

## 2014 WISE Survey: “School in 2030”

Since 2009, the World Innovation Summit for Education has brought together decision makers, influential experts and practitioners at an annual Summit in Doha, to explore groundbreaking innovations and take concrete steps toward making significant improvements to worldwide education. WISE is the premier international platform dedicated to innovation and creative action in education, where top decision-makers share insights and ideas with on-the-ground practitioners.

The strength of WISE is its broad multi-sectorial base, which gathers individuals from all fields of the public and private sectors. Together, the WISE community harnesses its expertise in order to share solutions to the challenges facing education today and tomorrow.

The “2030 School” survey was conducted between June 3<sup>rd</sup> and June 30<sup>th</sup>, 2014, among 645 experts representative of the global WISE Community, which comprises more than 15.000 individuals.

The 645 respondents completed a 15-minute online questionnaire: 25% of the respondents came from the Arab League Countries, 20% from Asia/Oceania, 19% from Europe, 17% from North America, 10% from Africa and 9% from Latin America and the Caribbean. 38% were from the education sector, 32% from the non-profit sector, 17% from the public sector and 13% from the corporate sector (\*).

Five prominent voices were also invited to comment on the results and provide their insights during a phone interview: Professor Noam Chomsky, Ms Julia Gillard, Professor Sugata Mitra, Mr. John B. Mahaffie, and Dr. Yasar Jarrar.

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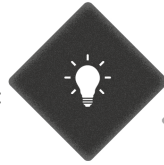
***Come 2015, it will be time to evaluate the completion of the Millennium Development Goals (MDGs) with respect to education. It is likely that a revised set of goals will be set for 2030 based on accomplishments and key learnings from the MDGs thus far. We engaged the WISE Community members in order to gain their perspectives on what school will look like in 2030. Their views are striking: the educational system will face major changes, some of them already emerging, and others still on the horizon. The resounding consensus is that education will embrace existing innovations at all levels.***

***No more “teachers”, lectures or imposed curricula: henceforth, the brick-and-mortar school will no longer be a place where students are taught theoretical knowledge, but instead a social environment where they receive guidance, enabling them to interact with their peers and build a diverse toolkit that will better prepare them for professional life. Innovation, not only technological but also social and pedagogical, will help transform the traditional “classrooms” into future “meeting rooms” where cooperative learning takes place and students prepare for their working future.***

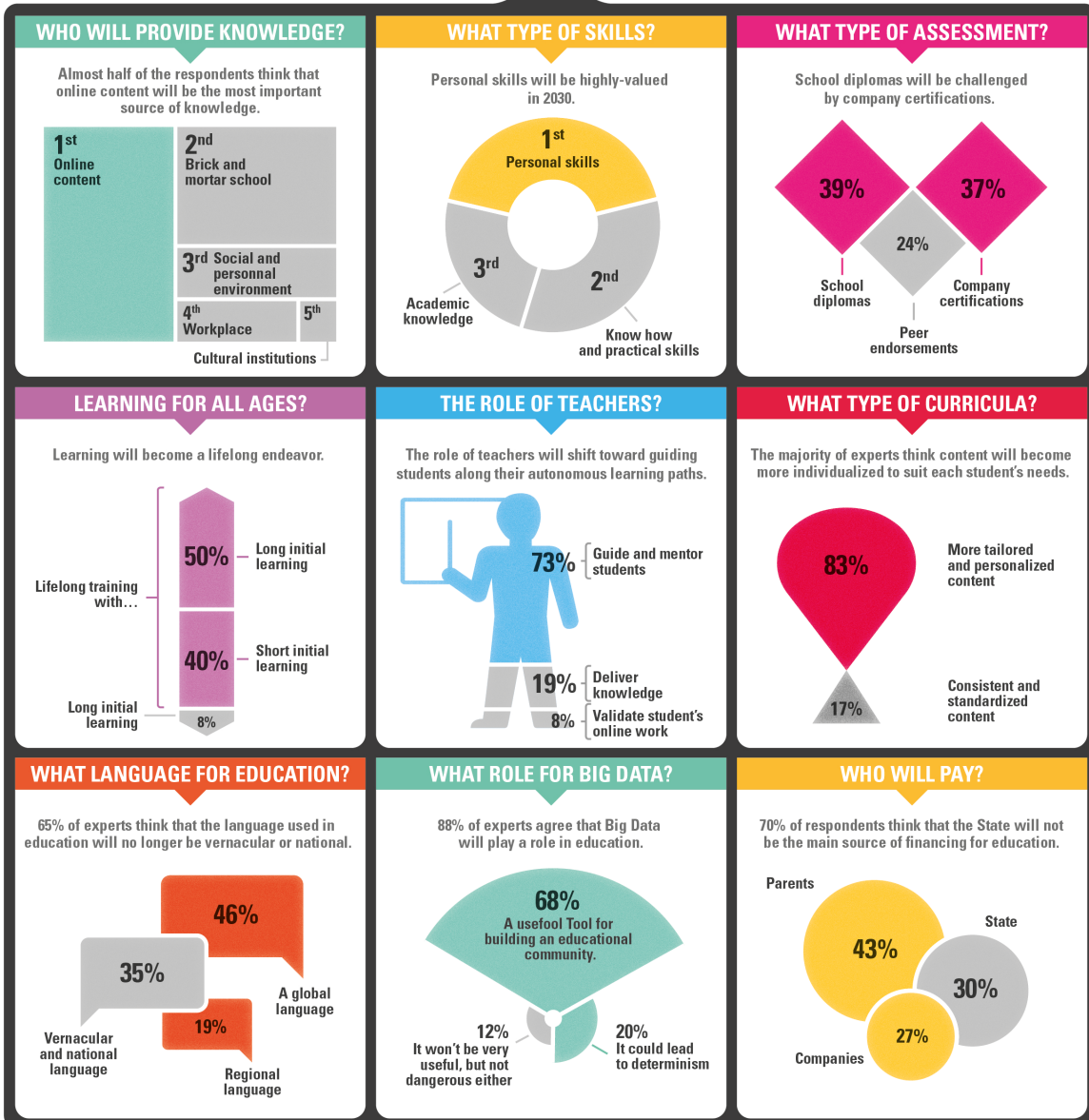
(\*) Education Sector: all teaching professionals; Non-profit sector: NGOs, foundations and social entrepreneurs; Public sector: governments, public administrations, international organizations; Corporate sector: private organizations.

# SCHOOL IN 2030

**93%** of respondents favor schools that implement innovative methods



**7%** of experts anticipate that schools will return to fundamental values and traditions



Source: 645 experts completed the «2030 survey» which was conducted between June 3rd and June 30th, 2014

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## Key Survey Results: “School in 2030”

- **Innovation in education is highly-valued**
  - **93%** of respondents favor schools that implement innovative methods based on new teaching approaches and creative processes.
  - Only **7%** of the experts interviewed anticipate that schools will return to fundamental values and traditions (empowered teachers, discipline, traditional tools and pedagogy).
- **From Bricks to clicks**
  - Almost half of the respondents (**43%**) ranked online content provided by private individuals and/or institutions as the most important source of knowledge.
  - While only **29%** of respondents ranked brick-and-mortar schools as the primary source.
  - **13%** of respondents prioritize external factors related to the social and personal environment, while **8%** cite the workplace, and **3%** cite cultural institutions as the main sources of knowledge in the future.
  - **4%** of the respondents chose “other” as the most important source of knowledge in the future.
- **Academic knowledge will not be the most valuable type of knowledge anymore**

When asked to evaluate a set of skills in terms of importance to education in the future:

  - **75%** of the respondents think that personal skills will be fundamental.
  - **59%** believe that know-how and practical skills will be fundamental.
  - Only **42%** of respondents think that academic knowledge will be fundamental.
- **School diplomas assessing academic skills will be challenged by company certifications, with both becoming equally important.**
  - **39%** of respondents think that the traditional school diploma will provide the most important assessment of aptitude.
  - **37%** postulate that a company certification of professional qualities and skills (management, collaboration, creativity) will provide the most important assessment of aptitude.
  - **24%** believe that peer endorsements for personal qualities and skills (e.g. using professional social networks such as LinkedIn, recommendation letters, etc.) will become the most important type of assessment.
- **Teaching and learning will undergo fundamental changes**
  - According to **73%** of WISE experts, the role of teachers will shift toward that of guiding students along their autonomous learning paths.
  - **19%** believe in the continued empowerment of teachers, whose primary responsibility will be to deliver knowledge.
  - **8%** envision more limited roles for teachers, who will be primarily responsible for validating student’s online work.
- **Education will become a lifelong endeavor**
  - **90%** of experts think that a lifelong education that continues throughout the professional life will become the norm: **50%** believe that the initial education will continue to be of long duration, while **40%** believe that the initial learning period will be shortened.
  - Only **10%** of respondents believe that the traditional system, involving a long initial learning period that terminates with the start of the professional life, will persist.

- **Curricula tailored to individual needs**
  - **83%** of the experts think that the pedagogical content will shift to more tailored and personalized content, adapted to individual student profiles.
  - The remaining **17%** of respondents believe that curricula will continue to be largely standardized.
- **The public sector will not have a monopoly on education**
  - **70%** of respondents think that the State will not be the main source of financing for education, and instead, that it will be financed predominantly by families (**43%**), or company sponsors (**27%**).
  - **30%** of experts believe that funding will be entirely administered by the public sector.
- **Big data will change the education landscape**
  - **95%** of the experts agree that big data will play a role in education (**51%** believe that big data will fundamentally change the education landscape and 44% believe that changes due to big data will be incremental).
  - Only **5%** of experts believe that big data will not impact the future of education.
- **But the effects of big data are still unclear**
  - **68%** of respondents consider big data to be a useful tool for building an educational community, while **20%** fear that big data could lead to determinism regarding the student's educational trajectory.
  - Only **12%** of experts believe that big data will neither be useful nor dangerous.
- **Globalization to apply to language used for teaching and learning**
  - **65%** of experts think that the language used in education will no longer be local or national, but rather global (**46%**) or regional (**19%**).
  - The remaining **35%** of experts believe that vernacular and national languages will continue to dominate in education.

## 1. INNOVATION: CENTRAL TO THE FUTURE OF EDUCATION

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### a. Innovation comes in many forms: technological, social, and pedagogical

There is strong consensus that innovation is integral to the future of education, and a resounding **93% of experts favor novel teaching approaches and creative processes in schools over a return to fundamental values and traditions.** This notion of innovation extends beyond new teaching tools, representing modified goals, inventive pedagogies, and the redefinition of traditional roles at all levels of education. As John Mahaffie, Co-Founder and Former Chair of the Association of Professional Futurists, explains: *“People usually think that to innovate you just have to spend money and give everyone a tablet: there are far, far more important non-technological approaches. It could be many different things: not sorting children by age would be a social and pedagogical innovation”.* Highlighting other remnants of a now antiquated system such as having teachers at the front of the classroom, or all students of a similar age having the same curricula, Mahaffie believes that the “rigidity of the system” remains a major obstacle to the implementation of creative new methodologies in teaching and learning.

It is also widely agreed that traditional approaches to student assessment must evolve with the system itself. As the objectives of education and the curricula change, so too will the barometers for academic success. **75% of experts surveyed believe that the most valuable assets for students in 2030 will be personal skills** such as the ability to interact with others, to make sound decisions, or to

manage time effectively. As Professor Sugata Mitra suggests, *“We need to look at our assessment system and change goals to reflect a more holistic education... Marks in disciplines such as mathematics, English literacy, or history don’t tell us anything about the student”*. This emphasis on interpersonal skills resonates throughout the academic community, as **83% of experts believe that curricula will become more individualized to suit each student’s needs**, while learning as a process will become more collaborative.

#### **b. The traditional role of teachers will become obsolete**

As **83% of experts surveyed anticipate a shift towards more individualized education**, the traditional role of the teacher as the expert, the lecturer, or the ultimate source of knowledge is expected to change as traditional classrooms become more diversified. As Mahaffie describes it, *“It will work like a library: a librarian is not necessarily an expert knowing every book, but he knows where the content is, how you can find it and if it is available. So will teachers: listening to your needs, interests and goals, and helping you fulfill them”*. In this sense, Mahaffie envisions the role of the traditional teacher becoming obsolete, being replaced instead by the *“facilitator of learning”*. Professor Sugata Mitra holds a similar view of traditional teachers, arguing that *“We don’t need people who know everything: I think we have to let them go.”*

#### **c. Towards a global education language**

Among the other changes in the realm of education, the language used for teaching and learning is expected to become more global. Indeed, **65%** of experts think that the language used in education will no longer be local or national, but rather regional (**19%**) or global (**46%**).

The globalization process currently underway in other sectors will also apply to education. As linguist and philosopher Noam Chomsky explains: *“English has been pretty much the global language, particularly since the Second World War. That was not true before. This reflects the overwhelming nature of U.S. power during this period. That has been declining and it’s possible that there will be competitors for a global language of science, commerce, interaction and so on, depending on what happens in the international arena, so as Chinese influence expands it’s possible that there will be some influence of China on globalized language. I don’t frankly expect it. It’s a long way in the future, if at all, but it could happen. However for the short-term future, for what we can envision, I think that English is likely to predominate”*.

Some experts like Sugata Mitra are optimistic about the unification of language in education: *“I think it is time to merge our languages, cultures and history into one common culture, as opposed to having millions and millions of people that cannot understand each other.”* However, globalization of language in education does not come without unforeseen risks. According to John Mahaffie, *“adopting one language and losing many of them is not good for cultures and national pride. Making children learn a language which is not their native language is not a good thing: I think they will get a better education if it is made in their native language”*.

#### **d. School as a global communication network with classrooms as nodes**

From this move toward more interactive or guided learning, it follows that school is projected to become more collaborative. Collaboration is expected to be enhanced by online resources and innovative technologies that support peer-to-peer networking, dialogue and exchange, much like

traditional social network structures. Policy Analyst and Professor, Yasar Jarrar believes that *“the future education system will be a hybrid between online content and global learning networks, which are where the majority of the content and interactions come from, and the brick-and-mortar schools, which are really there for quality assurance, standards monitoring and guiding students through their learning journey... technology allows people to work together to build social ‘learning networks’ both locally and globally, connecting learners, teachers and coaches, sources of knowledge, and even employers.”*

It is widely agreed that web-based technologies will be instrumental in constructing schools of the future. Indeed, **43% of the experts surveyed believe that content will be provided predominantly by online platforms.** However, this does not render brick-and-mortar schools obsolete. Instead, experts such as John Mahaffie maintain the importance of providing a physical space where learning takes place, envisioning school in the future as *“a learning environment with social interactions... an entire space where you can come together to build something, join together to create something.”* As Professor Sugata Mitra describes it, schooling will become *“more of a network-type structure where the physical classroom is the node”.* Professor Mitra maintains that online learning and group learning are not mutually exclusive, saying *“We shouldn’t confuse being online and being alone. You can interact and be together, looking at one screen: that’s an environment that is completely different from being alone at home with a computer”.*

Noam Chomsky shares the point of view that online content is a useful pedagogical tool that can alleviate problems of access, but is not sufficient as a model for education. He says, *“If you’re in a class, say at MIT, where I am, you’re not just listening to a lecture but you’re also communicating regularly with your fellow students and with others in the environment who are maybe concentrating in different areas, with faculty, and through these interchanges a great deal of the educational process takes place and very little of that can survive in online education. Which means that it’s going to be a more impoverished experience although plainly it is an advantage for those who couldn’t share the experience at all if it were not for this format”.* Despite differing opinions regarding the ultimate form that brick-and-mortar schools are likely to take, all experts interviewed agree that the physical contact and interaction that takes place in classrooms are indispensable to a holistic learning experience.

Online education brings added value, by expanding capacities for the exchange of knowledge, ideas and points of view. Former Australian Prime Minister Julia Gillard explains these benefits to future classrooms with an example: *“Today, you might have a high-school class looking at a topic in history, or a topic in contemporary world affairs, and you’d have a within-class debate about that topic, but now you can have that debate inclusive of the opinions and viewpoints of almost anybody in the world”.* In other words, classrooms led by a single lecturer will transform into meeting rooms, where students gather to exchange their ideas and opinions under the guidance of an experienced facilitator. In this manner, schools become, in Professor Mitra’s words, *“a physical space where the learning is made by the children themselves”.* As a consequence of this type of collaborative learning, teachers won’t teach in the way we know it today; instead, one can imagine a classroom of 30 students transforming into a meeting room of 31 “teachers”.

## **2. WHERE DOES LEARNING END AND PROFESSIONAL LIFE BEGIN?**

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### **a. Professional qualifications and technical skills will challenge traditional academic diplomas**

The great innovators of today all went to school. School is now, and will always be critical for producing the next generation of intellectuals and creative people. However, whereas traditional

schools rely on academic assessments of aptitude and achievement, changing times call for a new definition of priorities and expected outcomes. With more and more students filtering through the education system, Professor Jarrar highlights this need for re-evaluation on the grounds that *“today, we are in a world where jobs and employability are the issue, not simply education and degrees. While this might sound intuitive, it is actually a paradigm shift in how governments and societies thought about, and designed, education systems”*.

Experts remain divided on the issue of certification and assessment, with **39% maintaining that diplomas will continue to be the most important method of assessment, while 37% argue that traditional degrees will be replaced by professional certifications** assessing abilities such as management, collaboration or creativity. Yasar Jarrar is a proponent of this latter view, arguing that many things learned in school are irrelevant to the future workforce: *“we should move away from a sort of ideological approach of training in the traditional disciplines to put more emphasis on the operational, applicable ones. Naturally, the largest resistance we will face when heading in this direction is from the education eco-system itself, which has been designed with the ‘diploma’ end in mind. The future lies somewhere in the middle; diplomas might be necessary, but they are by no means sufficient.”*

Perhaps there is a way to reconcile these two distinct points of view, such as Professor Mitra’s proposition that *“a diploma with psychological, physical and logical information would be a valuable degree. I think every employer would agree because it’s helping me to decide about what I should use this person for”*. This view is echoed by former Prime Minister Julia Gillard, who states, *“I don’t think it is an ‘either or’...but I think that the rich source of data that is increasingly available about how peers view fellow workers or employers view employees will be increasingly relied upon.”*

#### **b. A balance between public interests and private resources**

The increasing interests of employers and professionals are reflected in predictions regarding how education will be financed in the future. **70% of experts surveyed believe that State funding will not be the principal source of financing and that, instead, school will be financed predominantly by private companies or families.** Yasar Jarrar is a proponent of this view, on the grounds that *“once basic education is complete – which should always remain under state or public funding - the employers should pay for further education since they are the entities who will gain the most benefit from it – both for their own success, and for the stability and sustainability of their societies”*. In this sense, employability and market forces would have a direct impact on school curricula, which begs the question whether certain disciplines would fall by the wayside. In Jarrar’s view, *“if a discipline has no commercial or societal value, then nobody should pay for it”*. This is in stark contrast to John Mahaffie, who believes that *“Educating people to become a better neighbor, citizen, or parent, is fundamental to society ... A focus merely on job training brings a much narrower, short-term focus. If big industries say that they need more people with this skill...it is what they need now, and not necessarily what they will need tomorrow.”*

Like John Mahaffie, former Australian Prime Minister Julia Gillard believes that a mixed model relying on both public and private funds will maximize accessibility without compromising the diversity and choice that follow from privately funded education. However, as Gillard warns, *“the risk with private financing is that you end up with potentially two tiers of schooling: an underfunded public system, a residual system for those who can’t afford to finance their own education, and a higher quality private-sector alternative. If that were to happen then clearly we would be leaving*

*those disadvantaged kids behind, and they would be getting a second-class education". On the other hand, as Gillard also concedes, "it is possible for private schools to be beyond the reach of oversight on quality".*

### 3. AN EVOLUTION RATHER THAN A REVOLUTION?

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The numbers reported in the *School in 2030* survey appear to tell a dominant story, one that involves drastic change and a forward-looking perspective regarding the future form that the educational system will take. While innovation is a prevailing theme in the discussion about the future of school, it is important not to confuse the need for innovation with the need for change. As Noam Chomsky posits, *"what we're in need of is reversing the process of undermining what is positive about the educational system. We want to resist that and at the same time develop approaches which will improve on it as a tool, a commitment"*. While there are many merits to forward evolution in education, it is important to also consider the lessons that can also be learned from looking back.

### ABOUT WISE

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The World Innovation Summit for Education was established by Qatar Foundation in 2009 under the patronage of its Chairperson, Her Highness Sheikha Moza bint Nasser. WISE is an international, multi-sectorial platform for creative thinking, debate and purposeful action. WISE is a global reference in new approaches to education. Through both the annual Summit and a range of ongoing programs, WISE is promoting innovation and building the future of education through collaboration. WISE 2014 will take place November 4-6 in Doha. See more at: <http://www.wise-qatar.org/>

### ABOUT THE CONTRIBUTORS

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#### Professor Noam Chomsky

Noam Chomsky is an eminent American linguist, philosopher, cognitive scientist, logician, political commentator and activist. Sometimes described as the "father of modern linguistics", Chomsky is also a major figure in analytic philosophy. He has spent most of his career at the Massachusetts Institute of Technology (MIT), where he is currently Professor Emeritus, and has authored over 100 books.

#### Ms Julia Gillard

Ms Gillard served as Australia's Prime Minister from June 2010 until June 2013. Prior to that, she was Deputy Prime Minister, Minister for Employment and Workplace Relations, Minister for Education, and Minister for Social Inclusion.

Ms Gillard delivered nation-changing policies including reforming education at every level from early childhood to university education. In February 2014, Ms. Gillard was appointed Chair of the Global



Partnership for Education, a leading organization dedicated to expanding access to quality education worldwide.

### **Professor Sugata Mitra**

Sugata Mitra has been working in the areas of cognitive science, information science and educational technology for more than three decades. He is Professor of Educational Technology at the School of Education, Communication and Language Sciences at Newcastle University, UK. Professor Mitra won the TED Prize in 2013 in recognition of his work and to help build a “School in the Cloud”, a creative online space where children from all over the world can gather to answer “big questions”, share knowledge and benefit from help and guidance from online educators.

### **Mr. John B. Mahaffie**

John is a futurist who speaks, writes, and consults with organizations on how to understand and succeed as society and the world change. He has been a speaker and consultant on the future since 1987. He has authored futures studies for corporations, government agencies, and non-profit groups. John’s recent projects have included workshops on scenario development, studies on telecommunications, and research and presentations on the future of libraries. He is an adjunct professor at American University, teaching Future and Foresight, an honors colloquium. John is a Co-Founder and past Board Chair of the Association of Professional Futurists.

### **Dr. Yasar Jarrar**

Dr. Yasar Jarrar is a Young Global Leader at the World Economic Forum (Switzerland), Adjunct Professor at Hult International Business School (USA/UAE), and a Fellow at Cranfield School of Management (UK). He is a partner at Bain & Company and heads the Middle East (ME) Public Sector and Social Impact Practice. Previously, he was a Partner in PwC (PricewaterhouseCoopers), led the ME Strategy Group, Global Education Group, and established the ME Public Sector Institute. He served as the Executive Dean of the Dubai School of Government and as a Research Fellow at the Kennedy School of Government, Harvard University. He also served as the Strategy Advisor at The Executive Office of His Highness Sheikh Mohammed Bin Rashid Al Maktoum in Dubai for over three years and as Senior Advisor at the Prime Minister’s Office (UAE Federal Government).

## **INFOGRAPHICS**

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For Infographics focusing on each key result, please visit our online press room at <http://www.media.wise-qatar.org/>