, connotes processes of creating, making, bringing into being and formulating; and outcomes that are innovative, fresh and original, contributing something of intrinsic positive worth. It suggests entrepreneurialism in the broader sense of being ready to venture, to try, without anxiety about failure. The constructs that underpin the competence are imagination, inquisitiveness, persistence, collaboration and self-discipline. Young people's agency

to shape the future will partly hinge on their capacity to create new value.

In a structurally imbalanced world, the imperative of reconciling diverse perspectives and interests, in local settings with sometimes global implications, will require young people to become adept in handling tensions, dilemmas and trade-offs. Striking the balance, in specific circumstances, between competing demands - of equity and freedom, autonomy and community, innovation and continuity and efficiency and democratic process - will rarely lead to an either/or choice or even a single solution. Individuals will need to think in a more integrated way that avoids premature conclusions and attends to interconnections. The constructs that underpin the competence include empathy, adaptability and trust.

The third transformative competency is a prerequisite of the other two. Dealing with novelty, change, diversity and ambiguity assumes that individuals can 'think for themselves' with a robust moral compass. Equally, creativity and problem-solving require the capacity to consider the future consequences of one's actions, to evaluate risk and reward and

Dealing with novelty, change, diversity and ambiguity assumes that individuals can 'think for themselves' with a robust moral compass.



The perception and assessment of what is right or wrong, good and bad in a specific situation is about ethics. It implies asking questions related to norms, values, meanings, and limits.

The past was about received wisdom, the future is about user-generated wisdom. The future needs to be integrated - with an emphasis on the integration of subjects and the integration of students.



to accept accountability for the products of one's work. This suggests a sense of responsibility, and moral and intellectual maturity, with which a person can reflect upon and evaluate their actions in the light of their experiences and personal and societal goals; what they have been taught and told; and what is right or wrong. The perception and assessment of what is right or wrong, good and bad in a specific situation is about ethics. It implies asking questions related to norms, values, meanings, and limits. Central to this competency is the concept of self-regulation, in the spheres of personal, interpersonal and social responsibility, drawing on constructs of self-control, self-efficacy, responsibility, problem-solving and adaptability.

The challenge is that developing these qualities requires a very different approach to learning and teaching and a different calibre of teachers. Where teaching is about imparting prefabricated knowledge, countries can afford low teacher quality. And when teacher quality is low, governments tend to tell their teachers exactly what to do and exactly how they want it done, using an industrial organisation of work to get the results they want. Today the challenge is to make teaching a profession of advanced knowledge workers who own their

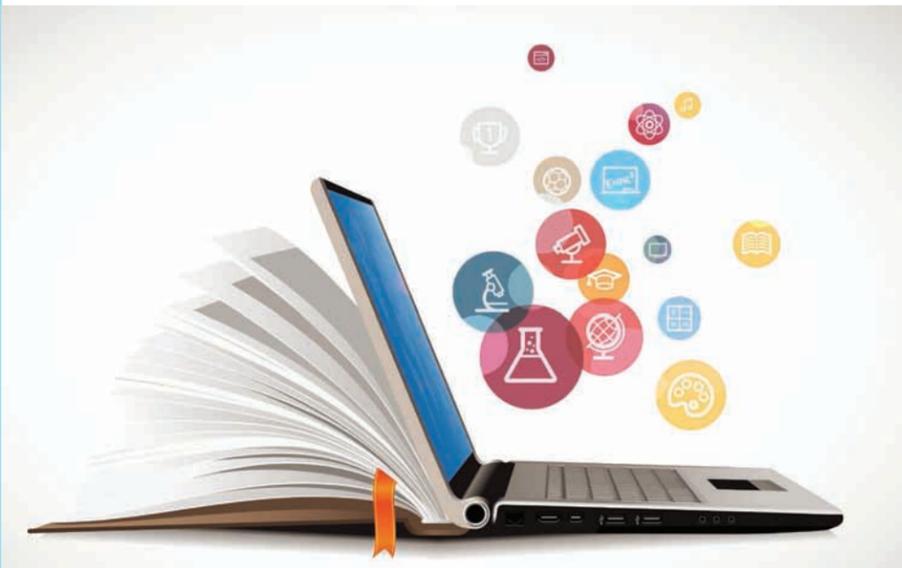
profession and who work with a high level of professional autonomy and within a collaborative culture.

But such people will not work as exchangeable widgets in schools organised as Tayloristic workplaces that rely mainly on administrative forms of accountability and bureaucratic command and control systems to direct their work. To attract the people they need, modern school systems need to transform the form of work organisation in their schools to a professional form of work organisation in which professional norms of control replace bureaucratic and administrative forms of control. The past was about received wisdom, the future is about user-generated wisdom.

The past was also divided - with teachers and content divided by subjects and students separated by expectations of their future career prospects. And the past could be isolated - with schools designed to keep students inside, and the rest of the world out, with a lack of engagement with families and a reluctance to partner with other schools. The future needs to be integrated - with an emphasis on the integration of subjects and the integration of students. It also needs to be connected - so that learning is closely related to real-world contexts and contemporary issues and open to the rich resources in the community. Powerful learning environments are constantly creating synergies and finding new ways to enhance professional, social and cultural capital with others. They do that with families and communities, with higher education, with businesses, and especially with other schools and learning environments. This is about creating innovative partnerships. Isolation in a world of complex learning systems will seriously limit potential.

Instruction in the past was subject-based, instruction in the future needs to be more project based, building experiences that help students think across the boundaries of subject-matter disciplines. The past was hierarchical, the future is collaborative, recognising both teachers

OPINION



Now schools need to use the potential of technologies to liberate learning from past conventions and connect learners in new and powerful ways . . .

and students as resources and co-creators.

In the past, different students were taught in similar ways. Now school systems need to embrace diversity with differentiated approaches to learning. The goals of the past were standardisation and compliance, with students educated in age cohorts, following the same standard curriculum, all assessed at the same time. The future is about building instruction from student passions and capacities, helping students to personalise their learning and assessment in ways that foster engagement and talents, and its about encouraging students to be ingenious. School systems need to better recognise that individuals learn differently, and differently at different stages of their lives. They need to foster new forms of educational provision that take learning to the learner in ways that allow people to learn in the ways that are most conducive to their progress. We need to take to heart that learning is not a place but an activity. As well as countering educational disadvantage, this will capitalise on the strengths of the most talented students.

In the past, schools were technological islands, with technology often limited to supporting existing practices, and students outpacing schools in their adoption and consumption of technology. Now schools need to use the potential of technologies

to liberate learning from past conventions and connect learners in new and powerful ways, with sources of knowledge, with innovative applications and with one another.

In the past, the policy focus was on the provision of education, now it needs to be on outcomes, shifting from looking upwards in the bureaucracy towards looking outwards to the next teacher, the next school and the next education system. In the past, administrations emphasised school management, now the focus needs to be on instructional leadership, with leaders supporting, evaluating and developing teacher quality and the design of innovative learning environments. The past was about quality control, the future is about quality assurance.

The challenge is that such system transformation cannot be mandated by government, which leads to surface compliance, nor can it be built solely from the ground. Governments can't do the innovations in the classroom, but they can help in building and communicating the case for change and articulating a guiding vision for 21st century learning. Government has a key role as platform or broker, as stimulator, incentiviser and enabler, and it can focus resources, set a facilitative policy climate and use accountability and reporting modifications to encourage new practice.

But education needs to better identify key agents of change and champion them and to find more effective approaches for scaling and disseminating innovations. That is also about finding better ways to recognise, reward and give exposure to success, to do whatever is possible to make it easier for innovators to take risks and encourage the emergence of new ideas. The past was about public versus private, the future is about public with private.

These challenges look daunting, but many education systems are now well on their way to find innovative responses to ensuring that the next generation is learning for their future, not our past.

Educational TV of violence



Helen Abadzi is a Greek psychologist and polyglot of 19 languages. She retired after 27 years as a senior education specialist at the World Bank and is currently a researcher at the University of Texas at Arlington. To improve the outcomes of education investments, she regularly monitors research in cognitive psychology and neuroscience. The implications are often counterintuitive, suggesting that education can greatly improve by using the often little-known neurocognitive research. Dr. Abadzi writes articles, books, and blogs that integrate the research findings and offer solutions. She also lectures in various universities and is a frequent speaker in international conferences. Topics include learning methods, reading in multiple languages, numeracy, adult literacy and skills development, creativity, accountability, and others. Her publications are at <http://uta.academia.edu/HelenAbadzi>

EFFICIENTLY TRAINING THE YOUTH IN AGGRESSIVE BEHAVIOURS

Helen Abadzi

On a recent flight, I sat next to a 3-year old Korean boy, who was watching a cartoon video on a tablet. Two characters were hitting each other. Every time one struck the other, the boy cried out with pleasure and slapped the seat with his hand. Clearly he was learning something that engaged the emotional areas of his brain. What was he learning, and how will he use it later?

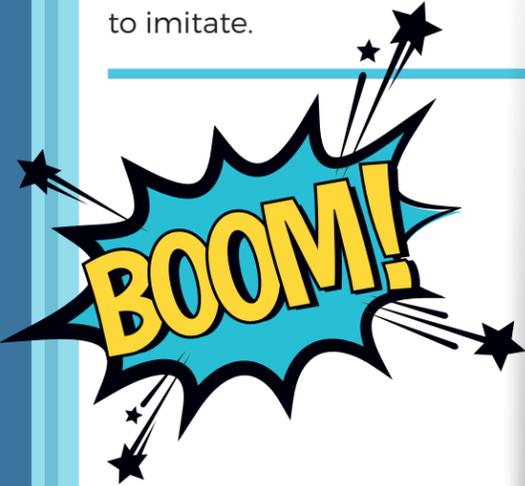
It was in a primary school a few months later where the learning outcome came. It was at a boys' middle-class school in the Middle East. First graders lined up to go to lunch. Suddenly one boy pushed another onto a line of students who all fell down. They started screaming. Two boys

“Boys always engaged in mischief; but organised bullying and attacks have multiplied in recent years

stepped aside and started kicking each other with the skill of a Kung Fu master, while the teacher was trying to impose some discipline with a voice hoarse from constant shouting. These were just two events in the course of 5 minutes. Just up the stairs, a group of third graders were pulling the hair of a short first grader who ran into the library crying. The boys waited outside for him, until a cousin came by and rescued him.

OPINION

Watch-and-imitate sequences form the rudiments of education... Aggressive acts seem easy to imitate.



Was the school climate like this ten years ago? The older teachers emphatically said no. Boys always engaged in mischief; but organised bullying and attacks have multiplied in recent years. Teachers would stop one fight, and another one would start. Windows rattled, desks overturned. Some would jump on tables, scream, and ignore the teacher. When alone, individual boys would behave peacefully, but in a group, they paralysed the class. Those who wanted to study were deprived of opportunity.

Evolutionary psychology research shows that through play children practice the skills they will use later in life and also establish hierarchies of ability. Children are experts at imitating sequences, such as the steps of a dance, and compiling them into fluent sequences. The acts are not random. Millions of years ago some animals survived because they could learn from their peers. Watch-and-imitate sequences form the rudiments of education and are common among mammals, including ants. The animals that learned most efficiently left more descendants, and they passed learning abilities to their next generation.

Specialised neurons in the brain, sometimes called mirror neurons, have

evolved to facilitate learning of movements. The imitation is not exact but adapts to circumstances. This constitutes informal education; unlike formal education, it takes place at all hours. We watch and perform the movements of the majority and of the role we expect to have in the future.

Aggressive acts seem easy to imitate. This was demonstrated in the United States in the 1960s¹. Children watched a TV character hit a big doll, and later they were put in a room with that same doll. They were more likely to hit the doll than children who had not watched the video. Many studies since then have had similar results (see references on page 15). A 2017 study demonstrated that children who were shown guns being used in movies found guns in a toy room and used them. Those who had not been shown guns in movies, used them at a much lower rate². The emotional connections facilitate consolidation. Once a child learns to hit a doll or joyfully imitate aggressive cartoons, it is unclear what forces will mitigate it.

The predilection for copying aggressive acts may be due to evolutionary forces on male roles. Humans have survived the harsh Paleolithic circumstances through labour division. Women bore and raised children, while men coalesced in groups to defend the community territory or to attack other

Evolutionary psychology research shows that through play children practice the skills they will use later in life



OPINION

with a gun aimed at the viewer. The various media have thus brought this content perhaps to almost every child on the planet.

So, millions of boys such as the three-year old Korean receive individualised and efficient training on how to hit others, pick up guns, shout, threaten, take hostages, punish those who disobey. They watch characters who competently and instantly pull out weapons, often defending women who helplessly cry to be rescued. Children may watch 2-3 murders per minute, with fake blood flowing. And these training programmes run multiple times per day. A better training strategy to raise aggression would have been impossible to build.

Compared with males who have not played violent video games, males who do play them are 67 per cent more likely to engage in non-violent deviant behavior, and 63 per cent more likely to commit a violent crime or a crime related to violence³. And like a canary in the mines, the effects of aggression training appear in the first grade.

Girls are affected in perverse ways. They may also become violent and kill girls they dislike, as some news stories show. But evolution has prepared women to look for strong defenders and providers. Thus many are attracted to violent men, even under risk of abuse. Men to some extent act violently because of female approval. And mating with aggressive males helps pass aggression-related traits to pass to the next generation. This tendency has gone on for thousands of years, but the many cases of girls who followed ISIS fighters to Syria bring this phenomenon into a sharp focus.

So what do researchers say today? Admittedly it is hard to attribute aggressive acts to movies watched long-ago, but links are clearly there. Violent content raises the probability of violent verbal encounters. It is not a coincidence perhaps that humans have been affected at the population level. There is an explosion of violence in the world. Men may not necessarily kill others, but they tend to become more verbally aggressive. They engage in bullying in schools, trolling on the



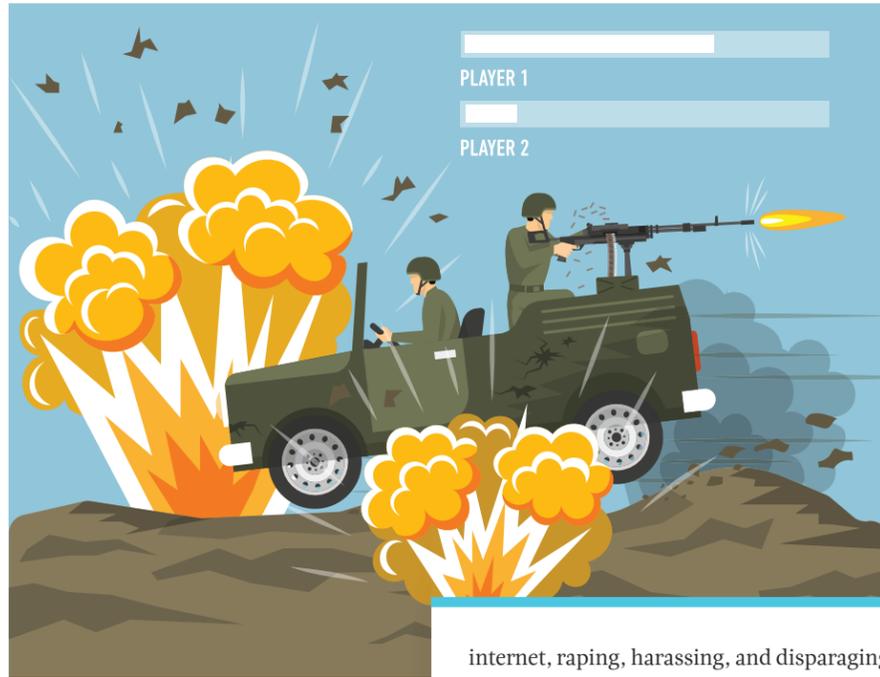
Violence was produced since the movie industry started

groups and expropriate their wealth. Attack behaviours have been a key skill, and may be why boys practice it with each other. They also tend to find pleasure in explosions, racing police cars, blood, and weaponry.

The evolutionary adaptation to learn such skills creates interest, which the movie and video industry have exploited. Violence was produced since the movie industry started, but it was limited by technology and actions feasible by male adults. In the mid-20th century, violent movies featured cowboys and Indians, Kung Fu, or cartoons such as Roadrunner. But now technology has created digital characters and scenes that are only limited by the producers' imagination. The feats of aggression and risk are now superhuman and not merely available for watching. They can be practiced in videogames. Children now practice car thefts, shoot aliens or ancient warriors or defend medieval castles. Violent content gets viewership and sells ads. It is almost impossible to turn on the television without finding a channel



The feats of aggression and risk are now superhuman and not merely available for watching. They can be practiced in videogames. Children now practice car thefts, shooting aliens or ancient warriors or defend medieval castles.



There is an explosion of violence in the world. Billions are invested in violent media and videogames . . .

internet, raping, harassing, and disparaging women. Desensitisation to suffering and death creates bizarre phenomena, such as a 17-year old girl coaching her boyfriend by phone to commit suicide.

Thus there is an explosion of violent gangs, terrorism, mass murders, school shootings, multiple civil wars, cybercrime, threats between the US and North Korea. These suggest that aggressive actions start more easily now than 10-20 years ago. And the perpetrators know what to do. They use guns fluently and easily, and they teach their comrades the missing skills.

Many researchers have raised alarms and publicised study results. Even daily news featuring criminals generate additional events. But the only outcome is scientific publications and interesting editorials. Policymakers at the national or international levels are not giving much thought to this threat. It is easy to see why. Billions are invested in violent media and videogames, as well as in guns. Men are willing to pay for violent content, and companies are happy to profit. Thus, it is currently impossible to stop the training of the young.

In another decade, most adult males of the earth will have gone through the aggression training programmes. How will daily aggression levels change? No mitigating forces are visible at this time,

and violence may rise further. Bands of aggressive men may drive women into retreat from the free movement and labour force participation that they have enjoyed since the 20th century. Wars may multiply and create larger areas of forced migration and environmental contamination. Devolution is conceivable in many areas, with humans driven back to the Paleolithic era that required aggressive adaptations. And with the changing climate and depleting natural resources, humans may be unable to climb out of that.

Justifiably, UNESCO is searching for counter-measures. UNESCO MGIEP is developing an online course on empathy, compassion, mindfulness and critical inquiry. But the effects of violent media are so instructional to the implicit memory system, that educational curricula are like a bandaid to a gunshot wound.

Somehow UNESCO must advocate for a ban of violent media. This certainly seems unrealistic and will not happen in the next decade. And even if new productions are banned, old movies and games will remain available in practically every corner of the world. Banning the content will only make it more desirable. And it may be insufficient to stop some children from being trained. They may just be more vulnerable to the bullies who have. There is a perverse reason to continue aggression training among all males.

So will our Paleolithic past control humanity's future? UNESCO should become a voice of reason and science on human violence. It may initiate plans of action and obtain the buy-in of donors and influential governments.

In the 1920s, the independence of India seemed equally improbable. But Mahatma Gandhi, armed only with moral fortitude practiced non-violence and overcame impossible odds. Perhaps UNESCO MGIEP, with its scientific orientation to peace is the right institute for this task.

Sample of studies attesting to the effects of media violence

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Chris 'Wombat' Crowell is a Game Designer and Creative Director with 20+ years experience creating a wide range of critically acclaimed games. He has worked with globally known brands such as NASCAR, Tiger Woods, Sim City, The Sims, Open Season, Indiana Jones, and Kung Fu Panda. He co-founded the online division at Behavior Interactive, developing the kids MMO Monkey Quest in partnership with Nickelodeon. At Tribal Nova, as Creative Director he helped launch the Wozworld startup, a virtual world for tweens. At Ganz Studios (home of WebKinz), he directed the creation of the Tail Towns MMO and social game for Facebook.

In recent years, Chris has shifted his focus towards working with educators to create engaging and effective **Game Based Learning** and **Gamified Digital Education** experiences. He has worked with leaders in this field such as Glass Labs, Pearson, and TVO to develop cutting edge projects such as Pearson's Insight Learning System and TVO's mPower suite of classroom games. He is currently working at ProdigyGame.com, a massively multiplayer game played by millions of elementary students that mixes gameplay with grade 1-8 math curriculum.

Chris has served on the Board of Directors for the International Game Developers Association, and is a founder of the Positive Impact Games SIG. In 2014, he was honoured to participate in the White House Educational Game Jam.

Why Games can be Effective Pedagogy

Chris Crowell

Physical and digital games are being increasingly used by educators as engaging and effective learning experiences. While many resist this as 'frivolous fun', there are valid reasons why games work as a pedagogical tool.

The Ongoing Evolution of Education

Considering the mandate of education is a popular sport, with pundits forwarding diverse views, but most agree on the basics: the role of education is to prepare the student for participation in society by presenting essential information, and guiding expertise in foundational skills.

“The function of education, therefore, is to teach one to think intensively and to think critically.

Dr. Martin Luther King

Kids are Makers and Digital Natives

In addition to the need to develop these modern skillsets, educators are faced with the second generation of students who have grown up with the modalities of the digital era. They are used to being able to drive every choice, communicate instantly, and access any information with the tap of a finger. Modern education needs to meet the expectations of these students in order to engage and challenge their curiosity and intellects.

Games are Tools for 21st Century Competencies

Games, Gamification of Learning, and Game Based Learning are not intended as replacements to any current effective pedagogy. Rather, these approaches can be valuable additions to the teaching toolbox that educators can leverage to engage the modern learner. The 3rd principle of Adler's 'Paideia Proposal' is 'The primary cause of learning is the activity of the child's mind, which is not created by, but only assisted by the teacher'. Game Based Learning puts the student in the driver's seat, with the teacher's role shifting from 'sage on the stage to guide on the side'. What follows is a review of a number of core properties of games and Game Based Learning that support this premise, and that also contribute to the development of 21st Century Competencies.

Agency and Responsibility

The player controlled interactivity of games is a key differentiator from other forms of media, and especially different

The thing is, society is constantly evolving. Looking through the lens of technological progress, we've witnessed some massive changes from the norms of the last century. In a few decades, we've gone from assembly line factory jobs and vacuum tube powered, room-sized computers, to the lightning fast interactivity of the digital world that is transforming every sector, including schools. Dealing with the differences created by the march of progress is nothing new. 3000 years ago, Heraclitus quipped that 'The only thing that is constant is change', which serves to illustrate the timeless nature of societal evolution, and the need to constantly re-evaluate and update the engines of society, including education.

In response to this changing world, pedagogy as a whole is undergoing a fundamental evolution. While basic comprehension and skills in language literacy, mathematics, science, and art are still essential; the current digital era demands a new set of transferable skills to meet the needs of a rapidly changing world. Globally, many educators are developing new standards under the umbrella title of 21st Century Competencies. Core to these competencies are the mental habits of logic, tenacity, and creativity honed by challenging gameplay. The opening statement of *21st Century Competencies: Foundation Document for Discussion* reads in part "Researchers acknowledge that the need to engage in problem solving and critical and creative thinking has 'always been at the core of learning and innovation'. What's new in the 21st century is the call for education systems to emphasise and develop these competencies in explicit and intentional ways through deliberate changes in curriculum design and pedagogical practice. The goal of these changes is to prepare students to solve messy, complex problems – including problems we don't yet know about – associated with living in a competitive, globally connected, and technologically intensive world."



social lessons can be packaged in an entertainment envelope.

One great power of games in the classroom is that students experience cause and effect firsthand, and realise that actions have repercussions.

from the didactic paradigm of classroom lecture focused on rote memorisation and repetition. A core element of any game experience is agency. Agency is the ability to take meaningful action, which conveys an associated responsibility for the results of those actions. As Spider-Man likes to say, “With great power comes great responsibility”, which is not only valuable advice, but good reminder that social lessons can be packaged in an entertainment envelope. The relevant point is that ANY power should have an associated responsibility. In a game, the player must observe the game state and create a mental model that makes sense of the game elements, the player’s own goals, available actions, and potential success at each of those actions...and what is likely to happen as a result of those actions. Every action (including taking no action) will have an impact on the state of the game. The student is not only able to make his/her own choices on an action by action basis but is responsible for the analysis and strategy that eventually results in success or failure at achieving his/her goals. One great power of games in the classroom is that students experience cause and effect firsthand, and realise that actions have repercussions.

No matter whether explicit or subtly implicit, engagement in a digital game experience comes from the challenge of correctly using critical thinking skills in each of those loop phases to solve the problem and create a positive outcome.

Critical Thinking and Problem Solving

An engaging game experience entails overcoming a series of challenges in pursuit of a goal. The player is presented with some kind of obstacle, and must use his/her available game actions to create a solution that gets the player past the obstacle and further toward his/ her goal. Whether the game is as simple as *Tic Tac Toe* or as complex as *World of Warcraft*, the act of playing a game is a constantly repeating loop of observation, analysis, planning, execution, and feedback. While this analysis process is implicit in all game loops, some games, such as *Body Battle*, offer a familiar explicit problem solving paradigm in the form of ‘detective’ style gameplay where clues are given. The player must explore and analyse the clues to find the solution. No matter whether explicit or subtly implicit, engagement in a digital game experience comes from the challenge of correctly using critical thinking skills in each of those loop phases to solve the problem and create a positive outcome.

Mastery and Resilience

Games are elastic interactive spaces where curriculum concepts can be encountered in familiar scenarios. In an explicit example of curriculum concepts used in a Game Based Learning framework, one game from mPower has students use math concepts such as protractors and geometric angles to navigate a small boat on a river as part of a trash collection job. Using the concepts over and over gives meaning to the concepts, and creates a mental pattern library for use in the real world.

As a virtual reality, games offer a safe space to experiment with the curriculum concepts, with the freedom to learn from failure, applying that new knowledge towards eventual success. The teacher can

The growing legion of progressive educators prove that games ARE effective pedagogy, and we can expect them to be a standard tool in the 21st Century classroom.

Examples of Games Based Learning



Educators use the incredibly popular game of exploration and creativity **Minecraft EDU** to teach everything from mathematics (implicit in everything from quantities in recipes to time planning) to Spanish language. Games such as **Prodigy** are using gamification techniques to engage millions of students in a wizard filled game world that has answering math questions as method for casting magic spells. **Classcraft** has been used to gamify the regular classroom work with in school rewards and collaboration. Portals such as Edutopia and Edtech can be gateways to many more games, and the communities of educators who use them.

constrain the play in terms of the game and setting of goals, and the student is free to use the tools available in that space to test the boundaries of the concepts, and assess the efficacy of multiple solutions.

Assessment and Differentiation

A digital game can be designed to constantly and invisibly capture granular play metrics for each student. The play metrics can be translated to reports on a teacher dashboard to allow differentiated instruction and assessment that is tailored to the individual student, such as when a student is having problems with particular concepts.

In real time, a digital game can also adjust the gameplay in response to the metrics to serve up the next set of problems at just the right level of challenge for each student. These metrics can inform the scaffolding provided by game help systems, to provide instant assistance aimed at the specific difficulties the student is experiencing at precisely the moment of maximum relevance.

But what about the Violence?

No conversation about the effects of video games can ignore the constant question of whether exposure to violent games increases violence in real life. While this question is provocative, the assumption of a big problem is unsubstantiated.

Like film and television, not all games are ‘violent’. There are untold numbers of games of all sorts, and the discussion should be centered on the particulars of each game. A quick check on the best-selling games of all time shows only two ‘violent’ games, with the puzzle game Tetris taking the top spot.

In reality, violent crime is in decline in the USA. The FBI reports that violent crime per 100,000 in 1997 was 611. In 2016 the rate was 386. This massive drop is over the same period where video game playing has

¹Trilling & Fadel, 2009, p. 50

boomed, to the current ‘sixty-five percent of American households are home to someone who plays video games regularly’. If there WAS a correlation, then we would surely be swimming in mass murderers who were infected by their game experiences. Per the numbers, ‘Violence In Games Does Not Cause Real-Life Violence’ seems to be the rational, if rather boring, conclusion. If anything, there is a case to be argued that the emotional outlets and psychological role-play experimentation offered by videogame experiences have had a deflating effect on violence.

There is even an argument to be made for considering violent games as classroom content. Consider that all media has a range of content that includes violent content. Consider the violent themes in classic classroom literature such as *The Diary of Anne Frank* or *The Iliad*. *Raging Bull* is presented in film studies as a cinematic masterpiece, but it is also an unflinchingly violent movie. *Grand Theft Auto* is a massively popular game series with an anti-social dystopian worldview where violence is a key mechanic. Yet, Toronto teacher Paul Darvasi was able to use this game experience, shared by the majority of his students, to lead a discussion about social privilege in the real world. Treating games as a valid medium allows teachers to reach students in a familiar format, bringing forth discussions about their games in addition to the movies and novels they also consume.

In regard to games in the classroom, one must note that like any other teaching tool, the inclusion of a game in the curriculum is entirely under the teacher’s control.

Summary

Of course, there is no such thing as a silver bullet that solves all problems, and games as part of learning is just another tool for educators to use. But it is a VERY strong tool, and should be understood and used properly. The growing legion of progressive educators prove that games ARE effective pedagogy, and we can expect them to be a standard tool in the 21st Century classroom.

Higher Education as a Lever of Development in India



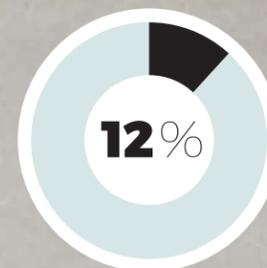
Ms. Bhaswati Mukherjee is presently a lecturer at the Foreign Service Institute and in different Universities in India and overseas - on disarmament and strategic issues. She also works on the Spice Route Project for State Government of Kerala and the Indentured Labour Route Project for UNESCO and the Government of Mauritius. She completed a book on 'Emerging Challenges and Dynamics in the India-EU relationship', commissioned by the Indian Council of World Affairs. Ms. Bhaswati was the Ambassador of India to the Netherlands from 2010 to 2013, and the Permanent Representative of India to UNESCO from 2004 to 2010.



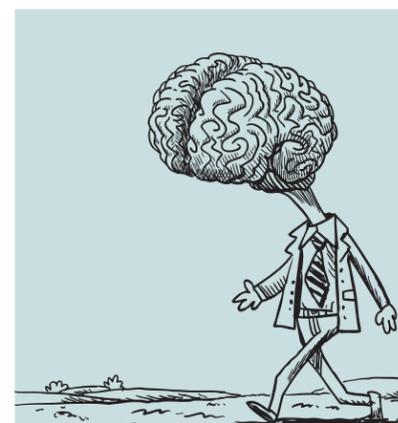
.....
 **Bhaswati Mukherjee**

India's illustrious second President, Dr. S. Radhakrishnan, as Chair of the University Education Commission (1948-49) immediately after India's Independence underlined the importance of higher education to lift India from its crushing twin burdens of poverty and underdevelopment in this seminal introduction to the Commission report: "The most important and urgent reform needed in education is to transform it, to endeavour to relate it to the life, needs and aspirations of the

people and thereby make it the powerful instrument of social, economic and cultural transformation necessary for the realisation of the national goals. For this purpose, education should be developed so as to increase productivity, achieve social and national integration, accelerate the process of modernisation and cultivate social, moral and spiritual values." Famous Nobel Laureate and Chilean poet, Pablo Neruda, put it more simply: "I want the huge majority, the only majority, every one, to be able to speak, to read, to listen, to blossom."



literacy rate in India at the time of Independence



The prevailing 'mantra' ... was to force developing countries to invest their resources only in primary and secondary education. ..The attempt was to encourage a 'brain-drain' with the outflow of national intellectuals to the West since no opportunities were available in the home country.

Both are powerful messages, which also resonate in the Preamble of UNESCO's Constitution: "That the wide diffusion of culture and the education of humanity for justice and liberty and peace are indispensable to the dignity of man...that peace must therefore be founded, if it is not to fail, upon the intellectual and moral solidarity of mankind."

India's Founding Fathers always highlighted the importance of tertiary education and despite the resource crunch, built Universities for social sciences as well as medical colleges and India's now famous Institute of Technology (IIT). It was not an easy task. In 1947, just after Independence, India, forced to miss out on the Industrial Revolution because of colonial rule, was a very poor country with a huge population and alarming illiteracy rates particularly among its women. India's literacy rate at the time of Independence was 12%. The prevailing 'mantra' in the World Bank and Breton Woods institutions, staffed by former colonial bureaucrats, was to force developing countries to invest their resources only in primary and secondary education, encouraging those who could afford to benefit from university education to do so in the country of their former colonialists. Dr. Mahmood Mamdani, Professor, Columbia University, and author of 'Higher Education, the State and the Marketplace' says: "The World Bank made a frontal assault on African Universities in 1986, advising the Vice Chancellors that it would make economic sense to close universities in independent Africa and have its human resource needs trained in Universities in the West." This was followed by what Mamdani defined as 'conditional aid'. The attempt was to encourage a 'brain-drain' with the outflow of national intellectuals to the West since no opportunities were available in the home country.

This World Bank injunction was rejected by both Nehru in India and Mao in China. Both countries have never looked back.

There is a national consensus in India,

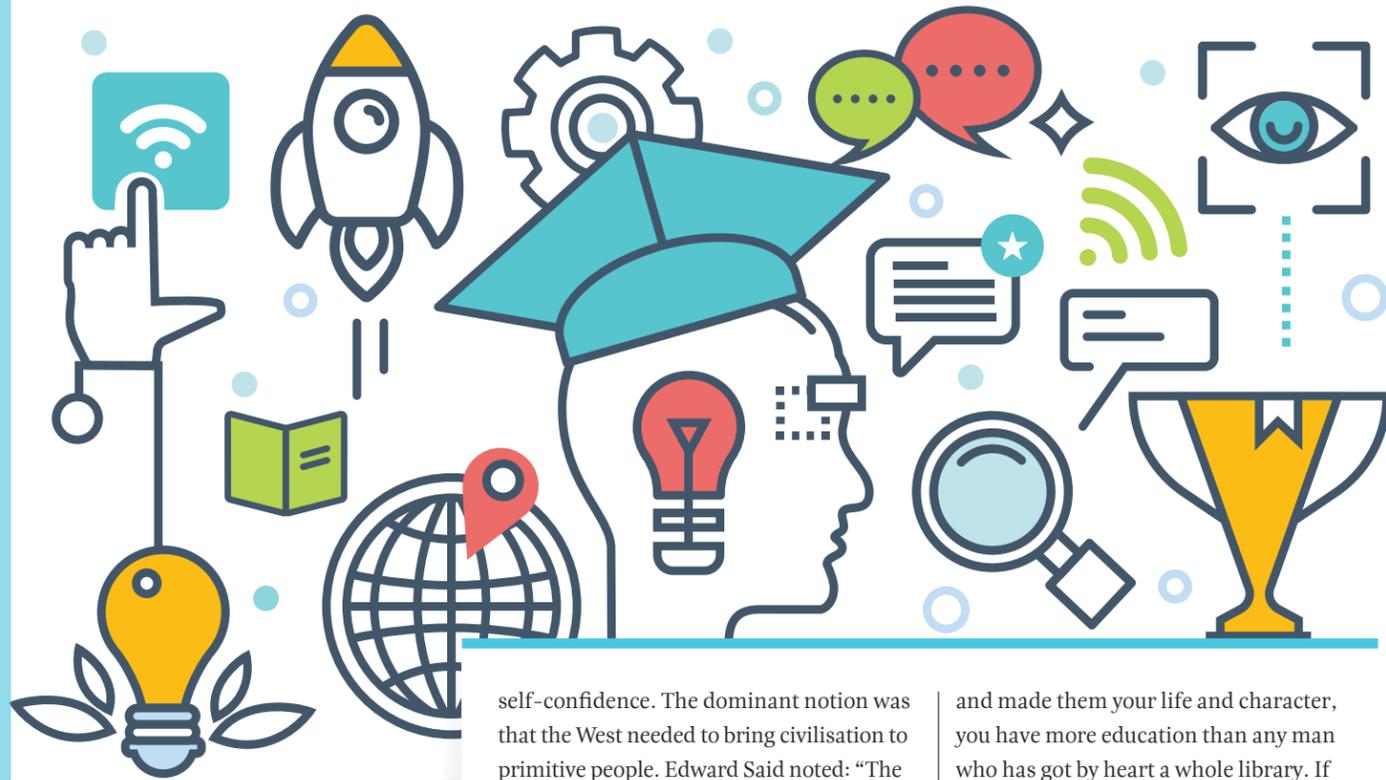
One cannot over-emphasise the role of higher education as the key catalyst for promoting socio-economic mobility and preparing our citizens in the knowledge society.

encapsulated now in the 2016 National Policy on education, which recognises the criticality of education as the most important vehicle for social, economic and political transformation. One cannot over-emphasise the role of higher education as the key catalyst for promoting socio-economic mobility and preparing our citizens in the knowledge society.

Tertiary education is facilitating the absorption of the positive effects of globalisation and enabling India to develop a trillion plus economy through a highly qualified and broad national talent base.

India is no stranger to higher education. The importance of education was well recognised in India. 'Swadeshe pujuryate raja, vidwan sarvatra pujuryate' in Sanskrit simply means: "A king is honoured only in his own country, but one who is learned is honoured throughout the world." The world's first University was established in Takshila in 700 BC and the University of Nalanda was built in the 4th century BC, a great achievement and contribution of ancient India in the field of education. Nalanda is now being developed as a potential UNESCO World Heritage site. Science and technology in ancient and medieval India covered all the major branches of human knowledge and activities. Indian scholars such as Charaka and Susruta, Aryabhata, Bhaskaracharya, Chanakya, Patanjali and Vatsayayna and numerous others made seminal contribution to world knowledge in many diverse fields such as mathematics, astronomy, physics, chemistry, medical science and surgery.

Under colonial rule, with the glorification of English and Western values, India gradually lost self-esteem and



Post-secondary education needs to prepare graduates with new skills, a broad knowledge base and a wide range of competencies to enter a more complex and interdependent world.

self-confidence. The dominant notion was that the West needed to bring civilisation to primitive people. Edward Said noted: “The culture of imperialism entailed venerating one’s own culture to the exclusion of other cultures”. This attitude is best symbolised in Macaulay’s Minute in 1835 when he said: “I have never found one among them (Indians) who could deny that a single shelf of a good European library was worth the whole native literature of India and Arabia.”

This colonial legacy still lingers on since education is of relatively low priority in India’s federal structure, both in status and recognition. The right to education is a State subject in India’s Constitution. There is now recognised in India’s Parliament, cutting across political barriers that education must be given the highest priority. Necessary resources must be provided and conditions created that are favourable for the process of teaching and learning to flourish. Indian educationists often cite the famous Indian philosopher Swami Vivekananda who underlined: “Education is not the amount of information that we put into your brain and runs riot there, undigested, all your life. We must have life-building, man-making, character-making assimilation of ideas. If you have assimilated five ideas

and made them your life and character, you have more education than any man who has got by heart a whole library. If education is identical with information, the libraries are the greatest sages of the world and encyclopaedia are the greatest Rishis.” This statement assumes much greater significance with the advent of internet and ever expanding digital connectivity.

Quality assurance in higher education is the top priority of India’s policy agenda. Post-secondary education needs to prepare graduates with new skills, a broad knowledge base and a wide range of competencies to enter a more complex and interdependent world. This will take time since quality is a multi-dimensional concept. Systems of accountability and accreditation with a robust regulatory mechanism are essential to the process of sustaining and improving quality. Quality has to be the concern of all institutions. Excellence will flow from good quality institutions and appropriate governance structures. Higher education in India has experienced an unprecedented expansion accompanied by diversification of the sector. The unplanned expansion of the sector poses challenges for enhancing and maintaining quality.

The country has established external

If India now does the things now required to be done and transforms its higher education sector, it would be equivalent to a major social revolution. The rest of the 21st century could then belong to India.

For higher education to be a lever of development in India, its Universities must be globally ranked.



quality assurance agencies in the 1990s to assure external quality. The National Assessment and Accreditation Council (NAAC) was set up by the University Grants Commission (UGC) in 1994 to accredit Universities and institutions of general higher education. The National Board of Accreditation (NBA) was established by the All India Council of Technical Education (AICTE) in 1994 to accredit programmes and institutions. NAAC accredits institutions and certifies for educational quality of the institution based on several criteria.

There is an urgent need to undertake reforms in India’s tertiary sector. Some reforms measures could include:

- Creation of independent quality assurance frameworks to address the quality deficit in the higher educational institutions.
- Matching of autonomy with accountability: this would involve the realignment of the regulatory functioning in such a way as to promote autonomy of institutions. This approach envisages that a paradigm shift to facilitation rather than regulation.
- Revisiting of the issue of multiplicity of entrance and eligibility examinations with the exploration of the possibility of a single national test.

— Permitting of foreign education providers in India for proper regulation and internationalisation of education by enhanced collaborations.

For higher education to be a lever of development in India, its Universities must be globally ranked. Today not a single Indian University finds a place in the top 200 positions in the global ranking of Universities. Even India’s top ranking institutions appear low in the global rankings. The idea of establishing accreditation agencies in India was to enhance standards and quality of higher education.

As a measure of quality assurance, India established accreditation agencies in 1994. The institutions of higher education were supposed to approach the accreditation agencies to get their institution or programme accredited. Accreditation was voluntary and as a result only few institutions are accredited in India. This issue must be addressed urgently.

India as a nation has travelled a long way from the India that Swami Vivekananda described so many years ago in ‘The Essence of India’. He said: “The longest night seems to be passing away, the seeming corpse appears to be awaking and a voice is coming to us – away back where history and even tradition fails to peep into the gloom of the past, India, this motherland of ours is awakening! None can resist her anymore; never is she going to sleep anymore; no outward powers can hold her back any more. India that is to be, the future India, must be much greater than ancient India.”

For two-thirds of mankind’s history, India as one of the oldest living civilizations in the world dominated the world scene, be it in philosophy, economics, trade, culture as well as in education. If India now does the things now required to be done and transforms its higher education sector, it would be equivalent to a major social revolution. The rest of the 21st century could then belong to India.

Reimagining Globalisation and Education



Fazal Rizvi is a Professor of Global Studies in Education at the University of Melbourne, as well as an Emeritus Professor at the University of Illinois at Urbana-Champaign. Fazal has written extensively on issues of identity and culture in transnational contexts, globalisation and education policy and Australia-Asia relations. A collection of his essays is published in: *Encountering Education in the Global: Selected Writings of Fazal Rizvi* (Routledge 2014). Fazal is a Fellow of the Australian Academy of the Social Sciences, a past Editor of the journal, *Discourse: Studies in Cultural Politics of Education*, and past President of the Australian Association of Research in Education. He is a co-author of *Class Choreographies: Elite Schools and Globalization* (Palgrave 2017), and of a major report, *Australia's Asian Diaspora Advantage*, produced for the Australian Council of Learned Academies (ACOLA 2016).



 **Fazal Rizvi**

The past few years have witnessed the rise of a strident form of nationalism around the world. This has clearly been evident in the unexpected electoral victory of Donald Trump and the Brexit vote; but also in the nationalist political tides in countries as diverse as Philippines, Turkey and India.

To explain the global rise of this nationalism, many commentators have pointed to the idea of globalisation itself. They have argued that this historical shift represents a major backlash against the various forms and effects of globalisation, and that ordinary people no longer believe in what they now regard as its false promises.

What implications does this anti-globalisation sentiment have for the

internationalisation agenda to which many systems of education are now committed? In what ways do they now need to re-imagine the relationship between globalisation and education? How might we now need to rethink the ideas of global learning and global citizenship education?

It is of course no longer possible to deny the contention that recent global transformations have resulted in much economic anxiety, social unrest and political angst. Recent economic shifts are at least in part responsible for unsustainable and unacceptable levels of inequality, both within and across national borders.

Politically, globalisation has spawned a new world order in which power is in the hands of a transnational elite. The rise of transnational corporations

and the influence of intergovernmental organisations have squeezed out the democratic voices of citizens within their own communities. It has led to a democratic deficit.

And, culturally, a growing number of people believe that cross-border migration, encouraged by global economic processes, has unsettled the deeply held values and traditions that had given them and their communities a sense of meaning and purpose. Distrust of migrants and refugees has increased markedly.

These voices of discontent are clearly linked to the uneven distribution of opportunities resulting from globalisation. While in some countries, such as China and Korea, it has created new opportunities in others it has exasperated social inequalities. Even in those countries that have benefitted from it, gaps in people's life chances have widened.

In Europe and the United States, both the industrial cities and rural areas have carried much of the burden of global economic transformations. Job security has vanished, forcing people to move to places where the new jobs might be, away from their communities. They have had to retrain for new jobs, but lifelong learning is often privatised and requires an investment that many are not able to afford.

At the same time, welfare provisions have been cut. Governments have

increasingly objected to them on ideological grounds. They have argued that state subsidies and programmes encourage inefficiencies, making people dependent on handouts. A relentless ideological campaign has celebrated the logic of the markets, suggesting that each individual should be, responsible for his or her own future.

It is these sentiments – some justified others exaggerated or false – that have arguably given rise to a class of people whom the sociologist Guy Standing aptly calls the 'precariat', an agglomerate of several different social groups that include young educated but underemployed people, those who fear losing their cultural privileges, and those who have fallen out of the old-style industrial working class.

This new class of people is not only worried about job insecurity but is also concerned about loss of cultural identity, and especially its long-established cultural privileges. Not surprisingly therefore it is susceptible to the siren calls of political extremism, including those enunciated by expedient politicians who are not reluctant to stoke the fear of immigrants, refugees, indigenous peoples and other vulnerable groups.

In the context of these developments, ethno-nationalism's appeal is perfectly understandable. But is it justified? To what extent is globalisation responsible for the economic, political and cultural conditions that have exasperated social inequalities? And is it possible to abandon globalisation in favour of a nationalism that can bring back prosperity and cultural certainties?

These are profound questions, of deep relevance to educational policy and practice. This is so because education is simultaneously about the present and the future: about how things are and should be. In a world characterised increasingly by cynicism, distrust and pessimism, educators face the challenging task of helping young people to understand the sources of their confusions and discontents, and imagine the possibilities of a better future.

There is a growing realisation that the issues of environmental sustainability and global peace cannot be adequately addressed without acknowledging the ontological realities of 'one world'





Most communities have already been transformed by the global flows of people. Cultural diversity, exchange and hybridity have become a fact of life . . . and cannot simply be wished away.

there is now a deep awareness, especially among the young, that many of the most serious problems facing humanity are global, requiring collective action

This pedagogic task clearly demands an appreciation of how global interconnectivity may not in fact be the main source of the contemporary problems, but the ways in which it is interpreted and articulated; how a particular way of thinking about it has been grounded into our popular imaginary; and how many of our major institutions have been re-shaped in line with its ideological assumptions.

Collectively these assumptions are widely referred to as 'neoliberalism'. Neoliberalism assumes that a society is best imagined as a sum of individuals, each pursuing their own self-interest. It rests on a belief that the public sector is necessarily inefficient and presents a barrier to individual freedom, economic productivity and national development. It suggests therefore transferring the control of public institutions to the private sector, opening them up to global competition.

In this way, the ideas of globalisation and neoliberalism are viewed as inextricably linked. However, recent nationalist movements do not view globalisation in economic terms only, but more seriously as a major source of cultural concerns. They thus present a most diffused and often contradictory account of globalisation. Perhaps their success lies in their ability to bring under one ideological umbrella a range of conflicting ideas, political interests and cultural prejudices.

What they fail to consider however is that it is the automation of work and the privatisation and corporatisation of institutions that might have arguably contributed more to the economic distress of the precariat than the facts of global mobility and exchange. If social inequalities are not inherently an outcome of the global flows of people then it is perfectly possible that their causes lie in the excesses of the global corporations and the transnational elite.

In recent decades, the neoliberal reading of globalisation has involved the contention that globalisation is a force to which there are no alternatives. Accepting the neoliberal logic, nations around the world have accordingly reconstituted their major institutions, including education. In the process however they have failed to manage the contradictions of the neoliberal logic of the markets, and also redistribute the benefits of global trade in a more inclusive manner.

Yet what is intriguing now is that while recent anti-globalisation rhetoric has been strong among the new nationalists around the world, they have not abandoned a commitment to neoliberalism. Indeed, under the Trump Presidency, neoliberal policies have been promoted with even greater vigour. In India, its neoliberal assumptions have driven the Modi Government to further open the Indian economy to global competition, even as its nationalist rhetoric has become stronger.

In the United States, private and charter schools have never been supported with greater conviction. The notion of public higher education has been undermined by the withdrawal of a great deal of state funding, especially for programmes that promote the equality of educational opportunity. The idea of individual self-reliance has become the key driver underpinning policy shifts.

These contradictions will of course play themselves out over the next decade or so. But it is hard to imagine national systems anywhere once again separating themselves totally from global forces and



. . . the challenge facing education is not to reject the facts of global interconnectivity and exchange, but to redefine globalisation, beyond its neoliberal imaginary; to re-articulate the meaning of global interdependence



opportunities. There are some aspects of global interconnectivity that now appear ontologically fixed. Developments in information and communications technologies have, for example, rendered inevitable the global flows of ideas, images and ideologies. They have intensified transnational connectedness.

Most communities have already been transformed by the global flows of people. Cultural diversity, exchange and hybridity have become a fact of life in both America and Europe, and cannot simply be wished away. Economies have increasingly become service-oriented, with a growing recognition that such industries as tourism, education and retail rely invariably on global mobility and cultural exchange.

At the same time, there is now a deep awareness, especially among the young, that many of the most serious problems facing humanity are global, requiring collective action. Indeed there is a growing realisation that the issues of environmental sustainability and global peace cannot be adequately addressed without acknowledging the ontological realities of 'one world'. In these and other ways, many aspects of globalisation are thus here to stay.

If this is so then the challenge facing education is not to reject the facts of global interconnectivity and exchange, but to redefine globalisation, beyond its neoliberal imaginary; to re-articulate the meaning of global interdependence. This meaning

should not only refer to economic exchange but should also view interdependency as an opportunity to build a more just global community. This should be seen as a moral and political issue. It is also an educational issue, for it involves young people imagining their future, beyond the neoliberal terms in which economic, political and cultural exchange is currently defined.

Globalisation is not only about the material structures of power, but it also constitutes, and is constituted by, a particular way of interpreting and representing the world, a 'common sense'. One of the unexpected benefits inherent in the rise of nationalism might yet be its unmasking of the 'common sense' generated by neoliberal social imaginary, in which education clearly has a role to play.

This unmasking should show students how the benefits of neoliberal globalisation are unevenly distributed and how it has disempowered many communities. Students need to recognise that in order to empower themselves and their communities, they need to develop a new common sense of globalisation that does not ignore the ontological realities of globalisation but interrogates further the neoliberal assumptions upon which its hegemonic understanding has been framed, as a way of better understanding the effects and discontents it has produced.

They need to explore ways of rescuing globalisation from the clutches of neoliberalism, and imagining a conception that is not wedded to its deeply ideological structures. At the same time, they need to be alerted to the risks associated with nativism, the dangerous form of ethno-nationalism that has in recent years been promoted widely by the popular media and is often exploited by expedient politicians.

The task of education is to show students how economic and cultural nationalisms are unlikely to deliver the economic and social benefits they promise. Instead they will intensify a cultural politics based on a permanent state of fear, resentment and conflict. The future of young people cannot be well served by such a politics.

The Future of Education



Anneli Rautiainen, Master of Education, has graduated from the Helsinki University in Finland. She has had a long career in education at school, district and government levels as a teacher, vice principal, principal and head of unit. She has worked at the Finnish National Agency for Education (FNAE) for the past seven years. Her responsibilities have included developing pre-primary and basic education, in addition to Early Childhood Education and Care. Presently, she is working as the head of Innovation Center at the FNAE.

Anneli has been a key note speaker in more than 25 countries across the world. Anneli's approach to education: "I am passionate to develop education. My dream is to help teachers change their teaching and students to take ownership of their own learning. Teachers can make a difference in students' life. Students need to realise that they learn for their own lives and future. In the changing world, it is necessary to develop the ecosystem of education."

Anneli Rautiainen

Education promotes participation, a sustainable way of living and growth as a member of a democratic society. Learning also educates pupils to recognise, respect and defend human rights.

As there are more signs of distraction than cohesion in the world, we share the urgency for change. Schools cannot remain isolated from this fast moving world. We need to shift the paradigm of education. Education reinforces the students' positive identity as human beings, learners and community members.

So why is there a need for transformation in the Finnish education system? We have been very fortunate to succeed in education outcomes throughout the years in our country, however, one should keep improving and learning constantly. The world is going through a massive change in technology and in society. The education system is strong in Finland, but it does not necessarily

We need to trust our students, so that they themselves are capable of discovering and even creating new knowledge, moving from being passive recipients of memorising inputs to finding their own ways of learning . . .

react quickly to changes in the surrounding world.

We are responsible for the students' skills and readiness for future working life. Traditionally, transformation has been guided through collaborative curriculum work, development projects and new legislation and government policies. Those processes are sometimes too slow.

We also have a concern that while some cities, municipalities and schools develop their working culture and pedagogy, others don't for some unknown reason. This might cause inequity in student learning outcomes as well as in well-being.

We have also heard the voice of teachers and principals as their work is becoming increasingly more difficult and we see new problems arising in faculty well-being. The Finnish system has been built on the pedagogical trust towards teachers but in addition to merely putting trust towards their work, teachers have needs in being supported when needed. Teachers feel that they need to change, but don't understand how. Presently student assessment seems to be an obstacle for them.

Students are not objects of learning, but active in their own learning. They explore new questions, have a co-sense and shape the future. We need to trust our students, so that they themselves are capable of discovering and even creating new knowledge, moving from being passive recipients of memorising inputs to finding

their own ways of learning as well as discovering how to influence and improve the phenomena that surrounds them. Skills must be present in all learning, not only in knowledge.

Teachers are no longer at the center of learning as being only experts. They facilitate, activate and coach learning. We need to give them the time to discover their new role themselves by collaboration and co-creation. Learning communities must be built in every school. The relationship between students and teachers should become co-creative and dialogic. This pedagogical change requires quality professional learning opportunities for those in the working field. In addition, we must promote excellent initial teacher education for student teachers. We hope that education as a field will continuously attract young people to become teachers.

We must change the role of the learner, the educator, their relationship and most of all schools as an organisation as well as governance. The middle leadership plays a key role in the transformation. This also requires collaboration. A key characteristic leaders must practice includes coaching. Principals must be strong pedagogical leaders, those who lead learning. They need to be well-trained and future-oriented. No longer must they work alone; instead they should involve new stakeholders to co-create in developing schools. Those stakeholders can be youth workers, professionals from the health and social sectors and members from different organisations or working life.

New players must be invited in schools to solve together existing problems and to share ideas on the future steps. No longer will education professionals manage to solve those wicked problems alone. To succeed in this difficult task, principals should turn the focus first on building learning communities in schools.

The whole system change requires the administration at municipal and government levels to transform their working culture as well. Governance should have a shared awareness of education.





Education systems must no longer focus only on achieving excellence. Education builds well-being in this world. Our world needs empathy.

We have worked traditionally in silos so to speak. It is time to discover a new perspective of working with other stakeholders. Governance should no longer be a top down approach anywhere.

We need to seek new ways in practice to work with parents and families on learning and well-being as families play a key role in their child's well-being. Student learning, development and well-being must be supported in cooperation with parents. I am not sure, if the voice of parents is heard enough yet.

Education systems must no longer focus only on achieving excellence. The change in the mind-set might be difficult to make. We need to think about, how we can approach this; by collaborating, co-creating, involving new players in the development process, experimenting and innovating, even by using analytics. I hope we can reach an ecosystem of education, a system that reacts to the surrounding world by breathing in and out.

Education builds well-being in this world. Our world needs empathy. How can we build a sustainable future through empathy? Can we work through innovations? Can we do experiments to discover, what works and what doesn't work? Can we work more with narratives?

We have realised that good systems and ideas don't scale. We need to look for new ways of collaborating with each other also globally to reach well-being and equity for all children and young people, who are the future makers of tomorrow's fast-moving and unexpected world. We should have a common vision in the world for education and navigate towards the vision by choosing different paths.

We all stand at different points in our countries on education due to the past and present. After all, innovations and experiments can be created everywhere. But we should not leave anyone alone; instead be ready to share and develop together with those who are less experienced in their education systems. Our common task is to help students identify their strengths and to build their future by learning. Education offers students possibilities for the versatile development of their competence. By succeeding in our work, education will help build up human and social capital.

Our common task is to help students to identify their strengths and to build their future by learning. Education offers students possibilities for the versatile development of their competence.



Pratik Mehta is the Head of Education & Skills in Microsoft. He works extensively with Policy decision makers, Government institutions, schools and colleges in the field of Digital Transformation in Education. He also mentors Ed-Tech and Start-Up Companies and provides them the right platform to scale up their business. He has recently been conferred with an award from the Hon'ble Ex-President of India- Shri Pranab Mukherjee for his contribution for driving digital initiatives in education. He is also a member of Confederation of Indian Industry (CII) National Committee on Skill Development.

Building a Technology-Driven Environment for Collaborative Learning at Schools

Pratik Mehta

Education is a key priority for governments across nations. Education has the most profound impact on the growth of a nation and also how the society evolves and the values it upholds. It is an era of digital transformation with rapid changes happening at a great pace. As a part of education, along with leadership and vision as well as building the capacity of teachers and the Millennials, creating the right learning infrastructure is equally

important. Access to technology can facilitate and empower the educators to build 21st century skills, which are around critical thinking, problem solving, attention to detail, collaboration and teamwork among several others. UNESCO's framework for 21st century skills strongly postulates a competency based approach to learning and teaching. Learning and teaching should not only focus on exposure to knowledge but also build competencies that matter for employability and entrepreneurship.

A FRAMEWORK FOR INNOVATION



21ST CENTURY LEARNER

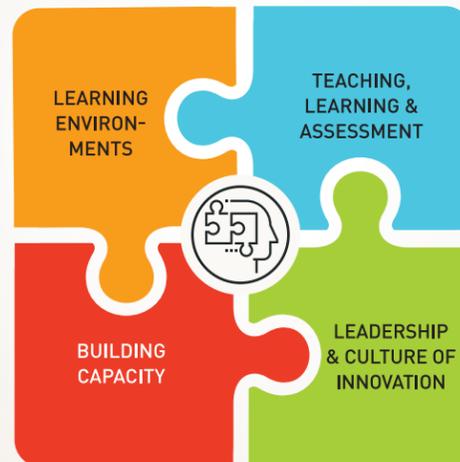
Systems framework for guiding innovative school reform that highlights essential dimensions that are critical success factors to help guide your innovation journey.

Where / When Students Learn?

- Physical & Virtual Environments
- Formal & Informal Environments
- Innovative Uses of Information & Communications Technology (ICT)

How Teachers Learn / Teach?

- Professional Practice & Standards
- Peer Coaching & Mentoring
- Professional Development
- Innovative Uses of ICT



What / How Students Learn?

- 21st Century Standards
- Curriculum & Learning Paradigm
- Assessment
- Innovative Uses of ICT

Develop, Sustain & Scale School Improvements

- Innovation Culture
- Leadership Development
- Learning Community
- Innovative Uses of ICT

Source: Adapted from UNESCO's framework for 21st Century Learning at Microsoft <Microsoft in Education <https://education.microsoft.com>>

A Framework for Innovation in context of Education

The Innovation framework on Education draws from UNESCO's work in this area, where the focus is on the learner. In order to drive excellence at an institutional level, there are four key areas to be addressed.

The student has to be at the center of the learning experience. The role of the teacher needs to be that of the facilitator. An educator helps deploy technology meaningfully to drive engaging learning experiences in the classroom.

- 1 Leadership and culture of innovation at the Institute
- 2 Building the capacity of teachers
- 3 Creating learning environment for students
- 4 Relooking at Teaching and Assessments to drive collaborative and innovative experiences for students

The role of the teacher needs to be that of a facilitator. An educator helps deploy technology meaningfully to drive engaging learning experiences in the classroom.

Creating an environment of excellence and role of technology

The role of the leadership and teachers is extremely important for excellence at an institutional level. A culture of innovation needs to be created at the Institution. However, this needs to be coupled with creating the right learning environment and infrastructure at an institution. This is not only at the classroom level but at the institution, district and state level.

The focus of this article is to share insights on how technology and ICT infrastructure can greatly influence the learning, management and governance at an individual, school, district, state and national level. Artificial intelligence, machine analytics, cloud technologies, data analytics and education tools can be deployed in meaningful ways to provide better insights into students' work and performance. The vision has to be in



Microsoft's One Notebook enables powerful learning experiences as the teacher can create Digital Notebooks for all students and can monitor their work.

Artificial intelligence, machine analytics, cloud technologies, data analytics and education tools can be deployed in meaningful ways to provide better insights into student's work and performance.



place for driving digital transformation in education. Digital technologies enable ubiquitous access to information. Learning is about making connections. This range of teaching-learning connections permeates the teaching and learning environment, a learning space that can be physical or virtual. The connections are created in several ways. Technology can be a big enabler in all of this. We connect

- New knowledge to existing knowledge
- The digital world with the real world
- Students to information and content
- Students to students
- Students to teachers

We connect the learning space to the world, competencies to skills, individuals to groups, and groups to communities. And, most importantly, we connect technology to information – information to knowledge and knowledge to application in the real world.

Learning at the classroom level and role of technology

There are several aspects that contribute to excellence in education at an individual, institution, state and policy level. As an individual, it would be helpful to not only build academic foundations, but also build experiential learning. This would involve collaboration within and outside the

classroom. This could mean working on collaborative projects, bringing in experts to the classroom, talking to people and learning from projects and doing activities outside the classroom. In the classroom, the teacher could play a very important role in bringing the world to the classroom. The role of the teacher transcends to being a facilitator. He/She deploys technology meaningfully to create some distinct learning experiences, which could enable deep learning. This would also perhaps involve some live projects and an interdisciplinary approach.

For instance, there are students across the globe working on Climate Change projects, which involves documentation of their experiences. These students are led by a few Microsoft Expert Educators. Skype as a technology tool can enable such collaborations across the globe. In a year, there are thousands of Skype calls, which are conducted across classrooms during which students learn about geography, science and are virtually present on visits to museums, national parks and so on. There could be an impact on how 1:1 (one to one) learning could be facilitated in digital classrooms. This could be very powerful as students could work collaboratively on projects during and outside the classroom. It could involve the use of Digital Class Notebook and also be an important way of getting feedback. A digital classroom can be created through the use of One Notebook.

Assessments and feedback also constitute an important element of the learning. Microsoft's One Notebook enables powerful learning experiences as the teacher can create Digital Notebooks for all students and can monitor their work. The students can work on the same document and also record feedback. One Notebook is a powerful tool for having multiple formats, documents, videos, Excel, Powerpoint and word files all at the same location. It is a great tool for fostering collaborative learning.

The use of Office 365 enables a rich, collaborative and a dynamic environment



for learning. Bing as a search engine provides a safe search environment for students. Intune enables management of devices in educational context. So there are several Apps and tools that can take classroom learning to a very different level.

The use case scenarios and an understanding of the benefits of this engagement would have policy implications as well. Merely deploying technology is not sufficient. Investing in capacity building of teachers and also providing a robust infrastructure, which facilitates power backups, internet, use of devices that have inking capability can take learning to a very different level. Understanding the entire framework for implementing such solutions is important and must be considered when planning for ICT implementation at schools.

The Government of India is also building up exposure to newer technologies and promoting the spirit of innovation in schools. Niti Aayog's (Government of India's policy think tank) initiative- Atal Tinkering Labs is an amazing program, which has been developed to support innovation and out of the box thinking by school students. Niti Aayog has invited the industry to also step in and extend support to schools and expose them to innovation and new technologies that

can help students build projects to solve problems that matter to India. Several industry players have come forward in support of this initiative and are working with schools. Microsoft has also adopted 25 schools to build exposure to emerging technology areas for students and teachers in these schools.

Technology solutions in Education

There are several innovative solutions available, which are around technology infrastructure management, content, student management, creating identities for students and employees, managing the examination and admission systems, alumni network, creating research infrastructure and storing data and backups for the Institution.

From a learning perspective, there could be digital repositories, resource materials across grades, assessment frameworks, platforms for learning such as MOOC, LMS, Flipped Classroom. Microsoft has piloted several Digital Classrooms in several states in India where the infrastructure- Digital class notebooks with inking capability, internet, power back up and projection system were facilitated. This was also supported with content and exposure to technology led teaching for the teachers. Both these interventions and support from the government brought in very distinctive experiences for students and teachers. There are some wonderful tech start ups in education who have done some amazing work in the domain of education solutions. Whether it is about designing assessments, which link to Bloom's taxonomy for learning; writing report cards which give deeper insights into the progress of a student through various grades and demonstrating dashboards at a school level, the possibilities are many. These solutions could alter the way decisions are made for capacity building and monitoring progress at the school level.

Merely deploying technology is not sufficient. Investing in capacity building of teachers and also providing a robust infrastructure . . . can take learning to a very different level.

Governance at a District/State Level

For governance at an institutional or a state level, cloud could be meaningfully utilised to drive insights into student performance and impact the dropout ratio from schools. High school dropout rates pose challenges to the demand for a skilled manpower. Approximately 250 million students are enrolled in our schools, however a huge number drop out every year, leading to lost opportunities. The Government of Andhra Pradesh leverages Machine Intelligence and Cloud to understand the risk of post 10th class dropouts with an objective to enable ground officers to develop targeted intervention in order prevent potential dropouts. These initiatives may include subsidies, programmes and other interventions to help schools improve graduation rate. This has enabled 600,000 predictions each in 2015 & 2016 .

The development of a MOOC platform at a state level has a great ramification for learning opportunities for students and teachers not only in India but anywhere in the world. The Ministry of Human Resource Development, Government of India has undertaken a great step in setting up Swayam, which allows transfer of

The possibilities of transforming the digital landscape are massive. The ability to . . . tracking journeys of students and teachers as well as taking steps to empower them at every step by building unique identities can be leveraged in so many ways.

credits between Universities. There have been steps undertaken around creating new courses and a quality process has been institutionalised to set this up. This is a great initiative, which has potential to impact 30 million students across India. The system of credit for courses taken up is a great strength and also helps build multi-disciplinary exposure for the student.

The possibilities of transforming the digital landscape are massive. The ability to have entire student data, teacher data and tracking journeys of students and teachers as well as taking steps to empower them at every step by building unique identities can be leveraged in so many ways.

Summing up

There is an urgent need to build exposure to technology in the domain of education. UNESCO's framework of education focuses on building student competencies. To achieve this, it is important to build the capacity of teachers and also look at the technology and ICT infrastructure. There is a need to look beyond text books and collaboration needs to be fostered with the external world. Exposure to newer areas such as coding, entrepreneurship, cloud, app development, sustainable development needs to be encouraged. Technology can play such a phenomenal role in driving individual and organisational excellence. Cloud and machine intelligence can help better governance at the state and district level. At the school level, innovative solutions can create a more connected ecosystem of teachers, parents and students. More personalisation is possible through innovative use of technology. The barriers of geography, language, socio-economic background can all be overcome with great learning and teaching experiences if right investments in technology infrastructure can be coupled with capacity building of educators. The new policies must take into account the various learning opportunities through technology solutions.

“ Education is a key pillar of development for the Government of Andhra Pradesh. Our work with Microsoft on predictive analytics is to see if we can better predict student dropouts before they actually dropout and use the data to do customised interventions to stop the dropouts. We now have a 360-degree view of students, mapped to close to 100 variables. Through this solution, the AP Government is confident of acquiring a 'more nuanced understanding' of the situation. Machine Learning will contribute towards better governance.

Mr. R P Sisodia, Principal Secretary, School Education Department, Government of Andhra Pradesh, is convinced of the ability of Machine Learning and analytics. He firmly believes it is important to get cutting-edge technologies into Governments.



The Learning Labs



Aditi Pathak is currently working as Associate Project Officer at UNESCO MGIEP and has been leading the implementation of DICE The Learning Labs programme since the last 3 years.

Aditi Pathak
UNESCO MGIEP

The world around us is changing rapidly. There has been a debate globally about the kind of knowledge and skills that are important for the increasingly diverse, interconnected, and innovation-oriented societies of the 21st century. Thus, learning in 21st century cannot be limited to literacy and numeracy but should be broadened to enable students to think, deliberate and address contemporary socio-emotional problems

they face individually and collectively. This can be achieved only if we bring about a change in teaching and learning processes. Thus, the need of the hour is to foster innovative, dynamic, and interactive pedagogies. It is time that we move beyond the traditional 'banking model' of teaching¹, in which students are treated as empty vessels to be filled. For learners pose questions, analyse, take action on social, political and cultural issues that influence and shape their lives, emancipatory



It is time that we move beyond the traditional 'banking model' of teaching, where students are treated as empty vessels to be filled.

pedagogies where students are co-creators of knowledge are required.

It is important that educational institutions especially schools equip students with necessary social and emotional skills for the 21st century. Research suggests that social-emotional skills can be taught. This was highlighted in a large review on social-emotional skills in 270,034 students in kindergarten through the 12th grade². The review found social-emotional learning programmes in schools not only improved social-emotional skills, but also increased positive attitudes towards school, positive social behaviour and academic performance. These programmes also decreased the likelihood of kids getting in trouble or experiencing emotional problems.

There is a need to arm schools with strategies and skills that can enable them to produce future citizens who are equipped for collaborative living as well as the right attitudes and values necessary for such an existence.

UNESCO MGIEP's DICE The Learning Labs project is one such initiative; it is designed to connect middle school students from varied social, economic and cultural contexts and help them engage in digital dialogue from across the globe, allowing them to share ideas and drive their own learning on issues related to peace and sustainable development.

The programme not only helps in promoting skills such as critical thinking, collaboration, empathy, perspective taking

and intercultural communication but also provides innovative tools for assessing these highly complex skills. Thus, the programme provides teachers with tools to teach and promote such critical skills and assess the young learners. The programme is conducted online and allows young learners to connect with peers from digitally remote parts of the world.

How do we do it?

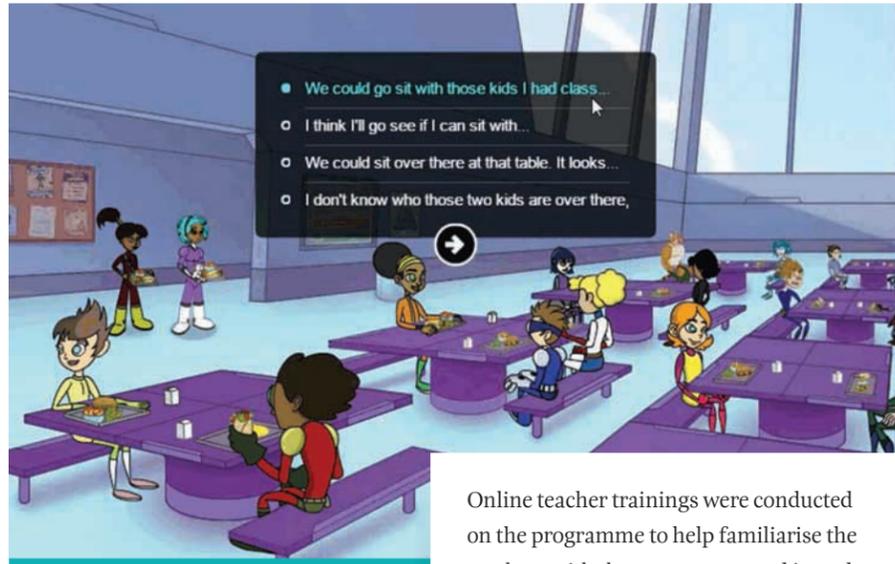
The pilot phase of the transformative learning labs programme was launched in June 2015. The programme reached out to grade 7 students (12-14 years) across 6 schools from diverse socio economic and cultural contexts in New Delhi, India. Students connected through an online platform and held discussions on issues related to migration. The team conducted pre and post assessments of the programme, collating and analysing large sets of qualitative and quantitative data. The programme was further refined and redesigned and phase II of the programme was launched with select schools from India, USA, Norway, South Africa and Malaysia.

To enable the teachers to facilitate the programme, a Toolkit was developed on the theme of migration. The toolkit is essentially a collation of lesson plans on the issue of migration embedded in core topics such as ratios and percentages, human and animal migration, social movements and gender issues, taught in the regular teaching learning practice in middle schools globally.

The programme is conducted online and connects students digitally, providing young learners to connect with peers from digitally remote parts of the world.



FEATURE ARTICLE



↑ Top: Hall of Heroes, a game developed and designed to assess SE skills for the middle school students.

↓ Below: Transformative Learning Labs workshop organised in New Delhi, India saw participants from United States, Malaysia, India, Norway and South Africa.



Online teacher trainings were conducted on the programme to help familiarise the teachers with the programme and introduce them to the assessment tools.

Research indicates that project based learning and engaging in intercultural dialogue helps in promoting skills such as critical thinking, self awareness, respect for others, perspective taking and appreciating diversity. A set of innovative tools were used to assess student growth on above mentioned skills. According to research, social emotional (SE) skills are key to doing well in school and are not only important for doing well socially but academically as well. There are very few fun and engaging ways to assess these skills. In order to effectively assess the SE skills of participating students, the project team used Hall of Heroes, a game developed and designed to assess SE skills for the middle school students. The game provided an effective

alternative to traditional measures. Apart from the games, picture based assessments were also used to measure the change in attitudes and perspectives of the students over a period of 6 weeks. Traditional methods of assessments such as surveys and questionnaires were also used.

Phase II of the Transformative Learning Labs programme concluded in a three day long workshop organised from 12-14 July, 2017 at India Habitat Centre, New Delhi. Students and teachers from United States, Malaysia, India, Norway and South Africa participated in the workshop and came together to share their experiences and learnings from the programme. The workshop started with an inaugural address by Dr. Anantha Kumar Duraipapp, Director UNESCO MGIEP, during which he highlighted the importance of ‘dialogue’ and ‘constructive engagement’ amongst young people for mutual understanding and collaboration. The address was followed by ice breaking exercises and experience sharing by the students and teachers, in which the participants spoke about how ‘sharing different perspective enhanced their understanding of multiple identities and their ability to accommodate differing opinions’.

It was for the first time that students and teachers, who had been interacting with each other online met in person. Excursion trips to the National Crafts Museum and an ethnic dinner were also organised to help participants understand the local cultures and interact with each other informally. As part of the exercise on collaboration and cross cultural communication, a two day workshop on participatory film making was also organised. The workshop was facilitated by the renowned film maker, Krishnendu Bose, during which students from different countries came together, brainstormed and collaboratively developed the idea of a film entitled, ‘Candy Chaos’. The film highlights the oneness of humankind and similarities in spite of differences and is available online: <http://bit.ly/2qfDFEY>



Ministry of
Human Resource Development
Government of India



Transforming Education Conference for Humanity

TECH
Transforming Education Conference for Humanity

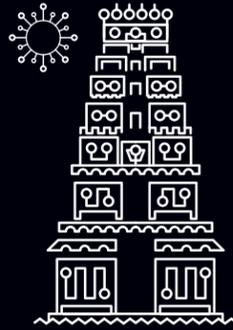
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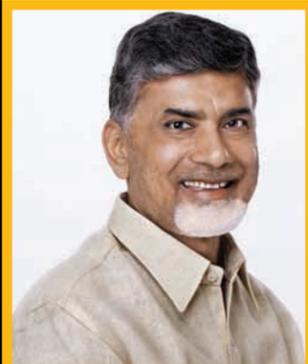
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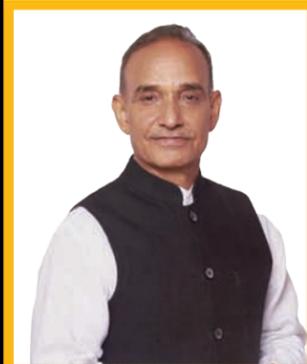
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- 50** CATALYTIC SPEAKERS
- 2** HEADLINE SESSIONS



DIGNITARIES



Shri Chandrababu Naidu
Hon'ble Chief Minister,
Andhra Pradesh



Shri Satya Pal Singh
Minister of State for HRD,
Govt. of India (Higher Education)



Dr. Mila Thomas Fuller
President, Board of Directors,
ISTE



Shri Ganta Srinivasa Rao
Hon'ble Minister of HRD
Andhra Pradesh



Dr. Ali Abdul Khaliq Al-karni
Director General of the Arab Bureau
of Education for the Gulf States



Shri Y S Chowdary
Minister of State for Science &
Technology & Earth Sciences



Ms. Roza Otunbayeva
Former President, Kyrgyzstan

HEADLINE SPEAKERS



Dr. Sugata Mitra
Newcastle University, UK



Dr. Heather Knight
Oregon State University

GLIMPSES



The three-day Transforming Education Conference for Humanity (TECH) 2017 organised by UNESCO MGIEP was held at Novotel Varun Beach, Visakhapatnam from December 16 – 18, 2017, focused on digital pedagogies for building peaceful and sustainable societies – through 21st century skills, schools and policies.

The conference was attended by over

1,700 registered participants (including teachers, educators, learners, technology and gaming experts, amongst others) from more than 75 countries and witnessed highly engaging deliberations on the future of education, particularly on the innovative methods of teaching using technology. Over the 3 days, TECH comprised of 2 Headline Sessions, including that of award-winning Prof. Sugata Mitra, over 50 catalytic speakers,

100+ presenter sessions and a dedicated Learning and Startup Zone. TECH 2017 was supported by the State Government of Andhra Pradesh and the Ministry of Human Resource Development, Government of India and will be held annually. For further details, please follow UNESCO MGIEP's social media channels. A detailed coverage of the TECH 2017 will be covered in Blue Dot 8 (due for release in July, 2018).

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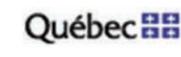


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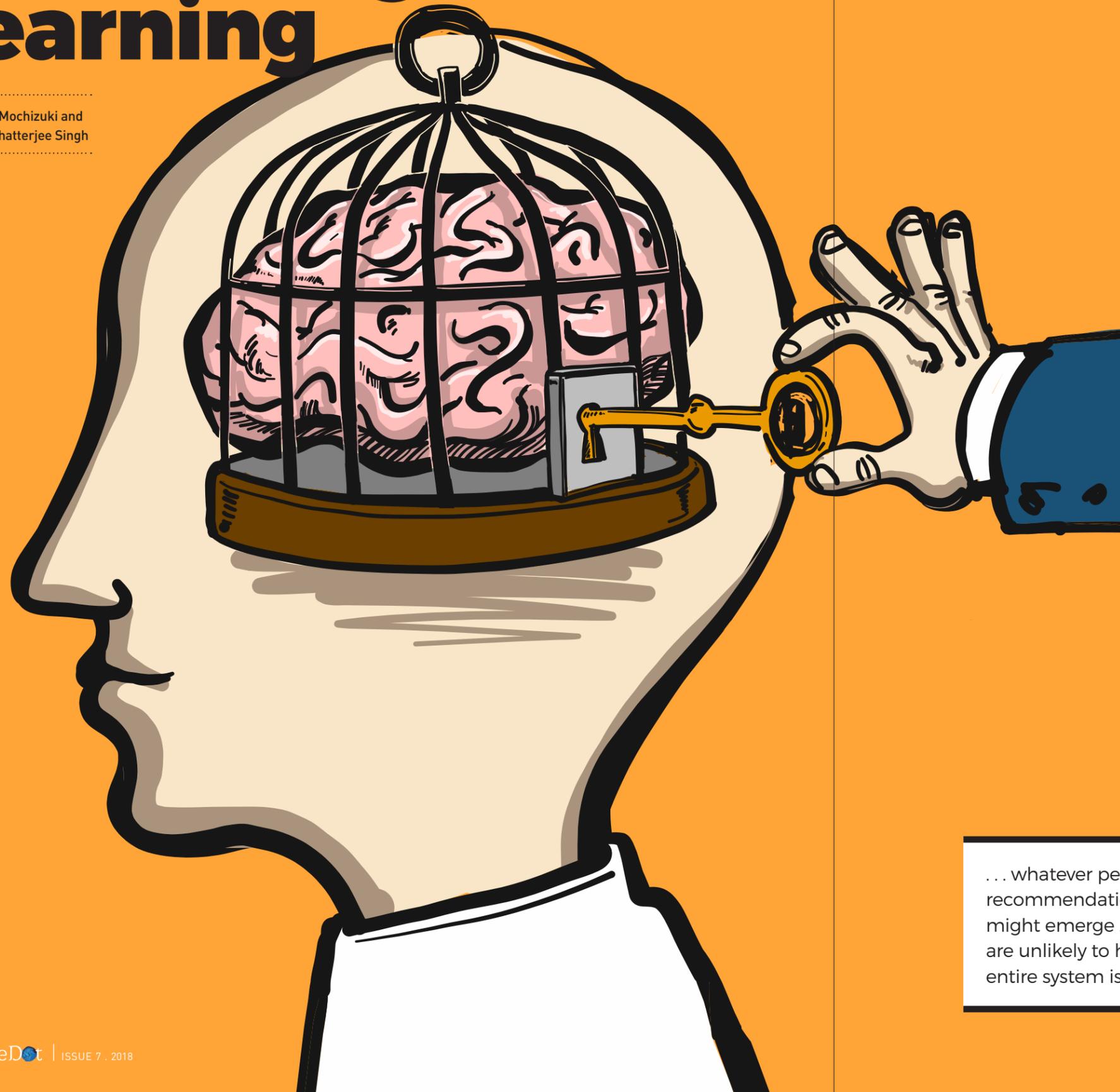


Transformational Ed -Tech Entrepreneurs



Rethinking Learning

✍ Dr. Yoko Mochizuki and
Dr. Nandini Chatterjee Singh



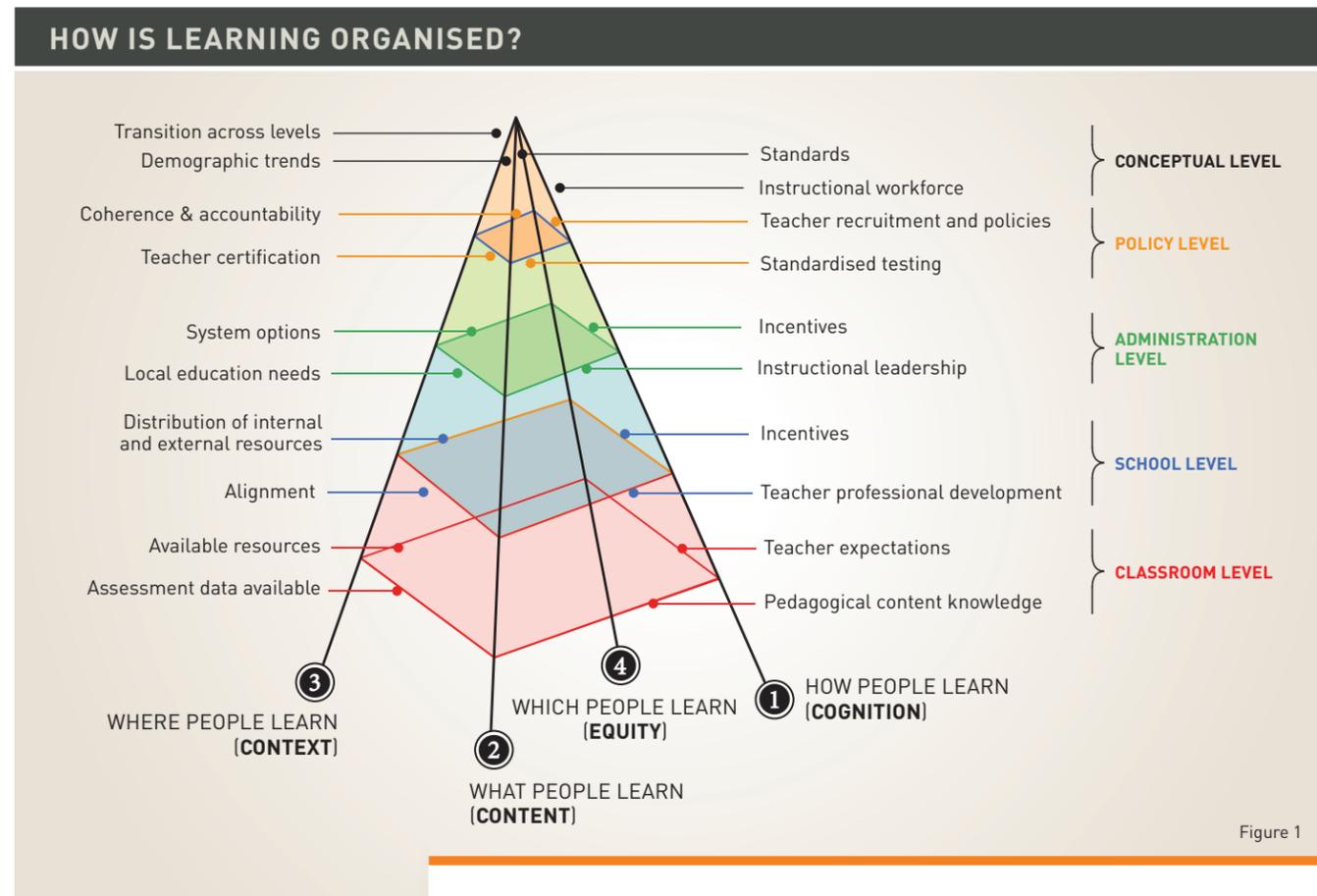
Why ‘re-think’ learning ?

In the last two decades, our knowledge about the neuro-biological basis of human cognition and learning has dramatically increased. Today there is much excitement around the idea that recent advances in neuroscience unlock the potential of ‘science-based’ education and lead new visions of learning for the 21st century. At the same time, over the past quarter of a century, new approaches to the study of complex systems have been developed by mathematicians and scientists (including biophysical, computer, social and organisational scientists), offering tools for qualitative reasoning about complex systems as well as for quantitative modelling and simulation. It is critical to recognise that education systems are complex systems that do not change overnight.

Education is a complex system because it is composed of multi-scale hierarchical organisations. Each subsystem also operates on a distinct time scale. Hence, changes to the complex system of education emerge only through incremental processes, often with unintended consequences. Whatever pedagogical innovations or recommendations for curriculum development might emerge—whether inspired by the UN Sustainable Development Goals (SDGs), driven by major technological, geopolitical, environmental or other social changes, or derived from latest insights from the neurosciences, we must keep in mind that they are unlikely to have significant impact unless the entire system is reconfigured to support learning.

Insights from the complex systems’ theory could inform the processes of curriculum revisions and, more broadly, of systemic reform in education. Researchers from the United States developed a schematic representation of four critical components of school education and their illustration at different levels, from classroom to policy (Figure 1).

... whatever pedagogical innovations or recommendations for curriculum development might emerge ... we must keep in mind that they are unlikely to have significant impact unless the entire system is reconfigured to support learning.



Source: Adapted from Lemke, J.L. & Sabello, N. (2008), Complex Systems and Educational Change: Towards a New Research Agenda. *Educational Philosophy and Theory* 40(1), 118 – 129. Available from: <https://pdfs.semanticscholar.org/ba5f/5016e264ea252e7234e198d530015e8036a0.pdf>

This model uses as variables the following:

- 1 COGNITION (how people learn)
- 2 CONTENT (what people learn)
- 3 CONTEXT (where people learn or learning environment)
- 4 EQUITY (which people learn and why)

With these four critical components of learning—cognition, content, context, and learner—in mind, this article contextualises UNESCO MGIEP’s activities to rethink learning and reorient education systems towards peace and sustainable development.

A renewed focus on learning

The 1990 adoption of the EDUCATION FOR ALL (EFA) goals demonstrated an international commitment to meeting basic

learning needs for all. This commitment was affirmed in the 2000 Dakar Framework for Action’s Goal 6, which focused on ‘improving every aspect of the quality of education, and ensuring their excellence so that recognised and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills’. As the 2015 target year of the EFA goals and Millennium Development Goals (MDGs) approached, there was mounting concern that millions of children and youth do not have the basic knowledge and skills necessary to succeed in school and life—let alone possess knowledge and skills required to navigate the changing world and shape a more sustainable and peaceful society.

While EFA has always been not only about guaranteeing access but also about achieving **quality learning for all**, the strong focus on education-related MDGs (MDG 2 on universal primary education and MDG 3 on gender equality) has somehow distorted progress with the original intent of EFA.

“... improving every aspect of the quality of education, and ensuring their excellence so that recognised and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills

2000 Dakar Framework for Action’s Goal 6



Sustainable Development Goal (SDG) 4, Target 7... has been interpreted as signalling an international consensus on the importance of ‘soft skills’ and a renewed attention to ‘life skills’.

“By 2030 ensure all learners acquire 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.”

It has shifted attention away from critical factors beyond completion of primary education in fulfilling the promise of education. With a focus on access, neither the content of education nor pedagogy have taken a centre stage in international education debates.

Admittedly there have been rich and diverse efforts to make the content of education more relevant for the 21st century and articulate competencies necessary to engage creatively and responsibly with the world. UNESCO’s work on Education for Sustainable Development (ESD) and Global Citizenship Education (GCED) has benefited from and contributed to these efforts. Indeed, SDG 4, Target 7, focusing on ESD, GCED and other related value-based education has been interpreted as signalling an international consensus on the importance of ‘soft skills’ and a renewed attention to ‘life skills’. But the reality is that ESD and GCED have been commonly implemented as ‘add-ons’, without really impacting the education system or the mainstream education policy.

In the long traditions of value-based and action-oriented education now captured in SDG 4.7, ‘whole-school approaches’ have been widely viewed as the ultimate desirable form of learning intervention, exemplifying the spirit of ‘learning by doing’ and creating an ethos of peace and sustainability at the school and the community level. While few would

disagree with the importance of context in learning for peace and sustainability, sweeping calls for mainstreaming holistic and transformative learning in formal, non-formal and informal learning settings mean that a necessary focus on the particular challenge of re-designing curricula to meet the 21st century challenges has largely been lost. What is lacking are concrete examples of exactly how we can reorient the mainstream curriculum to foster desirable competencies, as well as strategies and tools to foster such competencies that are informed by new insights into learning.

The Emergence of SEL as a Policy Focus

At the onset of the implementation of the SDGs, we are witnessing a growing popularity of efforts to support children and youth become more socially and emotionally competent. Between 2015 and 2017, UNESCO, the OECD, the World Bank, the World Economic Forum (WEF), and the Brookings Institution all developed their own individual publications, which highlighted the importance of social and emotional dimension(s) of learning.¹ There is a broad consensus that students should develop not only cognitive skills (both ‘foundational skills’ of literacy and

¹ See UNESCO (2015), *Global Citizenship Education: Topics and Learning Objectives*; OECD (2015), *Skills for Social Progress: The Power of Social and Emotional Skills*; World Bank (2017), *World Development Report 2018: Learning to Realize Education’s Promise*; World Economic Forum (2016), *Industry Agenda: New Vision for Education: Fostering Social and Emotional Learning through Technology*; and The American Enterprise Institute for Public Policy Research (AEI) and the Brookings Working Group on Poverty and Opportunity (2015), *Opportunity, Responsibility, and Security: A Consensus Plan for Reducing Poverty and Restoring the American Dream*.



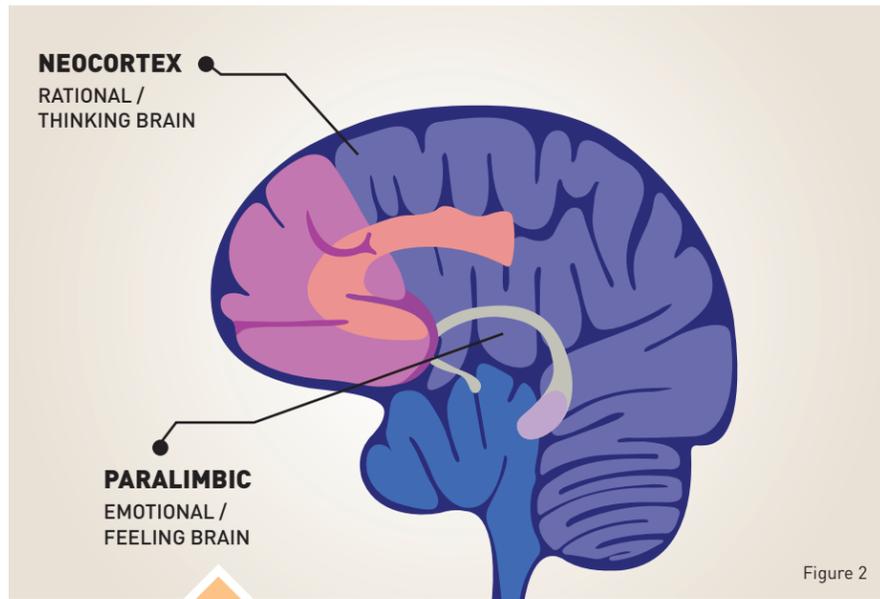


Figure 2

It is worthwhile to point out two important pieces of human brain design that are relevant here. The first is that, the human brain is broadly demarcated into the neocortex and the paralimbic cortex. Social and emotional attributes such as self-control, compassion and empathy - which are necessary for forming human connections are functions of the paralimbic cortex. The neocortex on the other hand, houses functions such as language, numeracy, literacy and decision making. The second is the notion that like reading and numeracy, empathy, self-control and compassion can also be trained. This is possible because of a phenomenon referred to as 'neuroplasticity' in which the brain rewires its connections during the process of learning.

numeracy and 'higher-order' cognitive skills such as critical thinking skills) but also social and emotional skills—also referred to as 'soft skills' or 'non-cognitive skills'.

At a glance, this seems like nothing new. It resonates with a familiar call for the development of a 'whole person'. However, what is new at the beginning of the 21st century is the fascination with the idea that social and emotional skills can be taught—an insight reflecting the advancement of neuroscience research on emotions in cognition and its dissemination and popularisation in recent years. (see Figure 2). There seems to be a great appeal to the idea that we can train our brains like we train our muscles.

Since the early 1990s, **social and emotional learning (SEL)** has been gaining traction in the United States. The Collaborative for Academic, Social, and Emotional Learning (CASEL), the most powerful SEL campaigning organisation in the U.S., aspires to integrate 'evidence-based' SEL into state education and 'to turn momentum for SEL into a national movement.' In 2004, Illinois became the first state to develop comprehensive, free-standing K-12 standards for SEL. By 2017, Kansas and West Virginia followed Illinois in developing K-12 SEL standards, and Connecticut, Idaho, Ohio, Massachusetts

and Washington developed SEL standards for pre-school through early elementary grades². In the U.S., SEL and the associated concepts such as 'character development', Angela Duckworth's 'grit', and Carol Dweck's 'growth mindset' have emerged as a key policy priority.

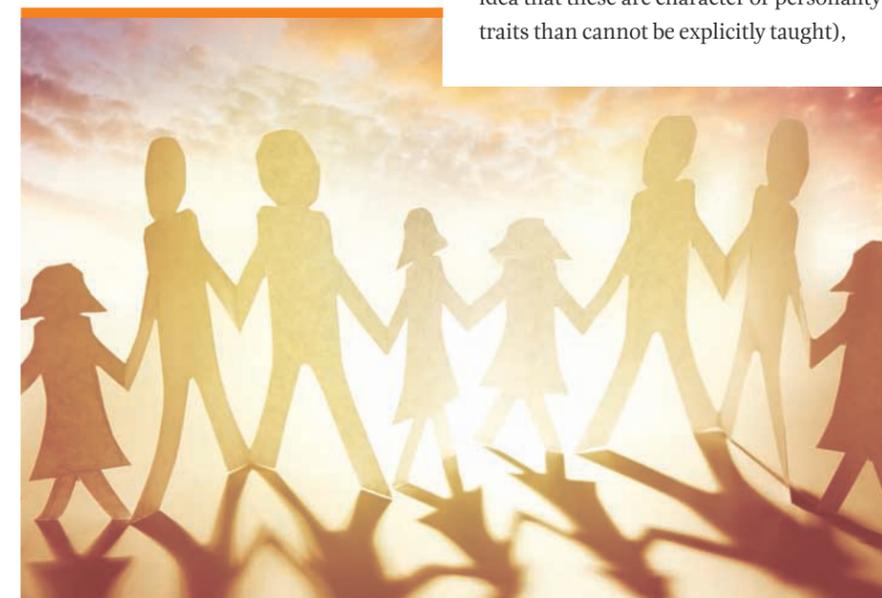
This phenomenon needs to be understood against the backdrop that the U.S. has tried to fix the problem of low academic performance (mainly of socio-economically disadvantaged students) over the last two decades through an emphasis on standards and accountability, introducing federal programmes such as 'No Child Left Behind' (under President George W. Bush) and 'Every Student Succeeds' (under President Obama)³. SEL is essentially being promoted as a cure for poor academic performance and behavioural problems. The Hamilton Project—launched in 2006 as an economic policy initiative at the Brookings Institution by academics, business people, and policymakers to address the challenges faced by the U.S. economy—makes this point in no uncertain terms: 'Noncognitive skill development interventions improve student achievement and reduce behaviour-related problems'⁴.

The SEL advocacy seems to be finding a niche in the global education agenda today. First of all, it provides high hopes for fulfilling the broken promise of EFA and addressing the 'learning crisis' the world is facing. Many developing countries have achieved or are nearing the goal of universal primary education, yet millions of children are leaving school without even the most basic skills. Furthermore, another key factor driving the SEL movement in American education finds a perfect parallel in the context of global implementation of SDG 4.7: heightened concerns over the (perceived and real) vulnerability of children and youth to a range of social and psychological problems such as substance abuse, violence, bullying and suicide. What has recently been added to the list of behavioural and psychological problems is radicalisation to violent extremism.

The SEL movement is making a valuable contribution to SDG 4 on education, sensitising educators and policy makers to the importance of the emotional domain in learning



... changing the ethos of classrooms and schools to cultivate experiences of caring and collaboration is urgently needed.



In the face of rising incidences of violent extremist attacks in recent years, the potential role of education in preventing, mitigating or ameliorating such risks has begun to catalyse the SEL movement internationally. Before getting on the bandwagon of SEL and contributing to its worldwide dissemination, however, we must critically look at the contemporary SEL advocacy largely originating from the U.S. and its main assumptions.

UNESCO MGIEP's "Operation Rethink"

SEL and SDG 4.7

What is driving the contemporary SEL advocacy is the simple and alluring idea that social and emotional skills are (i) *necessary* (to address long-standing educational problems of low academic performance and behaviour problems of disadvantaged students), (ii) *teachable* or, as OECD's *Skills for Social Progress* puts it, '**malleable and improvable**' (as opposed to the conventional idea that these are character or personality traits than cannot be explicitly taught),

and (iii) *measurable*. In the U.S., where SEL is becoming a policy priority, many school-based SEL programmes focus on fostering Emotional Intelligence (EI), or skill sets related to cognitive processing of awareness and emotion and the integration of emotional information with social-interactive skills.

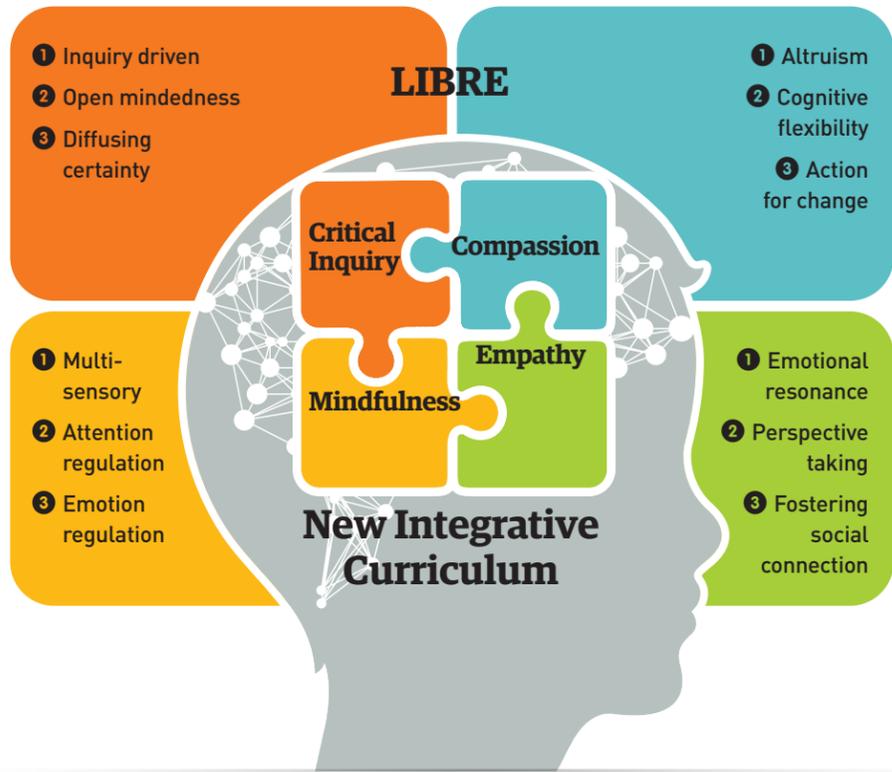
The model of SEL focusing on cognitive information processing and self-management (emotion monitoring and regulation) resonates with an emerging trend of personalised education enabled by educational technologies. Here, the 21st century SEL movement meets the ed-tech industry. A source of immense optimism expressed by SEL advocates and the ed-tech industry is the presumed 'measurability' of individual competencies, whether in SEL, Mathematics or English language learning. The bottom line for SEL advocates and the ed-tech industry is that individual strengths and weaknesses can be assessed and ameliorated through learning interventions based on cognitive sciences and customised for individual needs, and that eventually all learners can become more academically, socially and emotionally competent.

But the focus on individual SEL abilities and deficiencies runs a risk of 'remedial' or 'deficit' model of education. When we focus on what is 'wrong' with the individual learner and 'what works' to change individual behaviour, we tend to shift our attention away from the equally, if not more, critical aspects of what can and should be done to transform education for humanity.

² See CASEL (2017), *Identifying K-12 Standards for SEL in all 50 States*, available at <https://www.casel.org/wp-content/uploads/2017/02/K-12StandardsforSELinalStates-Feb2017.pdf>. The development of SEL standards in the U.S. followed a 2001 resolution on the school teaching of socioemotional skills passed by the National Conference of State Legislators (an NGO established in 1975 to serve the members and staff of state legislatures of the U.S.).

³ The RAND Corporation reviewed recent evidence on U.S.-based SEL interventions for K-12 students under the Every Student Succeeds Act and published in 2017 a report to help federal, state and district education policymakers identify relevant, evidence-based SEL interventions that meet their local needs.

⁴ See *Seven Facts on Noncognitive Skills from Education to the Labor Market*, available at http://www.hamiltonproject.org/papers/seven_facts_on_noncognitive_skills_from_education_to_the_labor_market.



Libre is UNESCO MGIEP's flagship initiative to design a curriculum for 'Social-Emotional Learning (SEL)

Meaningful implementation of SDG 4.7 rests on fostering intelligence that integrates reason and emotion.

While the remedial approach may be rather harmless in an individualised mathematics learning experience, the predominant SEL approaches shift our focus away from the critical importance of social and cultural contexts within which the learner is embedded.

No doubt the SEL movement is making a valuable contribution to SDG 4 on education, sensitising educators and policy makers to the importance of the emotional domain in learning. In an era when educational debate worldwide has come to be framed by a narrowly economic and instrumentalist agenda, changing the ethos of classrooms and schools to cultivate experiences of caring and collaboration is urgently needed. In much of the work by SEL advocates, however, social and emotional skills are valued not so much as a foundation for building a more peaceful and sustainable world, but as a key way of boosting academic attainment and personal gains. So long as SEL is seen primarily as something that gives an 'edge' to individual students to succeed in school and life,

SEL does not contribute to changing the competitive ethos of schooling and society—and the mindless pursuit of narrow and short-term interests on a massive scale and unsustainable patterns of development. As UNESCO MGIEP derives its mandate from SDG 4.7 on 'knowledge and skills for sustainable development', promoting SEL simply for the sake of making students more competitive falls short of—or is even counterproductive to—our aspiration of transforming education for humanity. So what would be next steps for UNESCO MGIEP?

Next steps for UNESCO MGIEP

At a glance, the contemporary SEL movement appears to be in congruence with UNESCO's humanistic agenda in education now encapsulated in SDG 4.7. But a closer look at the rationale for promoting SEL put forward by organisations such as OECD and WEF—which, by no coincidence, focus on economic development—makes it clear that the purpose of education continues to be conceived in instrumentalist terms. SEL is largely promulgated as a means to produce human resources to ensure national economic competitiveness whether the goal is conceptualised as to 'promote social progress' (OECD) or to 'equip students to succeed in the swiftly evolving digital economy' (WEF).

We must ask the 'what works' question not only in terms of cognition (how people learn) but also of other critical components of learning, and in the broader context of planetary imperatives of sustainable development. SDG 4.7 must go far beyond teaching good behaviour; it needs to promote the kind of learning that fosters reflective and engaged citizenship—to overcome rigidity and cynicism and respond to unforeseen challenges and changes beyond our individual control with hope and ingenuity. Meaningful implementation of SDG 4.7 rests on

fostering intelligence that integrates reason and emotion. UNESCO MGIEP will undertake projects to provide concrete guidance on fostering such intelligence in a holistic and transformational way.

1 Libre

To inspire and harness SEL that is more consistent with the aspirations of SDG 4.7, UNESCO MGIEP has developed a model entitled Libre. Libre is UNESCO MGIEP's flagship initiative to design an SEL curriculum. Libre will focus on building the 3R's of SEL, namely Attention Regulation (AR), Emotion Regulation (ER) and Cognitive Regulation (CR). Through piloting of Libre in ten countries, UNESCO MGIEP will engage deeply with questions of respect for cultural diversity. Establishing the empirical basis for and effectiveness of SEL needs to take place in the context of redefining the ultimate purpose of education—a transformative shift in the lens with which policymakers and educators examine the nature of desirable competencies in the 21st century.

2 The State of SEL Review

SEL programmes, if decontextualised and modularised without sufficient respect for cultural diversity and concerns for the politics of schooling, can promote an alarmingly individualist and robotic view of children and youth—all while emphasising the importance of empathy and compassion. Over the course of next two years, UNESCO MGIEP will review rich and diverse traditions of approaching social and emotional skills in different parts of the world to propose an approach to SEL that is consistent with the transformative aspirations of SDG 4.7. In Japan, for example, abundant academic literature exists on the place of emotion in schooling that provides insights into what SEL can look like in different cultural contexts. In 2018, an initial desk review will synthesise the research evidence on approaches to fostering social and emotional skills and identify



UNESCO MGIEP will develop platforms where teachers and students can co-create and share a highly interactive digital learning experience.

good practices (including, but not limited to, those aimed at building 'emotional intelligence'). It will cover a wide range of academic literature on alternative and holistic education approaches, including the notion of cooperative learning space and the development of self-regulated and self-motivated learners.

3 Digital Pedagogies

Despite high hopes and hypes surrounding the power of technology in transforming education, educational systems are still largely untouched by technology as a 'game changer' in learning. Viewing ICT as an enabler for immersive, self-directed learning, UNESCO MGIEP is exploring what digital pedagogies for peace and sustainability can and should look like. UNESCO MGIEP will develop platforms where teachers and students can co-create and share a highly interactive digital learning experience. These platforms will attempt to combine the best features of a textbook and a digital learning platform, while enabling teachers to attend to the interests and needs of individual learners, make complex interdisciplinary connections, and relate to students as equal partners in learning.

The response of the educational system to the public demands for reform, planetary imperatives of sustainable development, and the new threats and opportunities created by technological advancements must be guided by the combined expertise and innovative ideas of the interdisciplinary research community, and by decision-making driven by quantitative and qualitative educational research. There will be no shortage of organisations and ed-tech companies promoting SEL for their instrumental purposes in the years to come. UNESCO's role should be not just catalysing the SEL movement but to reframe and redirect the movement for fixing the broken promise of ensuring quality learning for all. UNESCO MGIEP's Operation Rethink inevitably involves rethinking the predominant model of SEL itself.



Ms Tawakkol Karman is a mother of three as well as a human rights activist, journalist, politician and President of Women Journalists without Chains. She is the General Coordinator of Peaceful Youth Revolution Council and a Member of the Advisory Board for the Transparency International Organisation and for several international non-government organisations focused on human rights. Ms. Karman is bold and outspoken and has been imprisoned on numerous occasions for her pro-democracy and pro-human rights protests. Amongst Yemen's Youth movement, she is known as 'the mother of the revolution', 'iron woman', and most recently as 'the lady of the Arab spring'. Ms. Karman was awarded the Nobel Peace Prize in 2011 in recognition of her work in non-violent struggle for the expression rights, safety of women and for women's rights to full participation in peace-building work in Yemen. Upon being awarded the prize, Ms. Karman became the first Yemeni, the first Arab woman, and the second Muslim woman at that time to win a Nobel Peace Prize. She encompasses a great deal of courage which she has shown, on countless occasions, through her perseverance to constantly confront injustice and build peace.

Interview by **Akriti Mehra**
Communications Specialist, UNESCO MGIEP

INTERVIEW

Tawakkol Karman

In commemoration of the International Day of Non-Violence on October 2, 2017, Ms. Tawakkol Karman delivered the second Ahinsa Lecture at the UNESCO Headquarters, Paris on the theme 'Working Towards Peace Building and Sustainable Development'. Ahinsa is derived from Sanskrit word 'hims', meaning injury and its opposite (*a-himsā* meaning without any injury) refers to non-violence. This ethical philosophy was popularised by Mahatma Gandhi, the greatest champion of nonviolence in the world. The Ahinsa Lecture brings forth public speakers of the highest calibre active in the field of peace and non-violence to the forum for the benefit of peace builders, policymakers, youth, UNESCO Member states and international community. The Ahinsa Lecture is organised to mark the International Day of Non-Violence celebrated on 2 October to mark the birth anniversary of Mahatma Gandhi.

Post the lecture, we spoke with Ms. Karman and gathered her views on the role of education in preventing violent extremism.

What role does the education system play in preventing violent extremism?

Unquestionably, the educational system plays a large role in both preventing and spreading extremism. In fact, this basically depends on the philosophy of education, and on the school curriculums and the methods used

in introducing them to students. I believe that having a coherent, progressive and contemporary education system is a crucial factor in preventing the infiltration of extremist ideas. In the end, the educational system plays a key role in whether the outcomes of the learning process are good or bad, and therefore the quality of education must be constantly monitored.



I have always believed in a fact: that there is no peace without development and there is no development without peace. . . Development plans, where women and young people are not taken into account, are empty and useless.

Do you believe that current education systems are equipped to provide students with the right skills to develop more peaceful and sustainable societies?

If this question is about the Arab world, I believe that the current education systems are unable to provide the needed skills for students, as there are obvious deficiencies regarding the curriculum and teacher qualification in addition to the shortage of equipment and laboratories that help increase students' capacities to absorb the educational content and develop their mental and physical skills. There are good examples of successful schools, but they are few. As for the current education systems, they still suffer from several weaknesses and they are not keeping up with the latest developments related to techniques and laws.

In a peaceful and sustainable society, what does the education system look like?

In my view, the education system will be more developed, and will be a catalyst for the acquisition of different skills, creativity and innovation, as well as critical thinking. Such skills would never be accepted by any tyrannical regime that is based on indoctrination instead of debate and free thinking.

If the goal is to prevent violent extremism, what skills do students need in order to not fall susceptible to extreme ideologies?

As mentioned earlier, in order for students to not be vulnerable to radical ideologies, they must be equipped with the skill of critical thinking. Cognitive skills such as thinking, learning and the ability to discuss and criticise constructively away from taboos are imperative for students to be more committed to logical reasoning and not to be susceptible to any attempts of polarisation.

What are the major current factors that are inhibiting education systems

from shaping compassionate and empathetic students?

There are several factors that make it difficult to shape compassionate students, most notably the absence of the political and moral project at the state level, the inability to deal with emotions and questions of students, in addition to extremist platforms, including media outlets and social media, which could reach them, deal with them the way they like, and provide answers to their questions, even if these questions were not correct (unclear). Therefore, attention should be paid on methodologies to increase the level of rational thinking among students and encourage their questions instead of oppressing them.

What is the connection between education systems and women's rights?

Family and education contribute significantly to women's access to their rights and helps prevent their marginalisation and persecution. Societies with a high education rate are better able to understand women's demands and are less likely to oppress them. Education is essential in correcting wrong behaviors and misconceptions towards women.

What do you think are the main tools for fighting violent extremism?

There is no doubt that education is one of the tools that can help eliminate the ignorance that leads to violent extremism. Besides education, however, other fundamental factors are required to overcome extremism and terrorism. Freedom, democracy and justice help create cohesive and non-extremist societies. Tyranny dilutes education and creates extremism and terrorism.

What social actors should be involved in shaping education systems?

They include states, researchers and institutions concerned with education development, NGOs and students themselves. Students should be consulted and allowed to assess what they are studying.



The Youth is a positive force that must be maintained and not allowed to turn into a negative force or a burden on society.

Youth voices

What does the future of education mean to you?

INTERNATIONAL YOUTH DAY, 2017

In order to achieve the Sustainable Development Goals, the role of young people needs to change from being mere beneficiaries to becoming active partners in implementing and monitoring the United Nations Sustainable Development Goals (SDGs).

To celebrate the International Youth Day, 2017, the Youth for Education, Sustainability and Peace (YESPeace) Network brought together voices of youth from around the world with a focus on SDG 4, Target 7.

Education is the most powerful weapon, which we can use to change the world. This is the time to change the world.

Education is about human rights and dignity.

Irina Bokova

Lesser competition ... more knowledge... more community mobilisation



Education that goes beyond the confines of the classrooms and institutions, that is ever evolving in terms of its content and that which empowers the individual to be better...

Education is the only thing that will remain with us forever through everything we experience in life

Education that builds on students' strengths, instills self-confidence and encourages kids to be kinder, more compassionate, driving people and leaders



Education is the path towards true freedom. We have to make it accessible.



KIRTHI JAYAKUMAR is the founder of Red Elephant Foundation, a partner organisation of the YESPeace Network-India Chapter. She is also an author, artist, actor and activist for peace and gender. She is based in Chennai, India.



Sowing Peace: One Mind at a time

From Economy-worthy to Empathy-driven: Peace is the Bridge

What comes to your mind when I say "education"? Reading? Writing? Or is it Arithmetic? For the longest time, the world has suffered – yes, suffered – with the understanding of what education means. There is so much attention attached to the literacy component in education, to the extent that people think of education itself as all about making more and more people literate. While that does serve a greater purpose and centres around building economy-worthy people who have the ability to add to the world's monetary capacity, it stops short of adding to the empathy that this world could gain a lot from having. By emphasising on the idea of economically empowering people to take on better jobs and augment the productivity of the economy, we have not invested much in education for the greater interests of peace. A social climate of peace can thrive only if there is a communal approach to it through education, but not just literacy-driven education – rather, peace education.

Everyone in today's generation is fighting a war on borrowed hatred. Think about it. Samuel Huntington was incredibly correct that culture, ethnicity and such individual identity markers would come to sustain differences of opinion. War is deemed good for business and the coffers of a select few enablers, and that vested interest keeps an agenda of promoting hatred as the norm going. Terrorist outfits are feeding off the combined effect of marginalisation and borrowed hatred. The world is burning with hatred that is only kept alive through education that is desperately in need of sensitisation.

Whole chapters in history are written by the victor's hand. Still more are written through a male lens, ignoring myriads of women who have made significant and meaningful contributions through untiring efforts.

We strive to create peaceful people, through peaceful tools, peaceful language and peaceful ways to solve conflict. Conflict is inevitable, but, if we create a proclivity towards peace in people around us, we naturally choose peace, we naturally turn to peace, we naturally prioritise peace, and we don't have place to escalate conflict at any level. Be it a bully in a classroom or two nations seeking ownership over territory. In that understanding, there is a very simple solution to finding peace in peace education.

Generations of students before me, along with me, and now, after me, have grown up without learning the most important values of life: of empathy, of choosing peace and compassion over hatred and violence, of choosing equality, tolerance and respect for one's identity as they are instead of pushing constant agendas of ideals and non-conformism attracting mistreatment. What if we taught non-violent communication while teaching rules of grammar, syntax and semantics? What if we taught history with the right telling, and with the agenda to prevent repetition of history's egregious failings? What if we taught geography against the landscape of actual equality – where we learned lessons from the earth's diversity and imbibed it as positive lessons for peace? What if we taught practical ways to use numbers in a way that had practical solutions to deter from conflict and choose peace instead?

Youth engagement in Europe

around the issues of education for peace, sustainable development and global citizenship



ANDREAS NATH

HIRSCH is the European Director of the AYUDH, the international youth movement of Mata Amritanandamayi Math (MAM). Andreas serves as the organisation's Youth Representative to the UN and is a member of the UN Inter-Agency Network on Youth Development. He also represents AYUDH in the German National Committee of the No-Hate-Speech Movement, countering extremism and racism online.



Sixty years ago, the European Union was formed, mainly with the tenet of maintaining peace on the continent. In 2017, the world has changed, and whilst peace remains of utmost importance, two other essential issues must be prioritised: sustainability and the challenges of globalisation.

As the world is becoming more interconnected, the challenges we face as a global community grow in complexity. Local actions in our respective regions have international ramifications, thus peace and security on one continent cannot be seen independently from that in other parts of the world. Social, economic and ecological sustainability - on a global scale - are crucial not only to ensure the prosperity of our own and future generations, but also to fight and prevent causes of displacement and conflict, caused by climate change and social injustice. Against common stereotypes, I think it would be ignorant to believe that the youth are unaware of the issues or indeed apathetic to their importance.

A testament to the youth's engagement with such matters can be seen through the 'Generation What Survey', which has been conducted since 2013 by a partnership of two companies in France and the European Broadcasting Union. It stands as an

international portrait of how young people feel: more like citizens of the world, rather than citizens of Europe. Undeniably, our educational systems have failed to adapt such a sentiment to its fundamentals and have therefore not nurtured a concept embraced by many young Europeans. I believe if fully implemented through proper education for global citizenship, it will prove invaluable in creating future policy makers, leaders and citizens who not only uphold the rule of law but act to fight global injustice and modify globalisation towards a system of benefit to all, and not just a few.

Yet we, unfortunately, either underestimate the potential of our youth or neglect to give them a platform to engage with many of the issues facing our world. Whilst being Director of the youth organisation 'AYUDH Europe', I have been fortunate enough to have become inspired by young people from diverse backgrounds. I have seen first-hand, the intrinsic sense of determination, ambition and dedication many young people share. Their uncanny insight into this world, is second to none to their curiosity and ability to look optimistically towards their future.

At AYUDH's recent youth summit 'Educate. Cultivate. Participate', we adopted UNESCO MGIEP's format of iTAG® (independently organised 'Talking Across Generations on Education' event), as the concluding

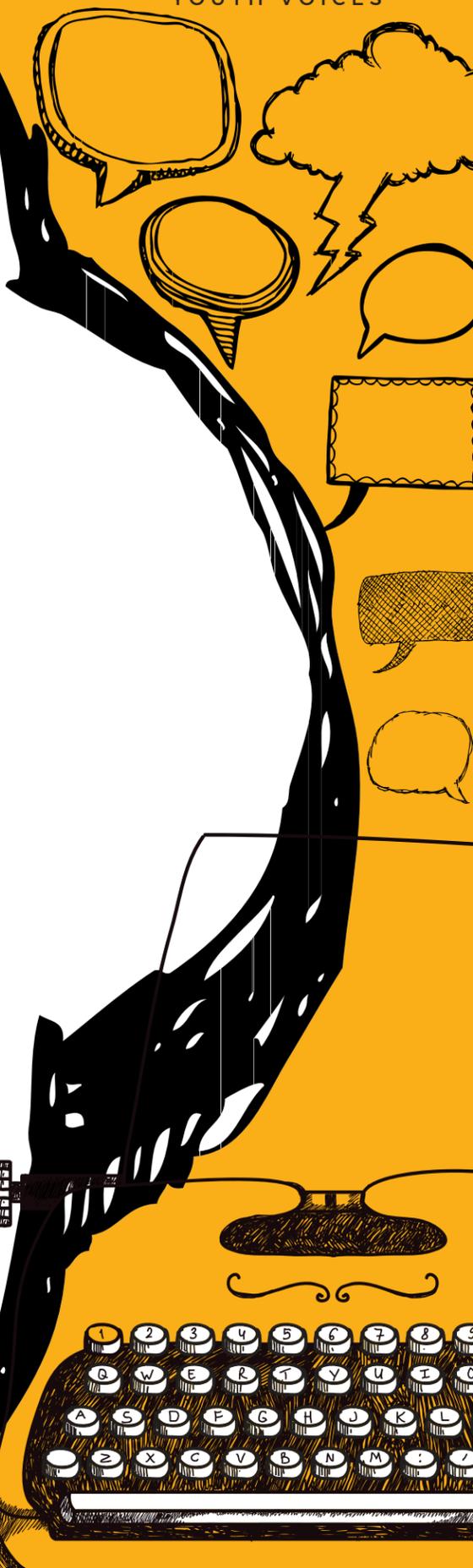
element of a weeklong summit with discussions around education, citizenship and sustainability. This highlighted just how eager young people are to transform both our educational and political sector to achieve our idealistic vision. It stands as a call for more youth engagement in education policies. Indeed, many of the senior panellists expected to deliver an exposé on the ingenuity of our education systems. However, they left surprised at the level of insight, maturity and sophistication that our nine youth panellists showed and came to appreciate that we must act in coalition with the youth to alter these systems to foster: empathy, emotional intelligence and a culture of the heart in young people. As Mata Amritanandamayi (Amma), a great humanitarian and the inspiration behind AYUDH, says: "There are two kinds of education: education for living and education for life." While education for living is essential for success in the academic and economic sense, education for life equips young people with the knowledge, skills and values needed to lead an ethical, empowering and socially beneficial life.

I believe that once we have fostered an educational system that creates students with the previous qualities and true compassion, an unencumbered sense of motivation to move towards a peaceful and sustainable world will be guaranteed. Transforming our youth to have this mindset

is no easy feat but remains paramount when one tries to achieve the sustainable development goals.

I do not stand solely on this matter. The global community through both SDG 4.7 and 12.8 have come a common consensus that we need to reform our educational systems. This means: revolutionising how we see both the formal and informal domains, reforming our curriculums and training our teachers to help form students who meet the needs of the future. Let us not be passive and expect others to implement the SDGs, let us make them happen. Let us not wait for the world to change and the world to wait on us.

So, as a citizen of Europe, I call upon our policymakers, educators and learners alike to transform our educational institutions from mere places of theoretical learning into hubs of action and platforms for dialogue, innovation and participation. I call upon young Europeans to be trustworthy, constructive and mature advocates and partners, initiating conversations and driving change. In a time when a majority of young Europeans recognise growing nationalism as a negative evolution (Generation What survey), we need to ensure that education nurtures a mindset that reinforces the values and idea of Europe as a continent of peace, sustainability and global solidarity.



Re-orienting education and empowering the young



CHINTAN GIRISH MODI

is a school teacher turned peacebuilder who writes widely on arts, culture and gender, apart from conducting student workshops and teacher trainings on education for peace. He is also the founder of Aao Dosti Karein.



Do you buy the argument that children and youth are inherently peaceful, and that it is only the adult world that wires them to be violent? I used to believe in this line of thought, and imagined that education for peace should focus on transforming the biased attitudes of adults instead of working with school and college students. I can now see how simplistic that approach was, especially with the regular stream of news reports about young people engaging in acts of murder and rape.

The National Focus Group Position Paper on Education For Peace, published by India's National Council for Educational Research and Training (NCERT) in 2006 mentions that 18 per cent of the children interviewed for that paper were "found to take pleasure in various acts of violence...they enjoyed stoning little pups and kittens, breaking flower buds off plants, holding butterflies between their fingers. Older children engaged in eve-teasing and ragging to the extent that it sometimes became fatal."

This description is a clear departure from images of children as innocent, uncorrupted and angelic. What is it that prompts young people to resort to this kind of everyday violence? The NCERT paper mentioned earlier states, "Faith in violence as a quick-fix problem-solver is an emerging epidemic." I think that is an appropriate articulation of the challenge that faces our society. With the power to communicate easily via social media, knee-jerk responses are even more commonplace.

People are easily offended by the content of films, the food on someone else's plate, the books that are being written, and much else. Instead of expressing themselves in a civil manner, they seek refuge in hate speech. Words are sometimes more powerful than weapons, and are known to instigate violence against individuals and communities. This is why

education for peace has becoming increasingly important.

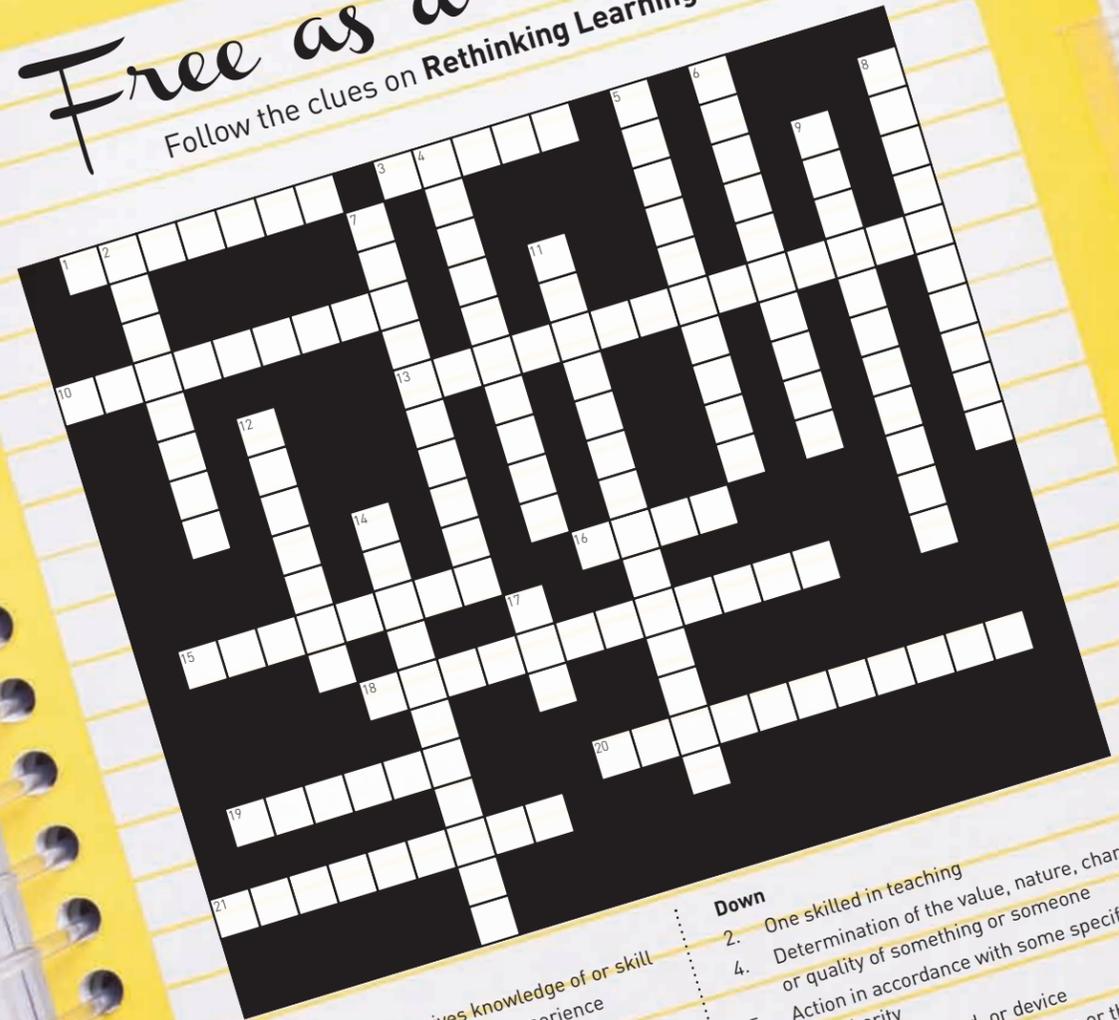
One cannot afford to emphasise only the knowledge of traditional school subjects or the soft skills currently in vogue. There is a need to reorient education in a way that it empowers young people to learn what it means to be in someone else's shoes, to connect with peers across the divisions created by caste, gender identities, sexual preference, class, ethnicity, language, and the other markers that individuals use to define or describe themselves. At the individual level, this is possible only when we begin to look within, and work with our own prejudices.

What can be done at the systemic level, in a pragmatic way, beyond the niceties of lip service? Since the Indian education system revolves mainly around the textbook, which almost has a scripture-like status in the classroom, that might be the perfect place to begin. I had the opportunity to work on Textbooks for Sustainable Development: A Guide To Embedding published by the UNESCO Mahatma Gandhi Institute of Education for Peace and Sustainable Development in 2017. It is a guidebook for writers and publishers of school textbooks, and the focus is on four subjects: Language, Mathematics, Science, and Geography.

As mentioned in the guidebook, "Embedding is not about inserting new thematic content into an already overcrowded curriculum, which would make it impractical – both time and content wise – for the teacher and textbook author. Nor is it about removing or minimizing the importance of academic content. Instead, it is about reorienting subjects into serving a more socially and globally relevant purpose: that of contributing to a sustainable, just and peaceful world, with young people motivated, prepared and empowered to address persistent and emerging local and global challenges."

Free as a word

Follow the clues on Rethinking Learning



Across

- 1. A person who receives knowledge of or skill in by study, instruction, or experience
- 3. A state of security or order within a community
- 10. Containing a specified element as part of a whole
- 13. The operation of changing
- 15. The art, science, or profession of teaching
- 16. Activity engaged in for diversion or amusement
- 18. The measure of output
- 19. Freedom or ability to obtain or make use of something
- 20. A secondary or unintended consequence
- 21. The field of study that deals mainly with methods of teaching and learning in schools

Down

- 2. One skilled in teaching
- 4. Determination of the value, nature, character, or quality of something or someone
- 5. Action in accordance with some specified standard or authority
- 6. A new idea, method, or device
- 7. The ability to make new things or think of new ideas
- 8. Machinery and devices developed from scientific knowledge
- 9. A person responsible for or involved in formulating policies
- 11. Capable of being sustained
- 12. Using or characterised by computer technology
- 14. Marked by vigorous and healthy growth
- 17. What provides amusement or enjoyment

* CHECK OUR WEBSITE [mgiep.unesco.org/bluedot/] FOR THE SOLUTION.



WHAT WE'VE BEEN UP TO AT UNESCO MGIEP

Learning Labs workshop: Ten students, five countries, three days!

12-14 July, 2017, India Habitat Centre, New Delhi



UNESCO MGIEP launched its Transformative Learning Labs programme that connects students from varied social, economic

and cultural contexts and helps them engage in dialogue with school children from across the globe. Phase II of the Transformative Learning Labs programme concluded in a three-day long workshop organised from 12-14 July, 2017 at India Habitat Centre, New Delhi. Students and teachers

from United States, Malaysia, India, Norway and South Africa participated in the workshop and came together to share their experiences and learnings from the programme. The workshop started with an inaugural address by Dr. Anantha Kumar Duraiappah, Director UNESCO MGIEP, during which he highlighted the importance of 'dialogue' and 'constructive engagement' amongst young people for mutual understanding and collaboration. The address was followed by ice breaking exercises and experience sharing by the students and teachers, during which the participants discussed how 'sharing different perspective enhanced their understanding of multiple identities and their ability to accommodate differing opinions'.

Capacity-Building Workshop for Educators on Preventing Violent Extremism through Education | 29-31 August, 2017, New Delhi, India



UNESCO MGIEP organised a three-day capacity building workshop for educators on the theme of preventing violent extremism through education

from 29-31 August, 2017 in New Delhi. This was a follow-up activity to the International Conference on the Prevention of Violent Extremism (PVE) through Education: Taking Action organised jointly in September 2016 by UNESCO MGIEP and

UNESCO Headquarters in New Delhi. This year's workshop was attended by 35 educators and policymakers from ten countries, namely; Australia, Bangladesh, Cameroon, Columbia, Finland, India, Kenya, Malaysia, Sri Lanka and Zambia. The workshop employed a transdisciplinary approach to education for PVE by integrating neuroscience, contemplative science and critical pedagogy to create a unique learning experience aimed specifically at building competencies for critical inquiry, mindfulness, empathy and compassion. The objective was to train and empower educators in applying these innovative and evidence-based pedagogies to address violent extremism through education in their classrooms.

Youth and senior decision makers embrace UNESCO MGIEP's iTAG^e modality to engage in honest dialogue on role of education in sustainable development

22 July, 2017, Brombachtal, Germany



At the iTAG^eAYUDH, organised by AYUDH Europe at its annual summit in Germany, participants examined the critical

contribution of education systems and their implications at the individual, societal and policy level. iTAG^eAYUDH, was the culmination of what had been a week of intense reflection

on issues related to education, mindfulness, citizenship, sustainability and peace for the 250 youth activists who had come from across Europe to participate at the 13th European Youth Summit. In the four weeks leading up to #iTAG^eAYUDH, the summit participants took part in an intense online dialogue via AYUDH Europe's social media platforms. These discussions were moderated and summarised by AYUDH team members. Equipped with the outcomes from the online global dialogue, the participants further discussed these questions in working groups, facilitated by international experts.

YESPeace Pakistan organises a youth workshop (Islamabad)

29 July – 1 August, 2017, Islamabad, Pakistan



YESPeace Pakistan's partner, HIVE, organised a three-day youth workshop in Islamabad.

A total of thirty-one students and young professional (thirteen girls and eighteen boys) from eleven different cities of Pakistan (Gujranwala, Okara, Karachi, Lahore, Faisalabad, Islamabad, Kasur, Swat, Quetta, Gilgit Baltistan and Peshawar) participated in this workshop. The workshop was conducted in collaboration with the Dil Say Pakistan Campaign. The training included different sessions on capacity building, leadership skills, team building, peace messaging, counter-violent extremism, interfaith harmony, bashing stereotypes, critical thinking, and interpersonal skills.

YESPeace Pakistan organises the Tamasha workshop in Lahore

July 31 – 5 August, 2017, Lahore, Pakistan



YESPeace Pakistan's partner The Little Art organised the Tamasha YESPeace Workshop in Lahore. More than 32 young adults,

aged between 16 and 25, participated in the workshop including 5 participants from Quetta, 1 from Islamabad, 1 from Sheikhpura, 1 from Taxila and 24 from Lahore. The workshop assisted in development of the participants' skills to understand, analyse, facilitate and lead conflict resolution activities, while engaging audiences in their home communities for dialogue on key issues. The aim was to discuss peace, conflict resolution, gender equality, cross-cultural understanding and diversity using the power of theatre and performing arts, the core strength of the YESPeace Pakistan Partner, The Little Art. This workshop was the first of a series of six workshops being organised by the YESPeace Pakistan partners (i.e The Little Art, College of Youth Activism and Development (CYAAD) and Pakistan Youth Alliance (PYA)) in various cities and towns of Pakistan.

YESPeace Pakistan partners co-lead youth workshop

21 – 23 August, 2017, Lahore, Pakistan

YESPeace Pakistan's partners, The Little Art (TLA), College of Youth Activism and Development (CYAAD) and



HIVE organised a three day Youth workshop in Lahore. The workshop was an advanced stage of the Tamasha YESPeace workshops, wherein TLA invited other YESPeace partners for training.

More than 25 young people from all parts of Pakistan participated in this event. The workshop included individual sessions by YESPeace partners. Syed Ali Abbas and Umair from the HIVE team facilitated sessions on civic imagination with young people, while Inayat and Jan Muhammad from CYAAD led intensive sessions on conflict resolution and issues such as identity.

Education is about human rights and dignity: The Director-General of UNESCO at MGIEP'S YOUTH TOWNHALL

31 August, 2017, UNESCO New Delhi office, New Delhi, India

UNESCO MGIEP organised a YOUTH TOWNHALL on Harnessing the Indian Youth Demographic Bulge for a True



Dividend: Vision to action for the 21st Century 2017 at the UNESCO corporate office in New Delhi, India. The Youth for Education, Sustainability and Peace (YESPeace) Network, a collaborative effort led by UNESCO MGIEP spearheaded this Youth TownHall by providing a platform to the youth to discuss key issues concerning their future with senior policy makers. The Youth TownHall was addressed by Ms. Irina Bokova, Director General, UNESCO and Dr. Karan Singh, Chair, UNESCO MGIEP and moderated by Mr Abhishek Mazumdar, Founder, The Logical Indian. The main focus of this TownHall was on how education systems can play a key role in empowering young people to address the challenges of the 21st century and how the voices of the young can be mainstreamed into policymaking.

Youth Round Table with UN Youth Envoy on Youth and SDGs

16 August, 2017, UNESCO MGIEP, New Delhi, India



As part of the International Youth Day celebrations, the YESPeace Network hosted a round table with the UN Youth Envoy, Ms. Jayathma Wickramanayake along with youth and

youth organisations on the SDGs in India. The purpose of the interactive session was to provide a platform to youth organisations and young people to share their perspectives, concerns and details of their work in India with the UN Youth Envoy. The lively and thought-provoking discussion provided a bottoms up perspective on the real issues facing young people in India and gave them an opportunity to share their expectations of the United Nations. Partners of the YESPeace Network-India Chapter including STEPS, Pravah and CYC were also present as a part of discussion session. Along with them representatives from Breakthrough, YP Foundation and Tata Institute of Social Sciences as well as UN Women also joined the round table discussion.

Training of Youth in "Global Citizenship and Interfaith Peace Building: An exploration of Interfaith Harmony through films"

8 – 21 September, 2017, Delhi Metropolitan Education, Noida and Amaltas Hall, India Habitat Centre



STEP Trust, in partnership with the YESPeace Network, organised a three-day training for youth on 'Global Citizenship Education and Interfaith Peace Building – An exploration of Interfaith Harmony Through faith' at the

Delhi Metropolitan Education Institute in Noida. In this programme, through the medium of filmmaking, thirty-four youths from different backgrounds were encouraged to relook at the idea of religion through an exploration of what faith means to each of us, and how it functions at each of the three levels – personal, cultural and social. Upon conclusion of the training, the participants made films on the theme of interfaith harmony, which were screened at the inaugural event of STEP's annual peace festival to celebrate the International Day of Peace on the 21st of September 2017, at the India Habitat Centre in New Delhi. The training sought to enable the young participants to become critically aware citizens as they learn to cut through stereotypes and prejudices.

“There is no peace without development and there is no development without peace”

Ms. Tawakkol Karman’s Ahinsa lecture | 2 October, 2017, UNESCO Headquarters, France



In order to commemorate the International Day of Non-Violence, 2017 on October 2, which coincides with Mahatma Gandhi’s birthday, the UNESCO MGIEP and the Permanent Delegation of the Republic of India to UNESCO organised the

second Ahinsa Lecture by Ms Tawakkol Karman, recipient of the Nobel Peace Prize in 2011. The theme of the lecture was: ‘Working Towards Peace Building and Sustainable Development.’ The second Ahinsa lecture commenced with introductory remarks by the Director-General, UNESCO, Ms Irina BOKOVA; the Deputy Chief of Mission, Embassy of India, Mr Manish PRABHAT and Dr Anantha DURAIAPPAH, Director, UNESCO MGIEP. Ms Bokova, in her introductory remarks highlighted how ‘Mahatma Gandhi’s vision of peace and development nowadays has never been so relevant’ and how ‘his wisdom and vision deeply resonate with UNESCO’s mandate and Constitution’. In her talk, Ms. Karman, expressed that in order to achieve peace and sustainable development, strong institutions would be required at the local and international level, supported by the UN.

UNESCO MGIEP organises its first Futures’ Workshop

9-10 October, 2017, IIEP, Paris, France



As countries march forward to achieve the SDG 4, which ensures inclusive and quality education for all, we must stand back and ask ourselves if the present system is adequate. Is there a need for a critical rethinking

of education? To undertake such an inquiry, UNESCO MGIEP designed the Futures Workshop Series, entitled ‘Transforming Education for Humanity: The Future of Learning’. The first Futures’ workshop to discuss and debate the design and structure of education for the future was organised on 9-10th of October 2017 at the UNESCO International Institute for Educational Planning (IIEP) in Paris. The primary objective of this workshop was to identify some of the key challenges that the global contemporary society will face in the 21st century and beyond and to provide some suggestions on what future education systems will look like to address these challenges.

YESPeace Peer Educator Workshop

9 and 11 October, 2017, Cape Town, South Africa



On the 9th and 11th October, ACTIVATE! Change Drivers and Africa Unite; both affiliates of the YESPeace Network collaborated to

host a peer educator workshop in Cape Town, South Africa. The workshop essentially sought to equip peer educators with knowledge and skills quintessential for the effective delivery of content aimed at promoting quality education on gender and human rights to create interconnected, peaceful and sustainable communities across South Africa. 9 peer educators (3 Male and 6 Females) from various organisations working within the gender justice sector participated in the workshop.

Developing Synergy for Change YESPeace Africa holds a workshop in Kenya

14 October, 2017, Nairobi, Kenya



Fifty-five youth from different counties in Kenya convened on October 14 in Nairobi to voice their educative approaches to ethnic

polarisation that is majorly faced by 44 tribes in Kenya. The participants, who were selected based on the relevance of their work to Sustainable Development Goal 4, Target 7 were representatives of various youth groups, community organisations and social organisations, whose primary focus is to better their communities. The outcomes of the event at Nairobi were a result of the efforts by Change Mind Change Future, a YESPeace Africa Partner and UNESCO MGIEP. The participants in these groups attended a follow up incubation programme from November 13 to November 17, 2017 at Africa Youth for SDGs Innovation Lab in Nairobi and thereafter, launched the projects, which are projected to benefit 300 people.

YESPeace Network leads initiative to empower youth to build a peaceful and interconnected South African society

28 October, 2017, Cape Town, South Africa

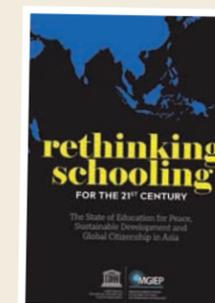


On the 28th October 2017, ACTIVATE! Change Drivers and Africa Unite collaborated to host the SDG 4.7 Interconnectedness, Gender and Human

Rights: Youth Training Workshop in Cape Town, South Africa. The workshop was coordinated with the generous support of the YESPeace Network. The facilitator of the workshop, Lezerine Mashaba, described the initiative as “a platform for shared learning on how communities can be empowered to contribute towards building peace and creating interconnectedness”. 26 youth leaders from various organisations including ACTIVATE! Change Drivers, Africa Unite, the International Peace Youth Group, Amy Foundation, ARCOSA, Mjoli Connect and the Khayelitsha Peace Building Team participated in the workshop.

Rethinking Schooling for the 21st Century: The State of Education for Peace, Sustainable Development and Global Citizenship in Asia

UNESCO Headquarters, Paris, France



UNESCO MGIEP launched a report at the 39th session of the General Conference titled ‘Rethinking schooling for the 21st century’. Building on the content analysis of 172 official documents in 18 languages based on a common coding scheme and extensive literature review on Asian schooling, this report seeks to assess how

far the aims and values encapsulated in SDG 4.7 have been incorporated into the educational policies and officially-mandated curricula of 22 Asian countries. By analysing current policies, curricular frameworks, subject syllabi and textbooks, it aims to create a baseline against which further progress towards SDG 4.7 can be monitored. At the same time, it sets out to change the way we talk about and act upon SDG 4.7, and argues that a broader vision of education’s nature and social role is essential to our chances of achieving a peaceful and sustainable future for Asia and the world.

UNESCO MGIEP launches #YouthWagingPeace:

A Youth-led guide on Prevention of Violent Extremism through Education (PVE-E) at the 39th UNESCO General Conference
3 November 2017, Paris, France



UNESCO MGIEP launched the #YouthWagingPeace: A Youth-led guide on Prevention of Violent Extremism through Education (PVE-E) during an

intersectoral event on Prevention of Violent Extremism (PVE) held under the auspices of the 39th UNESCO General Conference on the 3rd November, 2017. The #YouthWagingPeace: A Youth-led guide on PVE-E has been developed by young individuals who work within the area of Violent Extremism (VE), have been affected by VE or are former-extremists. The guide is a representation of the need to engage young individuals who are facing the on-ground, day-to-day struggles relating to VE and the various factors that lead towards extremism.

YESPeace Africa hosts National Youth Assembly

3-4 November, 2017, Institute for Accountancy University, Arusha, Tanzania



In the month of November 2017, the Vijana Assembly and UNESCO MGIEP's YESPeace Network successfully hosted the Tanzania National Youth Assembly

in Arusha, Tanzania at the Institute for Accountancy University. A total of 652 delegates (52% female; 48% male), aged between 15 and 30 attended the Youth Assembly from different parts of Tanzania, Kenya, South Africa and Burundi. The event was conceptualised with the aim of creating a platform for youth practitioners to share best practices on how peace and sustainability can be promoted through education within different spaces. The facilitation team from Kenya and Tanzania held a panel discussion and hosted educational talks on the United Nations Sustainable Development Goals (SDGs) and discussed the impact of the SDGs in our society. Additionally, a highly engaging and interactive discussion was held around defining the objectives of a National Youth Council. A discussion and debate was also held on the possibility of forming a National Youth Council within Tanzania.



Unbox: Breaking Stereotypes – YESPeace India Chapter Workshop

14 – 16 November, 2017, YWCA International Guest House Conference Hall, New Delhi, India



UNESCO MGIEP's YESPeace Network in India organised a three-day training

workshop for youth on Breaking Stereotypes from the 14th to the 16th, November 2017 at the YWCA International Guest

House in New Delhi. The capacity building workshop brought together 35 youths from diverse backgrounds around India and trained young people to identify and understand the extent of stereotypes they hold about others and themselves. The participants did this through an exploration of identity, labels and prejudices, and how these influence our ways of thinking and behaving in the particular forms they assume through the course of our intra- and inter-personal interactions.

World Rescue is a mobile-based narrative, video game inspired by the Sustainable Development Goals (SDGs) of the United Nations. Through fast-paced gameplay set in Kenya, Norway, Brazil, India, and China, the player meets and helps five young heroes to solve global problems—such as displacement, disease, deforestation, drought, and pollution—at the community level to achieve a more sustainable world. Each of the five issues that the players help to solve are mapped to one of the 17 distinct Sustainable Development Goals (SDGs) with the overarching theme of Quality Education (SDG 4). Since its launch in March, 2017, World Rescue has been download over 11,000 times.

Where to find World Rescue?
World Rescue is a free to download mobile-based game available both on the Android and iOS stores and has been rated 9/10 by the Children's Technology review for its educational value.

 worldrescuegame.com

Cantor's World



**In the tug of war
between instant
satisfaction and
sustainability,
are there any real winners?**



For more information, view
fieldsofview.in/projects/cantors-world

ABOUT THE GAME: Cantor's World has been designed for students and policy makers to learn how the Inclusive Wealth Index (IWI) complements other indices. In the game, players experiment with policy choices and experience first hand the tug-of-war between short-term results and long-term sustainability.