



Grand Challenges

Reinventing Teaching and School Leadership: Preparing Youth with the 21st Century Skills Needed for a Knowledge Economy

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THE CHALLENGE

The Misk Foundation and Bill & Melinda Gates Foundation aim to empower the youth and prepare them for success in the future knowledge economy. Great opportunities exist as technologies and industries advance faster than ever before. But disruptive technologies, such as artificial intelligence, also present challenges. Industries will undergo major transformations and according to the McKinsey Global Institute, approximately half of all jobs today may be lost to automation across the developing and developed world. Moreover, major societal issues that face humanity, such as inequality and climate change, continue to spread in a complex manner.

To prepare the youth to adapt and thrive in this uncertain future, and eventually solve these major societal issues, we need to help them develop new 21st century skills and competencies. Knowledge will still be important. But critical thinking skills, such as creativity and complex decision making, will be even more important. Leadership and social skills, including working cohesively with others and collaborating across borders, will be critical. As will the ability to quickly understand complex information, learn to use it, and adapt. All of these skills paired with character traits and competencies such as grit and courage will determine success in the future.

This time we must ensure every single child, regardless of where they live, receives a quality 21st century education. In 2015 at the UN Summit, the global community agreed to strive for a quality education for every child by 2030. As such, the fourth of seventeen Sustainable Development Goals to transform the world is focused on quality education for all. But we must ensure that quality includes more than just 20th century learning objectives such as reading and writing, and also includes all the 21st century skills and competencies that are necessary for success in the knowledge economy.

Preparing the youth with a quality 21st century education will be difficult since the current school systems throughout the world are struggling to even achieve basic learning outcomes. According to UNESCO, 4 in 10 Grade 4 children across the globe fail to meet minimum learning standards. In line with this, the World Bank recently declared a global learning crisis, reporting that 617 million school-aged children are not reaching minimum proficiency levels in reading and math. For example, in rural parts of India, basic skills such as two-digit subtraction are still beyond half of all Grade 5 students.

Therefore, we must think beyond incremental improvements and completely transform schools, starting with the teachers and school leaders that run them. Research, including that of John Hattie, renowned Professor of Education, shows that teachers are the number one driver of learning in the school. However,

teachers must change as the curriculum evolves with the needs of the 21st century. The curriculum of the 20th century was subject-based and weighted towards memorizing facts. Whereas modern curriculum is now being injected with new 21st century skills and competencies that can only be taught through exploration, practice, and feedback. Therefore, the role of teachers and the systems around them must be reinvented. Education must become more student-centered and models of learning must become active. And since teaching is primarily driven by the school leader's direction, the school leadership must change as well.

Preparing the youth across the world to thrive in the future knowledge economy is a daunting challenge, but one that must be and can be solved. The future is being defined by disruptive technologies. Therefore, disruptive approaches need to be applied to the education system. The only constant is that teachers and school leaders will remain to be the drivers of learning and therefore must be central to this change. Incremental improvement will not be enough. We must leapfrog the challenges of today and transform teachers and school leadership to solve the challenges of the future.

What we are looking for:

We are looking for new innovative ideas that transform teaching or school leadership to better prepare children with the 21st century skills they need to succeed in the future. Modern 21st century skills, such as problem solving, leadership, creativity, and adaptability, require a new active, student-centered system for learning. We seek ideas that better prepare teachers and school leaders to drive this new active 21st century system for learning.

We are looking for new ideas that may just be in an ideation stage or may have been tested in a small scale already, but require up to US\$100,000 to demonstrate their theory of change and potential for impact. Proposals that are selected to receive an initial funding of US\$100,000 and go on to demonstrate success will receive further funding to scale up and impact lives across the world.

Ideas may cover one or more of the following areas that impact teaching and/or school leadership:

- Reinventing the recruitment process how can schools attract the best people for the role? How are the people with the highest potential identified and selected?
- Transforming training and professional development how are new recruits prepared with essential basic skills? How is their craft further refined and enhanced over time? How is technology used to support growth? What other resources or tools be used to enhance development? How can mentoring and collaboration be leveraged more?
- Improving resources that support high-quality learning how can technology improve performance? How can teaching aids be transformed in line with learning 21st century skills? What other new resources can teachers leverage to improve lesson delivery?
- New forms of management how can new management systems and practices maximize performance? How can monitoring and incentives be effectively implemented?
- Any other area that drastically improves the performance of teachers and school leaders in line with the new competency-based curriculum of the future

What we will consider funding:

All proposals must:

- Be aligned with the challenge outlined above and greatly improve teaching and/or school leadership
- Improve the quality of learning with regards to 21st century skills for children around the world
- Outline the design of the solution to clearly explain how it will work

- Have a plan for using the US\$100,000 in 12-18 months to advance the solution.
- Have an implementation plan to ensure the solution is successfully delivered, including a plan for a strong leadership team and implementing organization
- Have a logical path to scale to help millions of children in an efficient manner. This includes measures for maintaining a lean approach and replicating whilst maintaining quality. In addition, proposals will be prioritized if they:
 - Are novel and deploy a unique approach or innovative method to solving the problem
 - Have a path toward sustainability either through private or government funding
 - Show a deep understanding of the education system in which they operate and outline ideas for integration, that leverages the rest of the system, for greater impact

What we will not consider funding:

Proposals that:

- Do not address the challenge. We will not fund proposals that do not have a direct impact on teachers, school leaders, or the human capital in schools. For example, we will not fund proposals that focus on other areas of schooling such as physical infrastructure or assessments
- Do not impact the development of 21st century skills. We will not fund proposals that only improve learning for traditional academic subjects
- Lack a complete, coherent design for how the solution will work. We will not fund unclear ideas. We will not fund proposals that merely explore the issue and do not have a clear solution
- Do not have a financial plan or have a plan that exceeds US\$100,000. We will not fund ideas that require more than US\$100,000 or more than 12-18 months to demonstrate success
- Lack a robust implementation plan or organization. We will not fund proposals that have no plan for demonstrating their concept
- Have no clear path to scaling. We will not fund proposals that have no reasonable idea for helping millions of children in an efficient manner