

HUNDRED RESEARCH REPORT #013

# Schools That Learn

Report

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IN PARTNERSHIP WITH

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SCHOOL & STUDIOS



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## SCHOOLS THAT LEARN

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The conclusions and recommendations in HundrED reports represent the authors and interviewees' personal opinions.

**Whittle**  
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## Summary

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The aim of this report is to examine schools that learn. By this, we mean schools and school organisations that recognise problems and unsatisfied needs and search workable solutions to them. An innovation-friendly school enables the development of these solutions and ensures their high-quality implementation.

Education systems are influenced by multiple stakeholders who are demanding faster change to keep up with the modern world. This demand has opened a space for innovative education organisations to change the status quo in the education sector. These innovative organisations are: challenging traditional methods, implementing new pedagogical practices, are agile in their development, and very solution oriented.

As a part of this report we interviewed 5 innovative learning organisations who have been selected to HundrED's previous Global Collections. This indicates these organisations have been evaluated as highly impactful and scalable by HundrED's Academy who are selected experts in education from all around the world. Based on the theoretical framework of Diffusion of Innovation (DOI) by Everett M Roger, collaborative approaches and collective learning cycles are seen as a key in organisational development & excellence. However, it was discovered that there was much more to learning as a school than these aspects with the organisations that were questioned in this report.

Similarities across most organisations found that a high quality learning organisation is based on many innovative approaches, usually influenced by charismatic leaders



taking the work forward. Vision and core values of these learning organisations are usually first developed by founding members, but improvement work around them is done with collaborative methods. The key vision of innovations were seldom created in truly collaborative methods, but change and implementation processes were boosted through co-development and communitarian approach.

Learning cycles in the interviewed organisations were non-linear but systematic and often utilised data-driven processes. Broadly speaking, they usually combine development, implementation & funding processes simultaneously. Whereas some of the development literature finds these steps taken one of a time, the common practice between all innovative learning organisations was an agile approach towards their growth. Organisations see their development happening on multidimensional levels all the time - like building a puzzle by inventing new parts as they go.

Clear and committed leadership was mentioned several times in interviews. It was seen problematic that in many instances change processes in the education field have a political nature, which makes demands change every 3-6 years. Simultaneously also some of the interviewees were pointing out staff rotation to be 2-5 years in the international school environments. This makes long term change processes very difficult since they are estimated to take between 3-5 years to take effect. Often a previous process is still halfway through when a newer practice or policy is already being introduced and implemented.

Student, staff and local community engagement was seen as the best way to support learning cycles in organisations. When the world is changing rapidly often at the expense of equality, it is valuable to listen and understand the needs of the community - including parents and local organisations. However, the learning organisations should be designed for and with its students and sometimes it means challenging stakeholders; for example, parents' expectations towards education. To make everyone inside and outside of the school understand the need of new implemented practices, solution oriented communication is key. Everyone should be understanding the key reasons behind improvement activities and how they are estimated to affect learning experiences.

The shift and desire to be a learning organisation is not dependent on funding or money, but instead the mindset of the people. For example, learning organisations working in extremely rural areas with low resources can be as ambitious with their practices as with highly visible private institutions. The key ingredient seems to be humble passion towards making positive change happen. Sometimes big budgets and vast resources can be even seen as a slowing factor. When resources are low, the urgency for change is more evitable. Based on the findings, it seems like the best learning organisations are the ones which are consistently challenging their abilities and resources to make the most out of them - over and over again.



Foreword by Edison Huynh,  
Whittle School & Studios

**Only with iterative learning  
cycles and a vision of continuous  
improvement can schools across  
the world chart a way through the  
needs and learning of young people**

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2020 has already been an eventful year and in the midst of the Covid19 pandemic, it has never been more important for education systems around the world to have 'schools that learn'. According to UNESCO, more than 70% of the world's students have been impacted by school closures and have had some form of home schooling. In the middle of the ongoing uncertainty, it is important that schools have the capacity to innovate and learn what works and what doesn't, and then spread those lessons to others.

At Whittle School & Studios, our founding vision has been to 'reimagine education' through a network of global campuses to meet the needs of the 21st century. The

need to innovate was highlighted for us by events in China, the first country where the effects of the pandemic on education was felt. Whether it be adapting our curriculum for online delivery or thinking through the remote support provided for our home learners, the whole community of our Shenzhen campus - our students, teachers, local leadership and parents – all had to adapt to this new normal. As we learnt from our successes and our mistakes, we were able to share our learnings with our colleagues in the Washington DC campus, and also share beyond our network too. This of course highlights something important about education innovation which both HundrED, and all the school networks contained within this report, emphasise: that is, the effectiveness and scalability of innovation and the conditions which support this innovation.

As schools reopen across the world, identifying education innovation and what makes a particular school a 'learning' one has new urgency. In this Covid-19 era, it is likely that schools will have to adopt a flexible and adaptive form of education as new hybrid learning models will emerge to take into account oscillations between full lockdown and partial reopening as different countries deal with subsequent outbreaks of the virus. Only with iterate learning cycles and a vision of continuous improvement can schools across the world, including us at Whittle Schools, chart a way through the uncertainty and still ensure that students can flourish and master skills needed for the future.

The pandemic of course didn't just present us with new challenges but it also exposed our vulnerabilities to long-term trends which were already present before Covid-19. Indeed, technological advances, AI and automation were already posing questions about whether our schools were truly preparing young people for the 21st Century. If educators around the world respond to this pandemic with an open approach to learning from others, they may find an unexpected opportunity for renewal and regeneration in education. I hope that the case studies contained within this report, and the common patterns and approaches that have been identified, will be of help to you as we all seek to better support schools themselves to learn.



Edison Huynh

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Whittle School & Studios  
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Foreword by Lasse Leponiemi  
& Chris Petrie, HundrED

## **In this report, we take a closer look at five learning organisations doing exceptional work to renew themselves**

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HundrED.org is a non-profit educational organisation founded in 2015. Our mission is to help improve education through impactful innovations and help them spread. Our activities are international. Throughout our history, we have reviewed well over 5,000 educational innovations from more than 160 countries on all continents. To date, about 70% of the innovations selected by HundrED are non-profit.

The aim of our work is to help every child flourish in their life - no matter what happens. In the education context we usually talk about lifelong learning as a way to equip our children with this ability. Many labour skill oriented surveys further underline the importance of quick adaptability for future workers - and there are quite a few complex problems and issues like systemic racism and the global climate crisis to be addressed. Comprehensive pedagogical approaches have been created to help our students to master these important skills during their school years and to be ready for the rapidly changing world.

When the demands for future employees seem to be somewhat clear, how do our education systems and schools executing the local curriculums keep up with this constant phase of change? Traditionally education has been organised based on subjects and their age-group related learning goals. In the latest curriculums around the world, more multidisciplinary subjects and skills from emotional intelligence to coding have been added on top of the traditional settings.

As the creation of curriculum is always a political process, it seems very difficult for all countries and regions to leave something existing out from the newer version. This puts the schools into a tight spot. On one hand, the changing demands for

future needs are making it obvious that old ways need to be renewed. On the other hand though, there is not very much room for new ideas when there is an already full curriculum without taking into account the bigger picture.

This report started already early in 2019 in discussions with Morgan Silver-Greenberg, Nick Dirks and Pavel Luksha. We would like to acknowledge the work done for interviewing different learning organisations was achieved through a working group consisting members from HundrED, Global Education Futures and Whittle School & Studios. Additionally, special thank you also to Pasi Sahlberg who helped us to put together 10 recommendations for learning organisations.

Based on a collaborative working group, in this report, we take a closer look at five learning organisations in education recognised by HundrED as doing exceptional work to renew themselves. Our aim is to identify common patterns and ways these schools have created practical learning cycles as well as ways to implement new ideas and let go some outdated ones.

Since 2017, we have been studying innovative approaches globally in various sectors at HundrED, from private to public, from new methods of teaching and ways of learning to change management. There are wonderful schools around the world who are paying attention to be lifelong learners too - we hope that you find these examples and interviews encouraging. On behalf of HundrED, we would like to thank everyone involved in this project: from the education innovators who were interviewed to education specialists commenting on the work, and of course, the whole working group getting the content together.



Lasse Leponiemi

Co-Founder & Executive Director,  
HundrED



Chris Petrie

Head of Research,  
HundrED



## About HundrED

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HundrED.org is a global, Finland based not-for-profit organization that seeks and shares inspiring innovations in K12 education. HundrED.org's goal is to help every child flourish in life by inspiring a movement to improve education in every school. We identify pedagogically sound, ambitious innovations across the world and help them spread.

HundrED annually selects 100 leading education innovations globally and shares their amazing work with the world, for free. We also offer exclusive services for partners looking to promote specific education innovation based on themes or regions. Finally, we work with educators to integrate innovations to address specific challenges or goals in their school systems. As of 2020, we have selected more than 300 innovators from over 100 countries, have more than 450 ambassadors in 92 countries, and completed 14 projects and counting on 4 continents.

At present, innovations selected by us impact over 180 million children and educators worldwide. Our long term goal is for every child to have access to the best possible education innovations by 2030.

### HUNDRED MANIFESTO

The purpose of education is to help every child flourish, no matter what happens in life. In a fast changing world focusing on traditional academic skills will remain important, but that is not enough. To thrive as global citizens, children must be equipped with a breadth of skills.

While we are advocates of a child-centric approach and personalised, passion-based learning, the relationship between an inspired teacher and a motivated student will remain essential. Assessment has to be aligned with the core purpose of helping kids flourish and all of this should be reflected in the learning environments of the future. To make this happen, we need visionary leadership at every level of our education system with ambitious, impactful and scalable education innovations that are globally effective. The world of education is full of hardworking specialists who are making this happen every day. Our mission at HundrED is to give them the recognition and visibility they deserve.





# Introduction

The world is changing – inside and outside schools. Some forecasts see the change as truly dramatic, and even the most cautious ones find it remarkable. It goes without saying that as the world changes, schools must evolve and keep up.

The year 2020 will be remembered as a year that changed many things in education. Because the COVID-19 pandemic rapidly spread throughout the world and eventually affected almost 2 billion children through kindergarten and school closures, education providers found themselves in a situation where they had to adapt quickly to a new normal.

This new normal forced a switch to distance learning. Schools which had been using hybrid learning environments combining contact teaching and learning with online solutions were relevantly quick in this transition, but those without an iterative and progressive approach for their education services were struggling.

This extraordinary time of early 2020 illustrated how important it is for schools to be flexible in their approach, learn quickly and move forward. As we have seen, the

fundamental and difficult issues are not usually related to the need for change, but to its implementation. For example: what has changed and what has not, and how this change can be implemented so that learners and teachers can keep up.

This report does not comment on the content of innovations, that is, what should be taught in future schools and how, because a lot of this work has already been done. Instead, this report focuses on: (a) how school organisations can learn and evolve; (b) how they define the needed changes; (c) identify suitable solutions that are proven to work; and (d) how these innovations can be disseminated so that they benefit as many as possible.

We were particularly interested in the questions: How can we create a school culture that is enthusiastic about change? And how can this culture support a school environment to become a good implementer of educational innovations?

If the school's mission is to help learners succeed, even thrive in tomorrow's uncertain world, it is essential to identify what is likely to be needed in the future and what is not. Many experts believe that in the future world, machines will perform repetitive tasks more efficiently and effectively than humans. For example, it is estimated that 50% of technical tasks are already automatable.<sup>1</sup> On the other hand, many skills like creative and critical thinking are hard to automate and will require humans to solve for the complex and wicked challenges we face in the future.<sup>2</sup>

On this basis, many current occupations are predicted to disappear in the coming decades due to technological advances, such as automation and artificial intelligence.<sup>3</sup> Of course, this does not mean that the school's only task would be to prepare learners for the workforce. On the other hand, it is also difficult to imagine a world in which school would be completely isolated from the development of the wider world.

In a world where every individual has access to an ever-increasing amount of information at their fingertips, it is increasingly important to learn how to use knowledge and think clearly – for example, to cultivate wellbeing and sustainable development practices.<sup>4</sup> The wider world is changing due to the combined effect of many different factors. It is affected, internationally, by various economic, cultural, technological, environmental and political forces and, as consequence of changes in these, schools also need to learn to align and keep up.<sup>5,6,7</sup>

However, change is challenging in schools. Nevertheless, we have to ask ourselves, what kind of change is too fast or too slow? It's estimated that change in education is generally five times slower than industry.<sup>8</sup> Despite good intentions, many school

reforms all around the world have been met with difficulties. Schools as well have struggled to implement new solutions or practices. Is it so that the slow nature of the education sector prevents learning organisations to develop? And what lies behind these failures?

Few common factors have been pointed out. For example, delays in identifying challenges, in decision-making, in implementing reforms and in assessing their true impact have sometimes contributed to the failure. Along with increased confusion, reforms have resulted in slow and weak impacts on learning outcomes.<sup>9</sup> In addition, sometimes change processes have been seen hasty and aggressive. In the spirit of reform or redefining the education, the school has been developed on the basis of new ideas, rather than innovations proven to work. An unfortunate challenge lies in this approach: very often new experiments and ideas do not work.

However, we have to remember that education does not exist in a vacuum and any change is highly susceptible to pressures that impact whether new ideas are considered (e.g. politics, available resources, and many more). Longitudinal studies are needed to assess the impact of new ideas which are difficult to plan for across election cycles. Often, new Ministers of Education have their own priorities that are different from what has previously been worked on.

Without constant collaboration, development and an open approach, learning organisations will not be possible. In this report we are going to take a look how five leading learning organisations are working in education, how they evolve their practice and how they experiment and implement innovations. But first, let's define what we mean by innovation in this context.



## WHAT IS AN INNOVATION?

In the education context innovation can be defined in many ways. Innovation is often seen as a kind of problem-solving process.<sup>10</sup> It is a solution to a perceived problem<sup>11</sup> and usually it contains features that facilitate its diffusion.

Innovation can be described as a practice or product which is new or perceived by adopters as new and useful, improving the quality of life.<sup>12,13</sup>

The diffusion of innovation, a workable solution, is always social in nature and occurs through interaction between people.<sup>14</sup>

The OECD has argued that, in education, innovation can, in the *best* case scenario, **1)** improve learning outcomes, **2)** improve the quality of education, **3)** produce fairer education, **4)** produce education more sensibly, and **5)** modernise education to better reflect the present and future.<sup>15</sup>

HundrED has studied education innovations on all continents for many years. At HundrED, innovations are evaluated through two main criteria: the **effectiveness of** innovation and **its scalability**. We want innovations, which develop education, to be proven pedagogically effective and take the school in the desired direction. Repeatability is also integral to innovation, which means that it has the potential

to be transferable and implemented successfully in the other contexts. To have the prerequisites for being truly scalable, an innovation must respond to the challenges or development needs experienced in the school community.

But, as stated earlier, good innovations are rarely implemented sustainably without considering the local context.

It is therefore essential that an effort is made to implement the innovation. For this to be possible at all, it is necessary to understand the nature of innovations and the process of their diffusion.

Innovation is usually not static. It is not 'ready' but needs to be continually developed and adapted to the changing world, feedback and context. This, of course, requires not only funding, but also time, responsible developers, and structures that support the activity.

Moreover, it is important to remember that effective innovations do not solve everything. They only provide a solution or *an approach to a specific situation or problem*.



# **How change happens in schools?**

School development should always consider the primary interest of the learner.<sup>16</sup> Good intentions to improve the school always begins from this starting point. Before choosing to implement new innovations, the school community should discuss which problems the community really want to solve, and the entire community should be involved in the change process.





The choice of innovations need to understand the problem they are trying to solve. Moreover, it is essential for a continuous discussion on the direction of development as new initiatives are implemented. In addition, it is worthwhile to emphasise that if innovation is to benefit the whole community, it is vital that development activities are carried out in close cooperation with the community as a whole.

Innovations and their introduction have been researched widely. Everett M. Rogers' theory of innovation diffusion is one of the most respected and well-known scientific studies. Consequently, we review learning cycles in schools, based on findings by Peter Senge and OECD Learning Compass 2030 report. Finally, we look at innovation-friendliness and introduction of innovations at school level, based on the findings of Michael Fullan and Transcend.

It is important here to clearly define the similarities and differences between systems and organisations/schools. Organisations and schools are places where many systems are needed (e.g. teacher professional development, assessment, digital technology integration and many more). However, systems in education can exist on many levels that exist beyond an individual school's power, for example: network or schools, networks of educators, local and national governments, and more. Collectively, they create an education ecosystem which can enable or create barriers for innovation.

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## Everett M. Rogers – **Diffusion of innovations**

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Everett M. Rogers, the late American sociologist, is one of the most prominent experts on the diffusion of innovations. His best-known theory is 'Diffusion of Innovations'.

According to Rogers, there are certain characteristics of innovation that predict the ease and speed of diffusion. Key factors for innovation diffusion include:

- Relative advantage
- Compatibility
- Complexity
- Trialability/testability
- Observability<sup>17</sup>

Rogers argues that the relative advantage of innovation outweighs its objective advantage. According to him, it is important that people really feel that the innovation benefits them and hence think it will bring something good for them.

Compatibility refers to the innovation's values and norms that already exist in context, and to their compatibility with the new innovation. If innovation conflicts with the prevailing context, its implementation will become more challenging.

By the concept of complexity, Rogers means the ease or difficulty of understanding

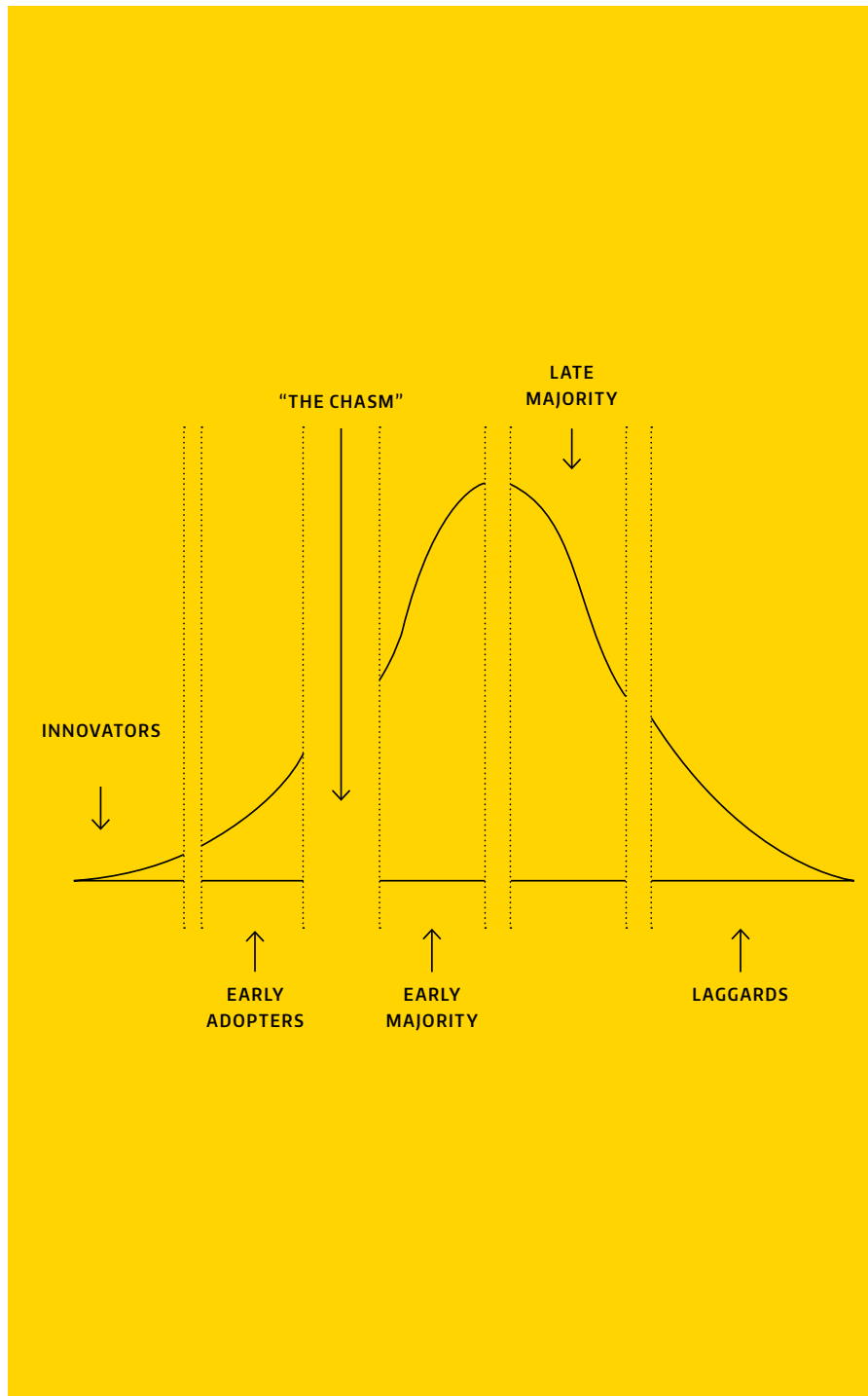
the idea of innovation – the simpler the idea of the innovation, the easier it is for it to implement to other contexts.

Trialability/testability and observability are also important factors in exploring the diffusion of innovation. According to Rogers, the fact that an innovation is easy to test, and the trial is easy to observe, also predicts its diffusion.<sup>18</sup>

According to Rogers' theory of innovation, the decision to introduce an innovation is made through the following thought process. First, the implementer receives information about the innovation. Through the information received, the implementer develops a certain bias towards the innovation. All this leads to the decision to either implement or reject the innovation. If the implementer accepts the idea of the innovation, he or she may try it in practice. Throughout the process, the implementer seeks information about the innovation in order to manage uncertainty about the future.<sup>19</sup>

The process is different for every person.

According to Rogers, individuals in a social system can be divided into five categories as adopters of the innovation: **1)** innovators, **2)** early adopters, **3)** early majority, **4)** late majority, and **5)** laggards.



According to Rogers, the diffusion of innovation occurs in the order of these categories. In his theory, the smallest group of all, the innovators, are the first people in the social system to embrace a new idea.

Innovators often present the idea to others in the community but are not always full members of the social system, being outsiders in some way. However, the next group of adopters, the early adopters, are an integral part of the community, and therefore have the greatest power to influence others by being role models and often opinion leaders.

In the next phase of the diffusion of innovations, the early majority will adopt the innovation, just before the average participant gets excited about the idea. The late majority, on the other hand, is somewhat sceptical in adopting the innovation and will do so only after many others have already put the idea into practice.

The further the process of innovation diffusion progresses, the less the group members' opinions will influence other members of the social system. Laggards are the last to adopt an innovation. They are very sceptical about anything new and prefer to base their decisions on how things have been done in the past.<sup>20</sup>

So, according to Rogers' theory, the diffusion of innovations is a social process.

In many cases, people considering the adoption of innovation will prefer to listen to the subjective experiences and advice of colleagues already experimenting with it, rather than base their opinions on objective, scientific knowledge.

Consequently, in the diffusion of innovations, it would be important to target early stage measures at early adopters, that is, the group that will adopt the innovation quite early in the diffusion process.

The experiences and role model of early adopters result in a social process where innovations found to work well will begin to implement to other groups in the social system.<sup>21</sup> And vice versa, if not even early adopters are enthusiastic, it is highly unlikely that the innovation will be implemented.

Furthermore, diffusion of innovation is often about the so-called 'critical mass' of individuals whose attitude towards innovation is positive. In many cases it is more effective to focus on encouraging the cautiously positive (early adopters and early majority) than turning opponents around. Most of them will follow, as long as the majority are enthusiastic about the innovation and tell positive stories about it.



## Peter Senge – **5 disciplines of a learning organization**

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Learning organisation has been discussed since the 1980s, but in the field of education the term has been more used since 1995 when Peter Senge extended his business orientation on learning organizational development to education. He wrote a detailed and accessible book with many resources called 'Schools that Learn'.<sup>22</sup>

Based on Senge's interview he said "A learning organization is an organization in which people at all levels are, collectively, continually enhancing their capacity to create things they really want to create." Senge talks a lot about the conflict between this ideal and how teachers feel and observe their situation in the 1990s. In the given context, most teachers feel oppressed trying to conform to all kinds of rules, goals and objectives, many of which they don't believe in. In addition, there has been a lack of collaboration between colleagues and just a little of collective learning going on in most schools.<sup>23</sup>



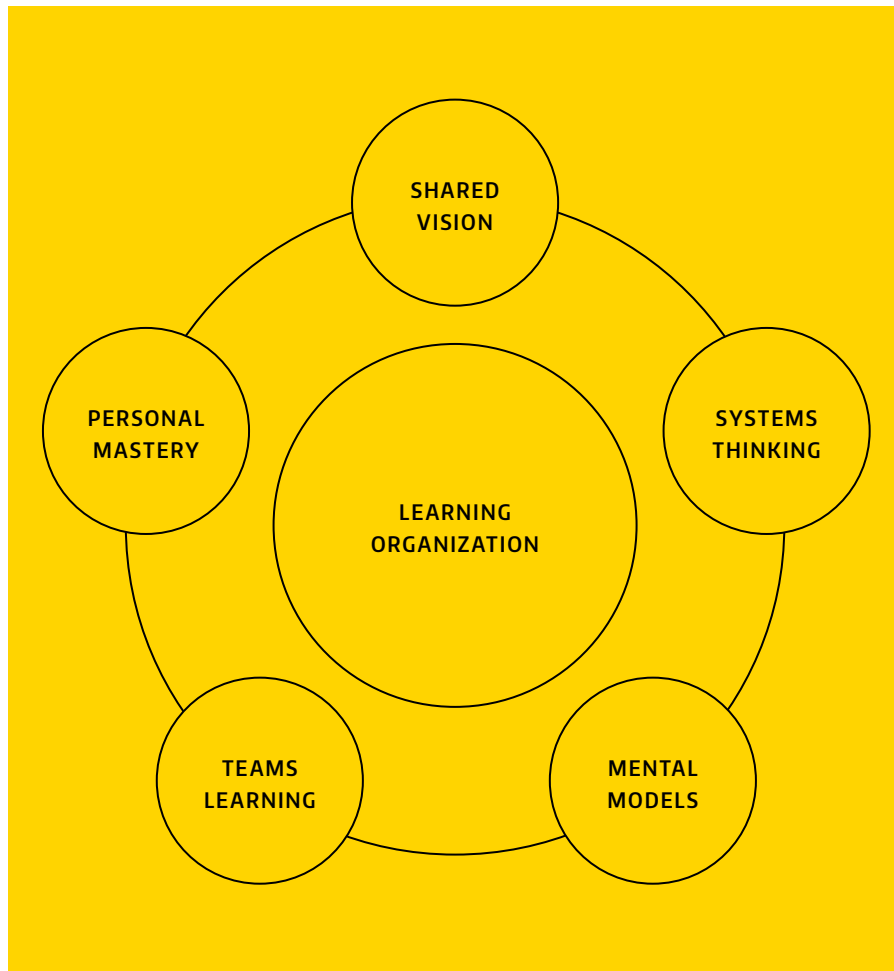


Figure 1. Peter Senge's Five disciplines of a learning organization

In *Schools that Learn*, Senge shares that all members of the organization, from the teacher to the leader, must develop the same five elements he identified in his previous work (See Figure 1). His belief was that if the school develops these five elements of personal mastery, shared vision, team learning, mental models and systems thinking they would evolve to become a learning organization. The result would be "a living system for learning—one dedicated to the idea that all those involved with it, individually and together, will be continually enhancing and expanding their awareness and capabilities."

- **Shared Vision** – created and cultivated collectively
- **System Thinking** – observational processes of the entire system
- **Mental Models** – all staff must be flexible to new mental models and accepting changes that are firmly rooted in values
- **Team Learning** – this is where personal mastery and a shared vision are brought together in a safe environment (where mistakes are forgiven)
- **Personal Mastery** – each individual should have a clear vision of a goal with an accurate perception of reality

Senge's work has been influencing the education policy community and various guidelines have been created based on it - for example, Common Core State Standards (CCSS) in the US.<sup>24,25</sup> Nonetheless, Senge truly believed that the essence of this work was best developed and shared through its practice, in applying exercises and tools in the classroom, the school, and the school community. This work was deeply driven by the necessity to learn and live in a world of:

- Rich and rapidly changing technology
- Interdependence of economics, finance, food & water, energy, security
- Unsustainable patterns of social and ecological imbalances
- Vast untapped human & social capital within organizations and society<sup>26</sup>

However, it was warned that this approach "may result in an unwieldy proposition with little impact in the classroom for years, if ever" and that its implementation could go the wrong way if CCSS simply become new targets that educators must meet. If teachers are evaluated based on simplistic measures of set targets, the long term benefits can't be achieved. The additional worry was considering the implementation; if the approach is seen as too difficult and there is no clear leadership on how it should be implemented and collaboration is missing, the good practices may just get ignored.

## OECD – **Learning Compass 2030**

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OECD Future of Education Skills 2030 project is investigating how education can be providing students with skills they need in an unpredictable world. The main aim has been to identify factors that help students adapt, thrive in and shape whatever the future holds. The approach looks at students' learning beyond knowledge and skills by also including attitudes and values which can guide towards ethical and responsible actions.

The report summarizes that the 21st century is characterised by interdependence among nations facilitated by global communication and the decentralisation of power, which has been accelerated by social media. Simultaneously workplaces have become more flat, open, flexible and transparent. Teamwork and flexible hours are valued more highly than hierarchy.

Education systems are adapting to the changes in the society. Schools are not anymore seen as closed entities in themselves, but as a part of the larger ecosystem in which they operate. In counter arguments against this movement it has been argued that neoliberalism is taking a foothold in the education sector, but at the same time this increased collaboration is seen vital for keeping education meaningful and relevant.<sup>27</sup>

This collaborative approach is visible through joint projects made together with organisations in school communities, such as scientific organisations, theatres, universities, social service organisations, technology companies and businesses. These projects help teachers and students can become familiar with the skills and competencies that employers and other community members deem critical. Different countries have been implementing this approach to their curriculum in various depths. For example, in Finland vocational training students are having prolonged mandatory studying and training periods with local businesses.<sup>28</sup>

All these developments are pushing educational organisations to be a part of a larger ecosystem to which they contribute and by which they are influenced. In line with this shift, a sense of shared responsibility for the education system and stakeholder engagement has also changed: decision-making is shared among stakeholders and schools are not anymore as independent top-down organisations they have traditionally been.

Students have also become active participants not only to the arrangement of their own education, but also how the education is provided in the larger perspective by the school. The whole school community is being activated to become change agents in the system. Everyone is guided and expected to be responsible for



their own learning - teachers and principals alongside the students. This way all stakeholders are working to improve the education provided in the system.

The table on page 25 describes the changes from the traditional education system/schools to more collaborative, low hierarchy system based on the OECD report findings.

Which is the more effective model from the viewpoint of innovation diffusion, top down or bottom up? And how can a school adapt its culture towards a collaborative approach?

The traditional model is guided by a cross-curricular reform of the education system, in which the top decision-maker sets the goal for the development effort. In top-down guidance, the idea is often to push change through local administration into every school and classroom. Top-down guidance can make large-scale changes happen through policy changes or executive orders. For example, during the Covid-19 pandemic top-down decisions were made to move into distance learning very quickly. At the same time, however, this approach is challenging and often inadequate in today's complex world.<sup>29</sup>

Therefore, when promoting change, it is important to adopt an approach that takes the entire system and school into consideration, taking into account the tensions created by change and seeking a balance between innovation and risk aversion, for example. Time and resources must be allocated to change, and its rationale and benefits must be justified credibly.

Reforms have been successfully implemented in both fragmented and centralised state structures. According to a report produced by the OECD's Centre for Educational Research and Innovation (CERI), it seems that coherence, stakeholder engagement, and running of the process itself are more important in terms of success than state level structures.

*Effective governance works through building capacity, open dialogue and stakeholder involvement.*<sup>30</sup>

The OECD's Centre for Educational Research and Innovation (CERI) has produced a summary report 'Schools at the crossroads of innovation in cities and regions' on its work on school development over many years.

*CERI's vision for implementing innovations is that they are more likely to succeed in open learning and innovation ecosystems.*

All these research findings are encouraging to move toward the collaborative approach. When school opens its doors to outside parties and communities, new innovations can be found and learning experience be improved. School gets important links with other communities to ensure diverse, innovative learning, and other parts of society can, in the best case scenario, learn from development work done at school and thus produce wellbeing to society in a broader sense.

According to the CERI report, the community's openness is a prerequisite for sustainable innovation. Creating such a culture is best accomplished by *sharing responsibilities horizontally within the community and empowering people to be active.*

An operational culture where innovation is an integral part of everyday life is made possible by transforming schools into true learning communities. According to the CERI report, a real learning organisation is created by:

- *Developing and sharing a vision* centred on the learning of all students
- Ensuring *continuous learning opportunities* for all staff
- Promoting *team learning and collaboration* among all staff
- Establishing a culture of *inquiry, innovation and exploration*
- Embedding systems for collecting and *exchanging knowledge and learning*
- Learning with and from the *external environment and broader learning system*
- Modelling and growing learning *leadership*<sup>31</sup>

Similar trends are present in the OECD's international recommendations for successful implementation, derived from studies of learning environments. They emphasise *culture change, clarifying focus, capacity creation, collaboration & co-operation, communication technologies & platforms, and change agents.*<sup>32</sup>

The Asia Society and OECD's Center for Global Education's report on teaching for global competence among learners highlights *communication as well as excessive rush, lack of restraint, as the biggest challenges for implementation.*

Change always takes time, and the results of development may not be available immediately. Restraint and confidence in success is required. The report also highlights the importance of assessment. In order to know that the change has truly been successful and has resulted in something positive, it must be shown, made visible in some way.<sup>33</sup>

Assessment of development produces answers about the usefulness of change and increases its reliability. That is not always easy. In particular, the benefits, or the lack

thereof, of holistic innovations that renew learning across school subjects, can be difficult to identify.<sup>34</sup> Therefore, innovation assessment should be broad enough to truly measure how the innovative practice has worked and in what context.<sup>35,36</sup>

Innovations that rely on longer-term planning and assessment seem to have proven to be more successful. The continuous assessment of an innovation enables it *to be redeveloped*, which is seen as essential to its success.<sup>37,38</sup>

One more observation based on OECD's reports.

It is important that innovations are primarily based on the needs and interests of teachers and learners. This is best ensured by engaging learners in the innovation planning process.<sup>39</sup> A learner-centred approach enables learners to commit to learning.

When planning to implement innovation and when assessing implementation in schools, different groups of learners should also be taken into account; whether the reform has helped some more than others, and how can everyone benefit equally from the new way of learning?<sup>40</sup> The starting point for all development at school should be that all students benefit from the innovation.<sup>41</sup>



	TRADITIONAL EDUCATION SYSTEM/SCHOOLS	AN EDUCATION SYSTEM/SCHOOL EMBODYING COLLABORATIVE APPROACH
EDUCATION SYSTEM/ SCHOOLS	Education system/schools are an independent entity	Education system/schools are a part of a larger ecosystem
RESPONSIBILITY AND STAKEHOLDERS ENGAGEMENT	<p><b>Decisions made based on a selected group of people</b> and thus they become held accountable and responsible for the decisions made</p> <p><b>Division of labour</b> Principals manage schools, teachers teach, students listen to teachers and learn</p>	<p><b>Decision-making and responsibilities shared among stakeholders</b>, including parents, employers, communities, and students</p> <p><b>Shared responsibility</b> everyone works together and assumes responsibility for a student's education and students also learn to be responsible for their own learning</p>
APPROACH TO SCHOOL EXPERIENCE	<p><b>Outcomes most valued</b> Student performance, student achievements are valued as indicators to evaluate systems for accountability and for system improvement)</p> <p><b>Focus on academic performance</b></p>	<p><b>Valuing not only “outcomes” but also “process”</b> In addition to student performance and student achievements, students' learning experiences are in and of itself recognised as having intrinsic value</p> <p><b>Focus on not only academic performance but also on holistic student well-being</b></p>
APPROACH TO LEARNING PROGRESSION	<p><b>Linear and standardized progression</b> The curriculum is developed based on a standardised, linear learning progression model</p>	<p><b>Non-linear progression</b> recognising that each student has his/her own learning path and is equipped with different prior knowledge, skills and attitudes when he/she starts school)</p>
FOCUS ON MONITORING	Valuing accountability and compliance	System/school accountability as well as system/school improvements (e.g. continuous improvement through frequent feedback at all levels)
STUDENT ASSESSMENT	Standardized testing	Different types of assessments used for different purposes.
ROLE OF STUDENTS	Learning by listening to directions of teachers with emerging student autonomy	Active participant with both student agency and coagency in particular with teacher agency

Table 1. Comparison between traditional and collaborative education systems/schools.



## Michael Fullan – **Multidimensional change**

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Change is very often a highly multidimensional phenomenon, and it understandably causes opposition in people.<sup>42,43</sup> In an organisation, a positive attitude towards innovation can be enhanced by focusing on explaining the need for change.

Michael Fullan, a Canadian author who has long studied education and educational reform, and contributed to it, has compiled a list of factors that oppose and support change. Fullan has presented his list in connection with the dissemination of the concept of deep learning and its principles.

Fullan believes that in order for us to be able to face an uncertain future and the challenges it involves; schools need to deliver a new kind of deep learning that prepares learners to creating a better world and more wellbeing.<sup>44</sup>

- Factors that cause change resistance include:
- Change happens outside the comfort zone
- Change is complex
- Change is unclear
- Difficult to assess the advantage of change
- Lack of support by a bigger system<sup>45</sup>

Fullan also lists factors he believes will favour change:

- Exciting
- Passion and purpose
- Collective
- Speed of change
- Societal disruption - the need to change the perceived problems in society<sup>46</sup>

Leadership is proven to play a major role in change situations. Effective leadership in schools is linked to students' improved learning outcomes.<sup>47</sup> However, the school leaders, principals, may feel lonely in their roles.<sup>48</sup>

Michael Fullan has put forward an effective leadership model amidst change, resulting in social engagement. Fullan thinks leadership is the key to situations of change that will inevitably cause emotions in employees. Effective management should lead to a situation where employees think that even the most difficult problems can be handled productively. The leader's agenda is to help employees face issues that they find challenging and force them to venture outside their comfort zone.



Fullan presents an effective change management model, which consists of five interspersing and overlapping themes. First, an effective leader acts with *moral purpose* to bring about positive change in the community.

Secondly, the leader must *understand* the change process.

Third, the *key to successful change is fostering and building interactive relationships within* the work community. Through these themes, knowledge and skills in the community increase through a social process, whereby information transforms into knowledge meaningful for the community.

Finally, an effective leader of change *makes coherence* in the midst of change. Fullan describes coherence making as a time-consuming process that can never be finally achieved – nor should it. In the process of change, it is important to tolerate uncertainty and traverse the edge of chaos while seeking coherence.

With these five themes, a leader is able to navigate successfully through change. It is also important for the leader to sustain energy, excitement and optimism.<sup>49</sup>

The leader also learns in the midst of change – an effective change process leads to learning for the community as a whole, and for the leader as well.<sup>50</sup> Rapid, continuous change in the world, therefore, requires a leader to adapt quickly and innovate. A forward-thinking leader is not content with a gradual, at times slow, change in education, but rather relies on the power of experimentation and innovation<sup>51</sup>, incorporating new ways of learning into school practices, harnessing the potential of technology, and recognising the importance of new players.<sup>52</sup> The leader's strong pedagogical attitude predicts success for the innovation.<sup>53</sup> Pedagogically competent leaders strive to create an environment in which the professional skills of all teachers can thrive.<sup>54</sup>

## Transcend – **Five-C model**

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The US-based non-profit organisation Transcend has created a Five-C model as a framework for conducive internal conditions for innovation in school communities.

According to the model, it is important that the people implementing innovation have deep and sustaining belief in innovation. This conviction, belief in the importance and potential of the innovation, fuels engagement and ensures that the innovation is prioritised in the community. This is important if, and when, there are challenges in implementing the innovation – as is almost always the case.

In addition, it is important that the community understands the direction of progress, and the reasons for it. It is essential that the community has a common vision, which is as clear as possible – clarity – that steers the efforts for change in a common direction.

It is important for the success of innovation that the school community has the capacity to bring about change. Capacity in this context refers to the support of personnel, funding and time required.

Coalition between all stakeholders is seen as playing an important role in the success of change. Important stakeholders include leaders, educators, students and caregivers, and other community members. Finally, the Five-C model highlights culture, which refers to values, norms, and practices that support innovation.<sup>55</sup>

Transcend lists these five factors – conviction, clarity, capacity, coalition and culture – as essential factors in building an innovation-friendly culture within the education system/school.<sup>56</sup>





## Enabling Conditions

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Many researchers who have studied change in schools emphasise clarity in implementing innovation. Consistency and a clear direction are key factors in successful change.<sup>57,58,59,60,61</sup>

Lack of consistency can be a barrier to implementing innovation. The vision for a post-change school should therefore be shared by all members of the school community. Achieving a common goal can be challenging as all individuals naturally understand the vision in individual ways.<sup>62</sup>

In addition, people working in the school community may be required to respond to a variety of problems, which can lead to many separate development projects in contrasting directions from where government funding is directed. This inherently noble idea may in fact turn against funded development, if clarity and a precise goal for the development are lacking or become too complex.<sup>63</sup> For example, if the government launches a development funding program for ICT implementation, that is what they will get regardless if it is actually needed at schools.

To enable and provide this kind of environment and progression it seems that there are a multitude of enabling conditions required to do this successfully. These range from the human relationships to financial capital and/or time required to do so successfully, with as identified by Kotter, a clear communication of purpose engaging personally on the short and long term levels resulting in authentic

improvements.<sup>64</sup> According to Redding, Twyman and Murphey the aims, at a wider, cross institutional level, can be reflected in five stages:

1. Stimulates innovations to improve learning outcomes
2. Enables potential adopters to select innovations appropriate to their context and need
3. Ensures that the innovation is implemented with fidelity to its essential elements and with adaptations to enhance its effectiveness in the given context
4. Facilitates the scaling of the innovation through implementation in multiple classrooms, schools, and districts
5. Provides a system for monitoring the effects of the innovation and its scaling, implementing change as necessary<sup>65</sup>

Researchers who have studied school development over many decades agree with the idea and propose that in many cases, the idea of *'less and more focused'*

often produces better results.<sup>66</sup> At the same time, researchers argue that it is important to play around with thoughts and ideas hypothetically, and to consider the potential consequences of development. The so-called dual mission of school often creates contradictions, as the school should simultaneously both renew and preserve culture and pass it on to posterity.<sup>67</sup>

These elements of the school that learns can be described through the following framework.

ENABLER	CLARIFYING QUESTIONS	ELEMENTS
CULTURE	What are the cultural factors that support the ecosystemic patterns of behavior and organization?	Values Stories & Myths Rituals & Rhythms Relationship & Communication Norms
ORGANIZATIONAL PRINCIPLES & STRUCTURES	What are the rules, protocols, organizational structures and agreements that enable the development of the ecosystem?	Local contexts Key stakeholders Ecosystem governance models Distributed leadership Agency/Personalisation Feedback loops
RESOURCES	What are the critical resources of the project?	Funding Space Tools/Equipment Technology Team/People Skills/Capacity
EXECUTION	Which methods and practices help execute the project in ecosystemic way?	Inclusive Planning/Design Prototyping Collaboration / Co Creation Action Oriented Research Engaging Storytelling

Table 2. Key enablers of learning ecosystems as identified by ecosystem leaders<sup>68</sup>

These components are highlighted as critical factors in the evolving education ecosystem. Many of these factors are likely necessary and vital in becoming a learning organization today, as they reflect on what it takes to evolve and innovate collaboratively with learning as a central component to their work or team.

Therefore, it is essential that there is an ongoing debate within the community on what is important, and the aim is to build coherence both in terms of objectives of the activity, and means of action, and between actors at different levels. The biggest obstacle to development, Finnish researchers say, is that development often forces individuals to work at the interfaces of their usual job. Overcoming this obstacle requires confidence, in both the innovation and one's own talents.<sup>69</sup>

There is fairly broad consensus among researchers that collaboration at all levels and between them is essential for the successful implementation of innovation.<sup>70,71,72,73</sup> School networks and collaboration between them are considered important in the scalability of innovation and change. Networks facilitate the development of uniform teaching approaches, the creation of support materials, professional sharing, and sharing of learning and leadership. Such networks seem to include both a strong pedagogical enthusiasm and a willingness to develop. In addition, the networks offer good opportunities for peer support between colleagues and feedback from outside the school, both of which are proven to promote development.<sup>74,75</sup>

Researchers have refined the idea of collaboration into a concept of “collective impact” that aims to achieve a major impact in change through collaboration. In order to achieve a collective impact, principles that reinforce the journey of development travelled together must be adhered to. In addition to a common vision, people in the community must act in a variety of roles, but in a coordinated way with the same goal. So, there must be clarity and integrity in the activities. The success of co-creation is also influenced by communication, which is essential to the change created together. In order for co-creation to take place at all, it must be ensured that there is an appropriate framework for it: a leader steering the change, the financial resources and the need for change.<sup>76</sup>

# Purpose and Methodology

The purpose of the report is to highlight functioning support mechanisms that enable schools to adopt and support innovative practices. The aim of this research is to understand how schools can renew themselves by using innovations. In addition, the report seeks to encourage schools to keep a critical eye on their ways of operation, how to renew them and foster lifelong learning also inside of the school community.

The research questions for this report are:

1. What enables a school environment to become a good implementer of educational innovations?
2. What enables scalable educational innovations to become implemented?

This report utilises mixed methods research, combining qualitative and quantitative research approaches. In the best-case scenario, this approach facilitates the multidimensional examination of research questions.<sup>77</sup> The wide range of stakeholders involved in the study also emphasises the multidimensional approach. The report seeks to highlight the views and experiences of people, involved in development work at various levels, of the functioning of innovations.



For the purpose of the report, we looked at five innovative school models that have been selected to HundrED Global Collection within years 2018-2019. These innovations were selected for closer scrutiny because they are proven to be highly impactful and they have created scalability factors higher than the average of education innovations submitted to the HundrED database. Furthermore, all these innovative models have reached the stage of rapid growth, and have been implemented over a geographically wide area.

Schools and education organizations at present do not have a learning organization criteria or framework as a transparent reference point. Consequently, we considered what is currently visible about an organisation's ability as potential indicators of success which was their: innovativeness, sustainability, scalability and internationalization. Schools and organizations were rated on a scale of 0 to 1, using the points 0, 0.5 and 1 as indicators along the spectrum. Thus, the maximum score possible is 4. This criteria should be understood as a loose guideline as they were defined by researchers based on prior knowledge of the organisation, rather than self report or other more in-depth quantitative methods.

CRITERIA	DESCRIPTION
INNOVATIVENESS	Focus on 21st century learner needs/new curriculum
SUSTAINABILITY	Have a history of successful operation (to see the effects of a stabilized model) with 5+ years of work
SCALABILITY	Have a replicable pedagogical/organizational model, a network or/and a franchise
CROSS-COUNTRY	Work in the international context and has cross-cultural dialogue/exchange component

Table 3. Criteria for selection of case studies

All interviews in this report were conducted using semi-structured thematic interviews informed by the theories outlined earlier (see Appendix for the interview guide). A semi-structured thematic interview allows changing the order of the questions and asking the interviewee specifying further questions.<sup>78</sup> The method

provided the freedom to address themes relevant to the research objectives during the interviews. The interviews were recorded and transcribed verbatim.

The qualitative material was analysed by means of thematic design. The transcribed material was coded into most frequently repeated key themes for each school. In addition, the most relevant observations for the research questions were taken from the data.

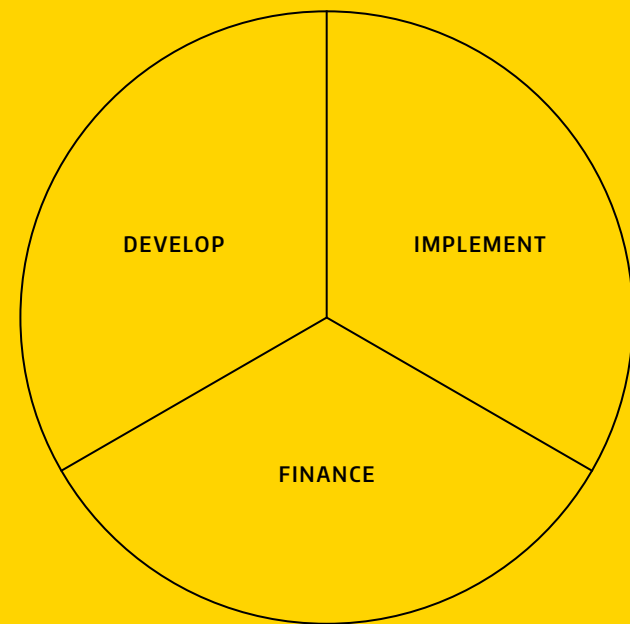
When looking at the results of the study, it should be remembered that they represent a limited number of subjects' experiences at a given time and place. As a result, this report does not tell the whole truth about the topic under study, but rather presents perspectives on developing innovation-friendly education schools/ organisations within the material compiled here.

## Develop-implement-resource model

The central role of the community in the implementing of innovation is common for the theories on the diffusion of innovation presented in this report. All theories assume that the innovation must respond to a commonly recognised problem or need. To enable the growth phase, the target group needs to understand the advantages of the innovation and its implementation must be sufficiently easy. In order for an innovation to implement rapidly, it must be possible to credibly verify its effectiveness for anyone in doubt, and the funding must be sufficient to allow scaling activities.

*In order to work in the long term, innovation must be developed, disseminated and its long-term resourcing secured.* All components are interconnected and form a circle. Development helps both diffusion and access to finance, which, in turn, enables further development and more effective diffusion.

Combining the aforementioned theories in the previous chapters, this model has been utilised as part of HundrED's operations from their learnings on what has been commonly observed to be effective when implementing education innovation across countries. It has helped innovators and stakeholders understand the holistic and systemic nature of development activities. All aspects of this model should be kept in mind by those who drive the action, and that resources are allocated appropriately.



While all aspects are important, it is clear that at different times, greater emphasis is needed on a particular area. In the early stages, attention should focus first and foremost on developing the innovation. Implementing an incomplete innovation often results in problems being scaled as well. Access to finance also becomes easier when there is clear evidence of the innovation in question being one that truly develops learning.

Development of innovations often requires years of pedagogically ambitious product development work. This entails field work, that is, developing the innovation with the target group, the users, conducting various experiments and improving the activities based on feedback. Ideas, not even the best ones, are not ready-made innovations. Perfecting their functionality requires tireless development – an idea becomes an innovation only when the action is repeatable, and the quality of results meets expectations.

It is important that implementing begins only when the true essence of the innovation, and what makes it work, is understood. This area requires not only time and resources, but also an in-depth understanding of the challenges of innovation implementing (i.e. diffusion, which Rogers refers to); the greater the change in approach, the more thoroughly the benefits of the innovation must be demonstrated to the target group.

An innovation-friendly school and education system is the result of all of the above. In such a system/school, there is an open and enthusiastic debate about school development, in order to identify challenges and solutions and to reach a consensus on the need for change.

Many different ideas are tried out for the problems identified, but only the most effective are implemented in partnership with the community through multi-stakeholder involvement. All this requires long-term and visionary commitment and resourcing.

# **How schools create their implementation processes and learning cycles?**

In this section we are taking a closer look at 5 innovative learning organisations to understand how they have created their implementation processes and learning cycles.









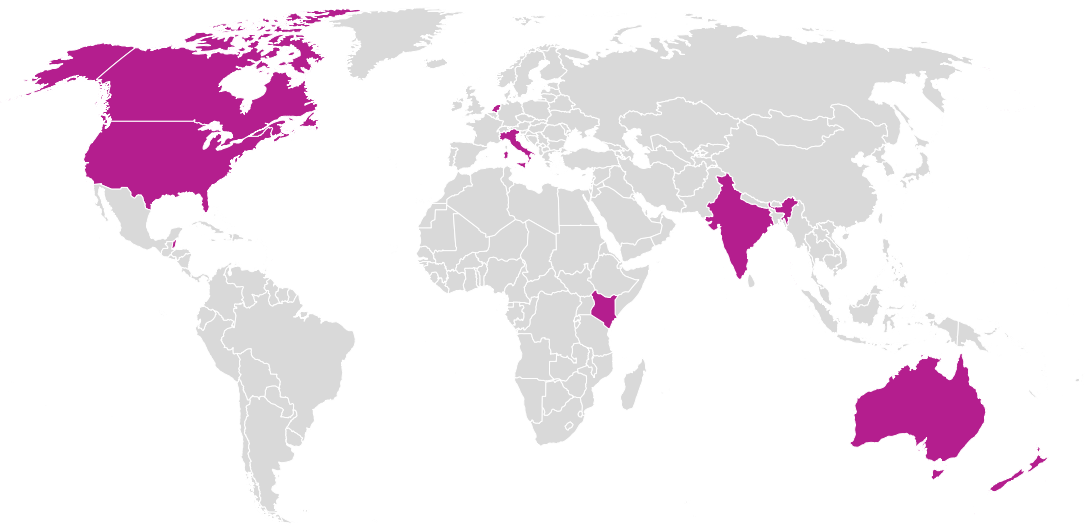
Enabling all students to follow their interests through personalised learning.

# Big Picture Learning

Rhode Island, USA

**Countries Spread:** Over 65 Big Picture network schools in the United States and over a hundred around the world. Schools in Australia, the Netherlands, Italy, Canada, India, Kenya, Barbados, Belize, and New Zealand utilise the BPL design.

**Year Established:** 1995



Big Picture Learning is a public state school network. Funding by philanthropy has been catalytic and supportive in its founding years, but the school operates solely on the budget provided by the state of Rhode Island. A visionary state official, Commissioner Peter McWalters, mandated the school to develop its innovative vision.

Big Picture Learning makes personalized education more manageable by breaking students up into small groups, called an advisory. Each advisory is supported and led by an advisor, a teacher that works closely with their group of students and forms personalized relationships with each member. Internships are a crucial part of the method.

The advisors work with each student to arrange opportunities best suited to them, providing real-world learning alongside creating future career plans in the form of internships. They stay in the same advisory for four years, and each student works closely with his or her advisor to personalize their learning by identifying interests, figuring out how they learn best and what motivates them. Parents and families are also actively involved in the process, helping to shape the student's continuation of learning.

To support the spread of this educational approach, Big Picture Learning has created a toolkit<sup>79</sup> complete with free resources and advice on how to develop meaningful internships within the local community.

Interviews with Elliot Washor, Andrew Coburn and Courtney Wright.

## DEVELOP

Elliot Washor, founder of Big Picture learning is recalling the development process of their process bigger than school program design. Their vision was to transform the way public schools can work and that's the mission they have been striving for ever since. Through the years they have been focusing on issues of equity and access to education, developing practical and philosophical approaches to work impactfully and moved from intervention towards prevention.

"Our aim has been to change students' lives rather than to provide a traditional school service. In order to do that you have to have flexibility in your design so it can constantly change at the level of community. Getting better at what you do involves bringing people together who are practitioners iterating on the design - and learn from one another" states Elliot Washor.

At the school level this means that teachers are working on their formal professional development with their administration team. They set goals in different categories for their teachers, e.g. give thoughtful and thorough feedback. Educators are encouraged to be transparent towards their students with the development goals they are setting for themselves. Teacher Courtney Wright explains the process further:

"We have a culture of feedback. Everyone can give feedback and be transparent about goals. When everyone knows what others are working on, it helps us to be accountable to each other so it's not only the duty of advisory administrators, but a whole community is involved."

One of the crucial items in the Big Picture development process is that the whole community knows each other well. That makes it possible for learning from others and being connected with other specialists in their network. Employees are brought together on regional, national and international levels. They consider face-to-face interactions most important as a part of the development process. Evidence of new findings are shared in meetings, conferences, online support channels. Materials are updated and iterated based on the found evidence, based on the actual practices created within the network.

## IMPLEMENT

Leadership is seen as the most important factor in the implementation process. When changes are implemented in the system/school which is inflexible, it will take more time to make the need of change understood.

“Leading people is much more time consuming than people would imagine. We never thought that we could set something up and walk away. When you are called for help, it’s better to get involved more rather than little and let them find a way by themselves. It’s a mistake to think that those situations wouldn’t be as high priority as they are.” Elliot Washor explains the challenge of implementation.

Big Picture Learning emphasizes the same language to be used within different schools to create similar practices and culture between different locations. If culture is not right, the school program and assessment will fail. The right culture involves community context and responses to their needs. When families feel correspondence from school they are choosing it because it fits them and their children’s needs.

“The school needs to fit its students. If teachers just do their programs without paying attention to who is in front of them, the educational experience will fail. There ain’t just one way to fit the experience and those experiences need to fit to each and every student. That won’t happen unless we pay attention to how we implement the education for the ones who are in front of us.”

On school level this happens through staff meetings. For example, some Big Picture Schools use standing meetings in a circle every morning, which last for 20 minutes where staff discuss what’s happening that day. The meeting includes items like fire drill, kids to focus and general things happening at the school. All issues are addressed through collaborative prep talk. In addition, every other week goals are checked and realigned based on values. If something is brought up, it will be addressed collectively. These discussions are mainly done in person, not through emails or other mediums, and they aim to build the community and foster collaborative experience.

“Anytime we had major concerns or a feeling that something needed to change we had an open forum - Ideas were heard out pretty instantly and everyone was able to think, share and get feedback on the spot. Because of the culture, one-one discussions often flipped to a community discussion in informal ways.” Courtney explains.

Big Picture Learning is using at least 6-8 months a year when they are immersing their community with new practices. They use tech platforms as a way to collect

data in real time from both outside of school learning environments and inside to see how they match. When the data is connected to the human aspect of learning, they are able to evaluate how well the learning process works.

“The greater growth, the greater the change of misunderstanding design, language and what we do as a Big Picture Learning network. Misunderstandings might lead to watering down our approach, and we need to stop that from happening. We want to give people a common immersion experience in already existing schools so they understand what our culture looks like and have a sense and a feel for a place that is common to everyone, especially around leadership of a school and community” clarifies Elliot Washor.

## RESOURCE

Big Picture Learning started by doing one school in the beginning. They did not have commitment for any set number of schools, and they wanted to start by iterating the school design and learn on their way.

“It took many more years than we thought it would to increase the Big Picture Learning network. Start up time around facilities is much longer than usually anticipated” Elliot Washor says.

Big Picture Learning challenged the way education was provided in the context earlier from their school design to services provided. The key thing throughout their organisation has been flexibility. When the network has been growing they have been hiring people who are self-directing and have been willing to solve problems also outside of their immediate tasks. Financial resourcing has then come through growing student numbers.

“Start with each and every person. The immersion of the culture brings people to our schools - staff, students, families and mentors. They are picking up our language and asking questions, running workshops and we are learning as we go.”









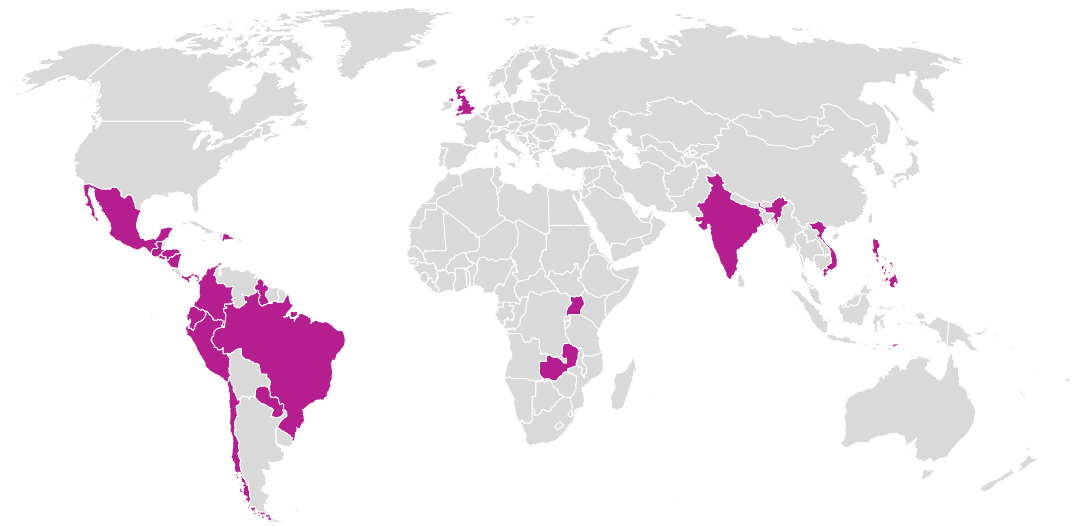
A child-centered education model that focuses on cooperative, constructive, personalized and active learning to empower children.

## Escuela Nueva

Bogata, Colombia

**Countries Spread:** 21 countries, including Vietnam, Uganda, India, Brazil, and the Philippines.

**Year Established:** 1987



Escuela Nueva, meaning 'New School' in Spanish, transforms the conventional school model by rethinking the teaching and learning processes to ensure that every child, everywhere, receives high-quality, accessible and relevant education. Their model and approach is used in 40 countries and 12 countries have adapted and implemented the model through government policy reform and global partnership.

Escuela Nueva was founded over 30 years ago to improve educational opportunities for the most vulnerable children in rural Colombia. What started as a grassroots project is now a large foundation influencing government policy in several developing countries. They are registered as a not for profit organisation.

Escuela Nueva teaching methods include small group work, dialogue and cooperative learning. Children interact, collaborate and learn with each other. Teachers do not stand in front of the classroom and lecture, but act as facilitators to guide discussions and support learners as they work through their learning guide workbooks. Students are involved in every element of how the school operates. They make decisions about how and what they learn, promoting democratic values.

The learning guides are designed and adapted to ensure they are relevant and reflect the contexts in which students are living. There are activities for learning outside the classroom to enrich the curriculum and there is an emphasis on encouraging families to participate in education. The use of learning guides is flexible in order to meet the individual needs of the children who work through them at their own pace.

Ongoing teacher training is a core component of the Escuela Nueva model. Instead of a focus on theory and academic study, teachers are trained using the same methodologies as used in the classroom with the students. In this way, the strategies are modeled clearly to the teachers.

Such child-centered learning has been seen to improve academic achievement, reduce dropout rates and develop social ideals such as democracy and peace. In Colombia Escuela Nueva is the single most widespread model, providing basic education (primary and lower secondary education) to rural populations following a multi-grade teaching methodology in Colombia. The programme emphasises teachers' learning about multi-grade teaching as well as opportunities for professional interaction with teachers in other schools.<sup>80</sup>

## DEVELOP

Based on the interview with Laura Poy Solano, Escuela Nueva is currently on their 3rd iteration phase to restructure their entire system/school to incorporate the learnings they have received from teachers, students and partners. One of their biggest challenges has been to move the work into online platforms.

"The community of practice is even harder now because it requires a new mindset for teachers. They need to be using the online platform - otherwise there is no way to come up with a solution for everyone. The biggest problem is the lack of connectivity and computers - not only with teachers but also within our organisation, which surprised us" states Laura Poy Solano, head of community connections at Escuela Nueva.

Escuela Nueva has been supporting their teachers in the cultural change by providing supporting and regular team activities. They are providing something new for teachers every month and they have been creating compulsory reporting with strict deadlines. This way of operating has been creating a new process of creation for the institution which helps it to learn and improve. Using the online platform as a way to source real life problems and demands from the field and providing resources teachers need could not have happened without online tools.

"We are looking at what the teachers need or want and transforming that into a form of new content. Connecting reality, online platforms and our thinking together is a concrete example of how to respond to real-life situations and to create a learning process inside of an organisation - however, it has been hard and it has taken a longer period of time to reach this point" says Laura Poy Solano.

These feedback loops have been created by sharing what teachers say on their platform, Twitter and Facebook. This has helped Escuela Nueva teachers to see examples of others and reflect on them. Active sharing has been also increasing transparency not only inside the organisation but also towards wider public.

"It might seem like a minor thing, but there are actually two purposes. We are able to show things we do and the way they work. We are not only posting reflections of the work we have done, but we always share quality information on why these models work (in learning)" clarifies Laura Poy Solano.

Escuela Nueva is working mainly in the areas where people do not have regular access to good quality information sources. When they are developing their way of operations they need to also provide advanced training for teachers and

community members so their pedagogical methods and impact are understood correctly. Without the wider acceptance and understanding of their method they are not able to scale their work further. As explained in Roger's theory of innovation diffusion, more persuasion and reliable examples are needed when innovation is scaling from early adopters to early majority.<sup>81</sup>

"We want to create online courses on specific topics. They are short and affordable in terms of time and money for people to know more about cooperative learning and what it means in the classroom. We believe this will be a very powerful way to develop our operations and to reach the border public."

## IMPLEMENT

When schools are changing the practices they have been using, the first step is to identify the need and help teachers understand how the new ways of operating can help them and students in the learning process. Schools are usually running with full schedules and Escuela Nueva have been finding it difficult to find time for their development work.

"Everyone is really busy all the time. So the first challenge is to find time. Then the second challenge is to stop the old ways of working, think critically and clarify which things demand being changed and teachers to adjust their behaviour."

Escuela Nueva has been creating evaluation and monitoring processes to assess the change in schools. Their idea is to identify how things were in the beginning and then after the development process. This systematic approach allows them to delve further into the 'whys' and reasons learning or operational processes improve or not.

"We need enough information to make strategic decisions; is it possible to do what we want regularly and why? If not, what is the other way to give the best in these particular conditions without sacrificing the core or our working methods?"

Most of the problems in the implementation process have happened, because the needs have not been understood at the deep level or the implementing party has not been committed to the full process. In these cases the collaborative adjustment or development process has been missing or has been executed poorly. Currently Escuela Nueva is focusing more on the visioning goal setting discussions with principles, school administrators and representatives from ministries. These discussions are being held with all new stakeholders to avoid resistance and to provide understanding how Escuela Nueva actually works.

Implementation work is supported by the planning team, teacher training team, curriculum and learning materials team and administration team including monitoring and evaluation. The constant feedback loop creates the core of the implementation process of Escuela Nueva. They are using micro centers inside of schools where they can make decisions quickly based on the real life situation in the given context. Based on teacher reports and demands they can adjust funding, time and personal development needs for teachers and advise their trainers where to focus. Trainers are the more experienced facilitators who support other teachers in their teacher training team.

"This is why the processes are so important for us and getting rich information from real cases in our projects. It makes us understand the needs and helps us to improve our practice."

## RESOURCE

Escuela Nueva is a small not-for-profit organization supporting schools in their operational areas. Their financing is based on approved project proposals which aim to provide tech assistance to countries or regions. To provide the funding for their operations they need to get school principals to approve the project at their school and simultaneously work with the national policies and regional budgets to provide the funding.

"As a small NGO we need to beat the system and move fast. If there are things that aren't working we need to incorporate improvements rapidly. If impact evaluation demands are changed on the national or regional level, we need to update our materials and strategies accordingly to secure funding" tells Vicky Colbert, the founder of Escuela Nueva.

In addition to the project funding, Escuela Nueva is using a licensing model as a part of their business model. This combined with the technical assistance to regions creates their self sustaining model. However, they see that the competition is fierce between all NGOs working with the same funding elements and best practices are easily copied by others.

"We can't just sit and think or just stop for 2 months to think and not do our projects. We need to incorporate the learnings from previous projects and keep going because this is also the way we earn our living. Sometimes the process is slow and visionary leadership is important. We follow our goals despite it not being easy and you don't see much results that fast" states Laura Poy Solano.







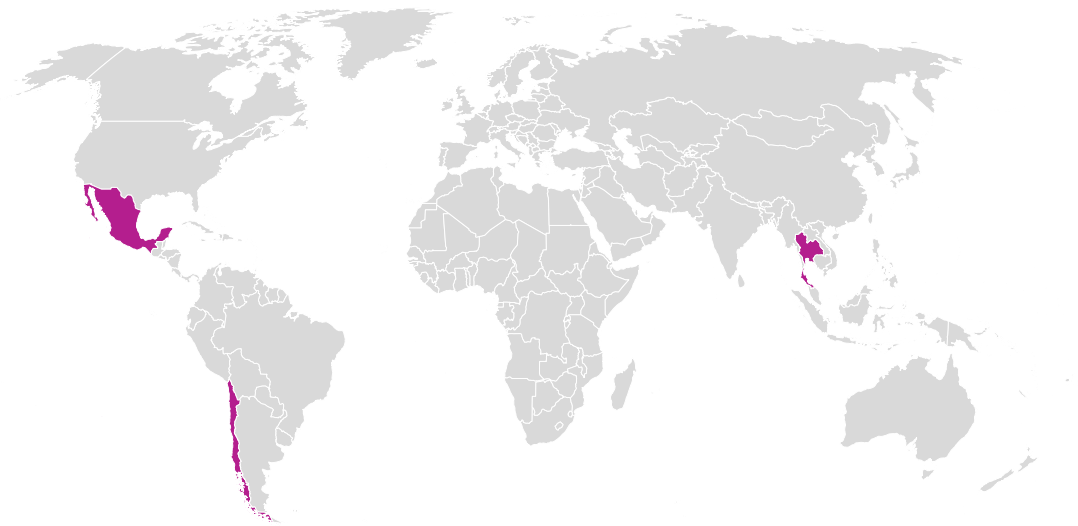
An educational movement to build networks of learning based on personalised dialogue, reflection, and community presentations.

## Redes De Tutoria

Mexico City, Mexico

**Countries Spread:** Mexico, Thailand, Singapore, Chile

**Year Established:** 1997 year as a not for profit





Redes De Tutoria is an educational not for profit movement to build networks of learning based on personalised dialogue, reflection, and community presentations. Over the past 20 years, Redes de Tutoría has sought to transform students and teachers by developing tutorial relationships and harnessing the power of one to one dialogue.

Their learning approach moves away from the traditional classroom where a teacher delivers standard content for all students to work through at exactly the same pace. Instead, tutees enjoy greater autonomy and choose what interests them most from a selection of inquiry-based projects called 'Temas' (Theme in English). Supported by individualised guidance from the teacher, students build on their prior knowledge with self-directed study. Once their study is completed, students reflect on their learning before presenting their Tema to the class.<sup>82</sup>

The student learning is supported by individualised guidance from the teacher and from other students built on their prior knowledge with self-directed study. The learning process leans on learning with and from others. This practice helps to create quick feedback loops to guide students further in their learning. Furthermore, all of the leaders are expert tutors, who know and live the practice and spend time with the teachers and model the practice that is expected from them. This collaborative aspect is a very important part of their strategy.

## DEVELOP

Redes De Tutoria started as a two to three day workshop experience, which was always co-designed by some school leadership members and almost always involved students as a part of the tutoria practice. The professional development always included designing processes with teachers, students and family members.

"We had to figure out how to create this (process). Two day process aimed at understanding the local context first. We had to be in the school and understand how classes were currently structured to actually think how to support teachers and students, and make tutoria part of personal and collective visions and growth for the school" states Dr. Gabriel Cámara, the founder of Redes De Tutoria.

One of the key ingredients in the Redes De Tutoria model has been the designed process of collaboration between different stakeholders. The key benefit of using students as main change agents has been creating different learning circles, which would have been out of the reach for adults. When young people take the learning process up with other young folks, the learning happens throughout the day and students engage with it with less resistance. When teachers have been seeing the impact of active, self-oriented peer-methods they have become more open towards the whole process.

Collaborative approach has also been introduced between different teams within schools. Redes De Tutoria creates supporting groups to identify strategic areas of further development. This helps also with the implementation process of the practice, when teachers hear from their colleagues how they could benefit from the practice. Follow-up meetings are organized every 1 or 2 months on average with teachers. In these follow-up meetings teachers together with students are thinking ways to improve the existing working practices - for example, if the school is having only a music classroom, they can collaboratively think about logistics and schedule structures. This way of working activates the whole school community to develop their work further - not only the Redes De Tutoria practice.

"Our development work is built on authenticity and actual needs. We see iterations as holding each other in micro moments to encourage ourselves forward. These are interactions and moments where you're comfortable with the pauses - comfortable being silent with one another listening deeply to what we try to do in Redes De Tutoria. These are the moments of transformation" tells Meixi Ng from Redes De Tutoria.

## IMPLEMENT

In the beginning Redes De Tutoria approach was seen working against the common, more traditional methods. Founder Dr. Gabriel Cámara was speaking on behalf of his vision. He saw that the main driver in the group was to explain the inadequacy of the way learning was supposed to take place in regular schools and what was experienced elsewhere and how that could be implemented in schools to develop their practices.

“We wanted to address something that is and was seriously damaging young generations - the fake relationships established in most of the schools - the imperatives imposed on young people which affects their learning and diminishing their capacities - when you experience this it turns you into a completely different type a teacher and promoter of new pedagogical approach” states Dr. Cámara.

Redes De Tutoria has been working with rural communities and with schools from various backgrounds. They believe in authenticity in all their communication and how they can support implementation processes in different settings.

“Think about math in indigenous context - the ways I have been asking questions or writing about (Redes De Tutoria) might have been seen as a way to perpetuate/ influence/ influence their family life. We have to understand that it can be a very vulnerable place for them” Meixi Ng explains.

Simple protocols and continuous examination and refinement of practice overtime has helped Redes De Tutoria to achieve high levels of implementation in its working regions. Through these internal processes they are seeing that different groups in their network are not implementing the practice in the same way - the methods compared to each other are uneven and they see a continuous need of supporting their groups to achieve a consistent level of expertise and practice.

In the case of Redes De Tutoria implementation might be slowed down because of local administration - they might not have interest towards the vulnerable areas or they might be ignorant. A lot is depending on the capabilities of their facilitators, who work as change agents.

“We have to expect various situations sometimes. In general, these (Redes De Tutoria) teachers act as change agents; they need stamina and courage. They keep going no matter what - run risks, even serious ones, but keep doing it. At times, it allows us to move faster which depends on both the bureaucratic possibilities and the strength of each person as a change agent.” clarifies Meixi Ng.

## RESOURCE

Even though Redes De Tutoria has existed since 1997 the future continues to be precarious. Sources of funding aren't stable and they are often connected to short time contracts. Negotiating them takes a long time and the work needs to be done in a relatively quick time span. This has kept the organisation lean and quick to pivot, but it also increases stress and anxiety among its members.

“We continue to go where there isn't any money, because we find the work meaningful and important. At the same time we lost important members of the organisation since there is not enough money coming in, and at some point that breaks the strength.

Redes de Tutoria sees the financial viability as a main concern for its future. They might need to balance their operations to ensure enough sustainability, but at the same time allow serving teachers and students in vulnerable regions. In their recent expansions to Thailand and Singapore they are hoping to start professional development work to provide further resourcing through regional and national exchanges.









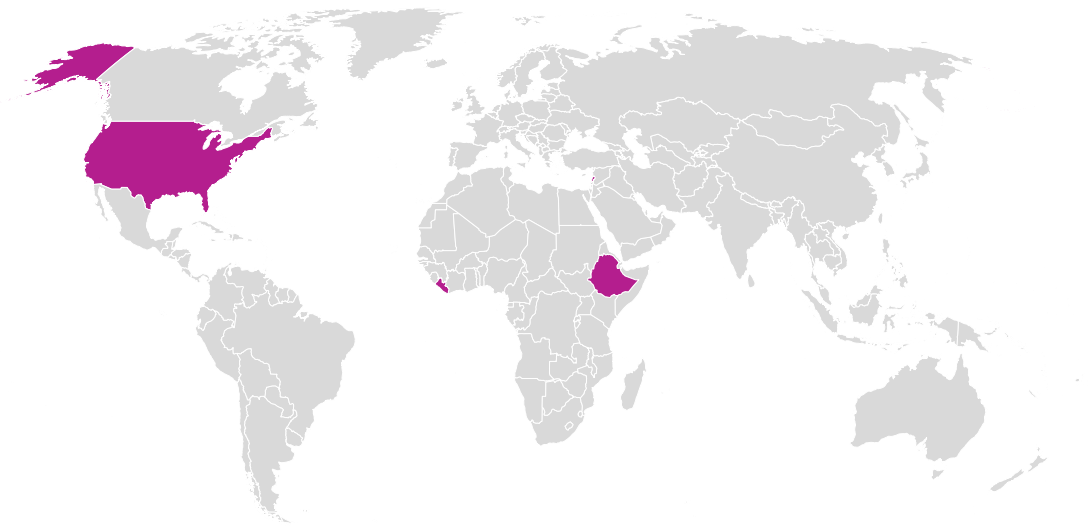
Providing a second chance at education to children who have been denied the opportunity to go to school.

# Speed School

Boston, USA

**Countries Spread:** Ethiopia, Liberia, Lebanon

**Year Established:** 2011



Since 2011, Speed School has worked in partnership with Ethiopian NGOs to enable 113,000 children to get a second chance at education. Over 90% of the children who start our program transition successfully to their local village school. University of Sussex evaluation has shown that graduates of the program complete primary school at twice the rate of their peers

Speed Schools is operated by the Luminos Fund which was created as a standalone non-profit organization in 2016, part of a network of three organizations originated and scaled by the Legatum Foundation. For Speed School nearly a decade in Ethiopia, Luminos has implemented the Second Chance program, an accelerated learning program that brings joyful learning to out-of-school children denied a chance to learn due to poverty, conflict, and discrimination.

Over the course of 10 months, Luminos helps children between the ages of 9 and 14 (girls and boys in relatively equal numbers) to become literate and numerate and then to transition into government schools with their age peers. The curriculum covers the first three years of school so children are ready for 3rd or 4th grade when they transition and uses a play-based learning pedagogy that is child-centered, activity-based, and facilitator-supported.

In 2016, Luminos scaled up the Second Chance model, launching a new program in Liberia reaching over 5,000 students. While the play-based approach to learning remains the same, they have increased the time spent on basic literacy and numeracy. Learning facilitators now receive special training on phonics, and their students spend about four times as many classroom hours on reading in comparison to their government school peers.

Speed Schools have partnered ecosystemically with BRAC, Liberia Institute for the Promotion of Academic Excellence and Restoring Our Children's Hope to provide learning experiences to the widest possible student body.

## DEVELOP

Luminos Fund which operates Speed Schools among other initiatives is seeing itself as a learning organisation, which is working actively through philanthropic organisations to solve education and inequality issues. Their development work is based on iterations which aim to experiment different solutions to identify the most potential ones. The decisions which solutions are funded and scaled further are made based on data.

"Being data driven is vital for our development. It brings a culture of transparency and authenticity when data is allowed to be shared and learned from. The data creates the base for iteration discussions and innovation in the long term" explains Mubuso Zamchiya, managing director of Speed School.

Speed School's iterative development work is connected with the wider education ecosystem through different stakeholders and partners who are used for benchmarking and evaluation purposes. For example, they are comparing their level of progress on Brookings Institute's Leapfrogging models or with United Nations sustainable development goals. In addition, they have been collaborating with University of Sussex in UK and University of Hawassa in Ethiopia to provide independent external evaluation. The main focus of the longitudinal evaluation study was to track students who attended Speed School to measure the impacts of the program on primary school completion, learning outcomes, and attitudes towards learning.<sup>83</sup>

"Innovation comes from classrooms, students and facilitators who support student learning locally. Combining iterative practices with longitudinal review of our pedagogical work gives us an evidence base to look objectively at our progress at the top level. It makes us understand the actual impact on children at Speed School units".

At the school level, Speed School does a formative assessment that captures the progress of student learning. Children take assessment before they enter into the program to help Speed Schools facilitators to get a sense of prior knowledge before their transition to their school system. Formative assessments continue throughout and that data is at the individual student level, but also wider analysis is being made for implementing partner to monitor the quality and see how well students improve their skills. In addition teachers and observers capture fluency etc. children and overall well being of students.

Speed School is setting its growth and development goals every half and full year. All measurement data is aggregated to Luminos Fund for a review and put it into

a micro analysis to track progress. The Luminos Fund team then pulls together evaluations to show the concrete status updates. This kind of approach helps the Luminos fund to make data driven decisions and to understand the impact of their development work in.

“Speed School was established in 2011 and it was purposefully designed as tech agnostic. As we move forward, we are currently seeing the growth of mobile devices in learning. Some programs are a way ahead of us, but we wanted to ensure that we could deliver (learning results) without them. Learning delivery and measurement is a process we are engaged in currently.”

## IMPLEMENT

Speed Schools operate in extreme contexts and environments to help drop out students back to governmental schools. The program was introduced in 2011 in the Ethiopian Southern Nations, Nationalities and People's Region (SNNPR). Implementation is subcontracted to local NGOs. The SNNPR is one of nine federal states and one of the poorest in the country. Within SNNPR are numerous ethnic groups and languages. The program targeted five woredas (districts) - Alaba, Boricha, Chench, Kabena and Shebedino in year 1. Three of these words have different languages, and two in the Sidama region, share the Sidamigna language.<sup>84</sup>

“Education implementation is difficult for everybody in the contexts we are working at. It's difficult for parents to allow their children to go to school instead of working, it's difficult for our facilitators and educators to provide the education in the context and it's difficult for governments to provide needed resources to cover such a large populations - many of them who are still struggling with civil wars, ebola and other difficult situations. When you're working in highly challenging contexts the word of the day is difficult, but the pragmatic embracing of it aligning with enthusiasm of stakeholders and learning it allows you to look at what is working.” explains Mubuso Zamchiya.

Speed School has been experimenting different approaches to help students who have dropped out from government primary schools prior to acquiring basic literacy and numeracy skills. They have been also providing educational opportunities to a few others, who had never entered school. Initially, Speed Schools also provided pre-school education linked to a public primary school to help mothers and carers with children who have dropped out from school who have young siblings. In the impact measurements their approach has been seen powerful and it has provided

good results. However, some students have been still dropping out of school after completing Speed School programs.

The implementation part has been especially challenging since they can't control their working environment, and students with vulnerable backgrounds might encounter all kinds of social, emotional and physical traumas which makes the learning more challenging. To improve the overall achievements in their working contexts, they have been also providing staff development for teachers in public schools linked to Speed Schools. In fact, some Speed Schools have been located in the premises of the government schools that Speed School students were expected to enter. This last initiative of the project was to help reduce the chances of future drop out after reintegration into mainstream education.

However, they have found it difficult to provide high quality through NGOs they work with. The 2012 impact evaluation revealed that the professional development component for the teachers had not been implemented as effectively as originally intended in the two areas by local NGO grantees who were responsible for delivery and supervision of the Speed School program.<sup>85</sup> This has made them to focus even more on the communication and how they support local operators to provide the program.

“We host engagements ourselves when we have something to share. We share our achievements and challenges in person with people. We're building a storytelling culture through social media, blogs and in person as well to get. It's our responsibility that our learnings that we develop we share” clarifies Maretta Silverman, head of communications at Luminos Fund.

The other part of their implementation practice is to involve the teams on the ground to be an incremental part of their development processes. Communities are involved in the school operations through teachers spending time with parents. Parents are also participating in the delivery of learning. Government ministers are also invited to visit the program and encouraged to integrate the learnings.



## RESOURCE

Luminos Fund has been experimenting through Speed Schools on what kind of system/school, structures and relationships need to be built to help the biggest possible number of out of school students to get back into education. They have been defining their ecosystem as a hub and spoke system, where they strategically partner with local NGOs. This allows them to have localise expertise to be used in scaling and growing their reach. Empowering local people has helped them to have a reach which could not have been achieved individually.

“Team members establish their own growth and development objectives every half and full year cycle - some of those are quite clearly connected to work we do and some not so clearly. We are building a team that embraces joy - trying to be as purposeful as we can at the individual level and see ourselves as organically growing ecosystem of actors and having an expansive vision for the work we do” explains Mubuso Zamchiya.

They fund their operations through collaborative engagement with multiple funders who are also invited to visit their sites and see them in action. The whole philosophy has been built on open source thinking where none of the funders or operators are having ownership in terms of the actual approach. To make their impact even stronger, was pointed out that the collaboration with government schools would need further resourcing.<sup>86</sup>





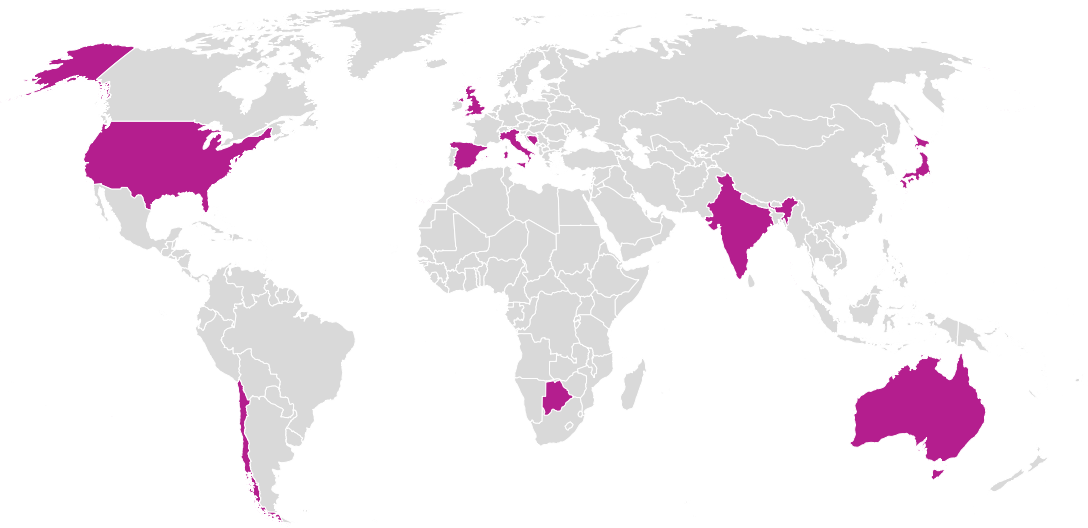
A travelling high school where students live and learn in four countries a year, making unforgettable connections between their education and the world around them.

## THINK Global School

New York, USA

**Countries Spread:** Botswana, India, Japan, Spain, Bosnia and Herzegovina, Australia, Chile, Italy, UK

**Year Established:** 2010



THINK Global School is an independent high school that travels the world, with students studying in twelve countries over the course of three years. The school is a non-profit, co-educational, and non-denominational. They use project and place-based learning as a medium for deep learning to increase student autonomy which provides a greater sense of connection and purpose for students.

Through travel, students experience real world issues and engage with the communities that they live in each term. Each school year, THINK Global School students live and learn in four countries, and each eight-week term is a chance to engage in community-focused projects that develop not just skills and knowledge, but a deep understanding of the country and culture they are immersed in. The community literally becomes their classroom and its denizens their teachers. By gaining an authentic global education, students develop the skills, knowledge, and experiences necessary to become the changemakers of the future.

The cornerstone of project-based learning at THINK Global School is the Teacher Designed Modules (TDM). Rooted in a specific country's place, students choose one intensive seven-week project. Each TDM is a multi-disciplinary project that is woven into the community. At the conclusion of each TDM, there is an additional week of project work in preparation for a public performance of learning. Members of the community, including local experts who shared their findings with students on the projects, are invited to this event and it is an ideal time for parents and family to visit the school as we celebrate student learning.

Multidisciplinary projects weave traditional subjects into real-world learning. Expert members of the community engage with their students in authentic ways and add invaluable meaning to their experience. With these connections the school aims to build long-term relationships and ongoing projects within the communities they visit by returning annually. In this way, projects are more sustainable and the effects can be longer lasting. Outside of the projects, students learn about local cultures and develop an understanding of communities which differ from their own.

## DEVELOP

THINK Global School development process is student and solution oriented. They try to identify the actual root causes behind problems and focus on holistic, deep-rooted solutions to provide better learning experiences.

"We look at the reality and think about how to change it. It takes a different mindset. Typically you need an asset base model rather than deficit based approach. This is a key characteristic of our learning organisation. If you always focus on the solutions you tend to grow in more healthy ways instead of focusing on the problems" says Jamie Steckart.

In the comparison between asset and deficit based approaches this same insight comes visible. The focus on the assets of communities – rather than its needs, deficits, or problems – represents an important shift in mindset and practice for people who work with communities on issues of importance.<sup>87</sup>

In the educational context, the deficit model of teaching can be seen as a teacher providing the learning to make good deficits, and it stands in direct contrast to the belief that the teacher's role is to draw out learners' previous knowledge and understanding through questioning and facilitation. Focusing on asset-based and culturally relevant teaching styles may better serve an ethnically and culturally diverse student body.<sup>88</sup>

THINK Global School is focusing on staff development to support the organisation to work this way. They have four terms in a year and every term starts with a week worth of staff development. Sometimes the development week is individualised based on teacher needs or it might be targeted to the whole school community.

"The week is an interesting time for the staff. We are setting up the new term together and we have 6 days of purposeful orientation with each other and we can talk about whatever burning topic needed" explains Steckart.

All professional development plans at THINK Global School are based on the student development plans. Teachers think an action plan for their professional learning and it will get reviewed based on its execution with students.

## IMPLEMENT

The core values of THINK Global School are fixed, but everything else can be improved in an agile and nimble way. The asset based model is also visible in the implementation of new practices; best solutions are actively sought to solve any possible problems and this culture is fostered through the community. What makes the THINK Global School special is that their operations are scattered across the world through different cohorts.

Every new student and staff member go through the familiarization period with existing community members. Older returning students are doing a significant portion of leading in mentoring new students and helping them in the onboarding process. The right of passage grounds all new students in the culture of THINK Global School, its mission, values and expedition. Through the process staff and students form a community for the school year, and when the next school year is starting people from different cohorts are mixed together.

In the beginning of the school year 7 days are committed to onboarding new members. All new members of the cohort are going through a section of different activities to make them familiar with the cultural context, the way the current cohort operates. When the new members have gone through their onboarding process they are welcomed as community members.

New practices are implemented through commonly set goals. The process starts by asking a lot of “why” questions and thinking about the purpose of different possible solutions. When direction is set through discussions, the leadership team supports cohorts to eliminate possible barriers and operationalise the set new solutions.

“We start actioning towards the direction we want to head. For example, we can clarify the top 3 things we can do. They can be little improvements to help make the change happen. When they become automatic it shows a cultural shift has begun and we can move forward and iterate more” says Steckart and gives an example:

“For example earlier we did expeditions which weren't tied up to our curriculum. Fun and very touristy things to do, but then we changed that. Now we only visit places which are implicit within the curriculum. All visits are tied to projects we do and are fully embedded in the learning experience. It took 3 years to get that completely implemented.”

The school teachers have a lot of autonomy which creates a culture of trust. There is an implicit message that the teachers are trusted in their pedagogical thinking

and decisions. They are seen as creative people and their judgement is valued in the change processes. This is seen as an important factor in the implementation process, and when the staff feels they are valued it also seeps down to the student level.

## RESOURCE

THINK Global School staff is seen as the most important resource the school is having which they are hoping to stay for a longer period of time with the school. Steckart refers to Frederick M. Hess's book “Spinning Wheels: The Politics of Urban School Reform” to explain the importance of long term planning in the school operations. In the book Hess explains how political incentives drive school superintendents to promote reforms to demonstrate that they are “making a difference.” Changes have to happen quickly, both because their tenure is usually three years or less and because urban communities are anxious to see educational improvement. However, the nature of urban school districts makes it very difficult to demonstrate concrete short-term improvement.<sup>89</sup>

“Real systemic change takes at minimum 3 years but typically 5, if the culture changes. The problem is that staff look at a head of school as a temporary personnel if Hess's described model of 3 year terms applies. If that happens during the first year as a head you listen and see where people are at. Then second year you move it in a direction and then you leave after the third year - how do you build and maintain a sense of culture that you think are important for these processes if you're gone in 3 years? It's not talked about a lot. People need to stay for longer. Revolving door of leaders are not talked a lot and it's a very problematic thing for educational change”

THINK Global School is investing to take care of staff physically, mentally and emotionally. The work related stress factors are even higher in their operations, because their staff travels with their students and are for long periods of time away from home. The environment is changing quickly and that puts pressure on resourcing.

“We can't have staff members that aren't spot on. It just doesn't work in our context. Making sure they are taken care of is important. Of course we don't do everything they demand and ask, but we are doing the best we can. The students are going to leave your care but the staff isn't.”





## Observations

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Senge underlines that the shared vision should be created and cultivated collectively. However, in many case studies the founders were mostly behind the vision the organisation was aiming for. For example, in case studies like Escuela Nueva or Big Picture Learning employees were often reflecting or basing their opinions on their founders' words. Looking at these learning organisations from the innovation perspective, the founders who have created them are often highly charismatic, well spoken and clear in their argumentation about what they expect from their organisation. Roger's innovation diffusion theory can explain this phenomenon; often innovators are seen as outliers in their field when they start their new practice or solution. To make their innovation stick, they need to stand out.

All researched organisations have been challenging or changing the way learning organisations have been traditionally working in the education sector. To make the innovation spread, it has taken a lot of resilience and persuasion from the founders to make their idea stick. Because of their persistence they are often looked upwards and respected in the education sector - however, the journey to this point hasn't been easy for any of them. Their solutions and practices have been challenged multiple times, especially in the early days.

In many case studies founders are explaining how their vision has been misunderstood in the beginning. Similar to Roger's explanation of innovation diffusion theory, experimenting and iterative approaches are vital parts of creating

sustainable innovations. When new solutions and practices are implemented, they need to be adjusted to their environment together with early adopters. In some cases, learning organisations might have found the slowness of the process frustrating. For example, everything is taking more time than they would like, it might be difficult to get the required approvals, and motivating the majority of educators to understand the benefits of the models can be highly time and resource consuming.

In the early stages of innovation, collective decision making is not taking place. It might be even contradictory to it. Innovation founders are often seen as outsiders of the community and their vision which might be talked down multiple times, but still they find a way forward. If the decision making would have been too democratic at this point, most likely the original idea would have been watered down, made average or less bold. However, this does not mean that the community would not be involved in the co-development. This is where the leadership comes into a play.

All case studies are underlining the importance of clear development and operational goals, which are created within the team. Senge discusses this in the form of system thinking and mental models. The whole organisation/school needs to be a part of the observational process and staff need the flexibility for accepting and implementing improvements based on their values. Based on this observational process, a learning organisation can be formed; team learning happens when





common goals are being reached and simultaneously personal skill sets grow. Roger explains this from an implementation point of view as people considering adoption of an innovation want to hear subjective testimonials. This was clearly visible from the Escuela Nuevas and Redes de Tutoria implementation processes.

In many current education schools/organisations, decision making and responsibilities are more divided among different stakeholders. This has also been changing the way organisations in the education sectors work; transparency of practices and their impact was one of the key themes all case studies were pointing out. For example, Speed School had been collecting and creating deep learning data from its school. The importance of this data is two fold: firstly it's seen as a key to identify the overall performance; and secondly, it provides authority in funding negotiations. When this data is made public, organisations can easily address different stakeholders and show their accountability.

The development processes were non-linear in all organisations/schools. When the founder's vision was clearly understood, collaborative approaches were used to move forward with implementation. However, contradicting some theoretical frameworks collaborative thinking was not used with core elements of innovation. Those key decisions were always held in the hands of a few, but their decision making was based on collective data.

Change is often multidimensional and for that reason the whole organisation is needed for making it happen. Many interviewees were describing how their organisation was addressing a larger, meaningful purpose in the society. This is aligned with Fullan's favourable factors of societal disruption which seems to be a root cause in all researched case studies. They were seeing their mission "bigger than school" or "relevant for the future" – and were highly passionate about it. Reflected in Transcend's insights, this deep and sustaining belief in their work fuels engagements and makes it prioritised in the community. For example, THINK Global School is rooting back all their improvement work to student development. A similar kind of solution oriented focus on student experiences was common in all researched organisations.

# Why are school learning cycles needed?

An innovation-friendly school refers to an organisation in which the aim is to constantly develop at all levels, seeking solutions that the target group has found effective and functioning. It all starts with the desire to develop the school itself and tackle the challenges of learning – whether it reflects socio-economic differences in learning outcomes, the development and transformation of literacy, or a new kind of pedagogical approach. Innovation-friendliness is a desire to develop an operational culture and support the development of learners' skills.



However, an important distinction between need assessment and solution orientated culture should be made. If the learning cycles in the school are only pointing out problems which should be solved, the organisation might be only focusing on their weaknesses. If this continual focus on problems is not provided with positive solutions, the culture may start to believe that all they have are deficits.

If this negative mindset is not changed, a widespread belief may start to influence individuals and stakeholders around the school. This can be witnessed, for example, through media articles and social media posts which often distribute these stories widely. As a result, the community might become depressed, burned out, dysfunctional - or just filled with other problems, exacerbating the original issue. It is often very difficult to get people motivated to make positive changes from the status quo.

In contrast, an organisation focusing their assets is changing their approach from “what’s wrong with us” to “what’s right with us.” This mindset assumes that, even though there may be problems, sometimes very serious ones, there are also untapped resources and capacities inherent in every individual, organization/ school, or larger community, which can be put into use to improve the current conditions. Discovering and affirming underutilized assets and untapped potential are hallmarks of an asset based approach to community work.<sup>90</sup>

In the best-case scenario, innovations solve existing problems and challenges, helping teachers to teach and learners to learn. A well-implemented innovation-friendly school is therefore in the best interests of all, above all children.

However, the context of the school affects how well they can function in the innovation friendly way. As we learnt from the case studies, many of them found that schools themselves wanted to develop faster than the systems allowed them. And often it has been found that schools can be up to five times slower in the change than other fields.<sup>91</sup> It is not enough that only schools are innovation friendly, larger education systems (e.g. networks of schools, communities of learning, local and national government) have to be able to learn and adapt to future needs and demands as well.

This report has repeatedly revealed that a more collaborative culture, trust and willingness to improve is a key success factor. Even though change is always a complex and time-consuming process, schools can navigate through it with visionary leadership. Leaders must provide adequate protection for the development, improvement, deployment and resourcing of new operating models. This work must be done tirelessly.<sup>92,93</sup>

COMPARISON BETWEEN THE APPROACHES	
ASSET BASED	DEFICIT BASED
Strengths Driven	Needs driven
Opportunity focus	Problems focused
Internally focused	Externally focused
What is present that we can build upon?	What is missing that we must go find?
May lead to new, unexpected responses to community wishes	May lead to downward spiral of burnout, depression or dysfunction

Table 4: Comparison between asset and deficit based models<sup>94</sup>

The development of an open and enthusiastic, innovation-friendly school is essential for the learning of important future skills.<sup>95,96,97</sup> Sometimes old structures and resistance created by it is frustrating for school leadership and staff. They might feel that they are fighting against larger systems or their visions are unheard. Simultaneously the government role remains important in generating coherence of aims, infrastructure and accountability. Governments also have a vital role to play in regulating, incentivising and accelerating the change they see important.<sup>98</sup> If collaboration is lacking between education providers and government organisations, development work is happening in unsynchronised ways and polarisation within schools are likely to increase. How can this crucial collaboration be encouraged?

In a slightly simplified form, an innovation-friendly school consists of three components. First, the general atmosphere must be supportive of development activities. All stakeholders must see the change as necessary and even be excited about it. Instead of accusations like “school has to change”, it is important to encourage everyone to understand that “school development is important”.

Problem-solving is always difficult and in many cases, new solutions do not work. However, new ideas should be tested, and their potential non-functioning accepted. This is the core of an experimental culture. Try and approve. Pick the one that works.

And after that, the things that work, the innovations, must be made to implement as effectively as possible. This requires continuous development, active implementing, high-quality implementation and long-term resourcing.

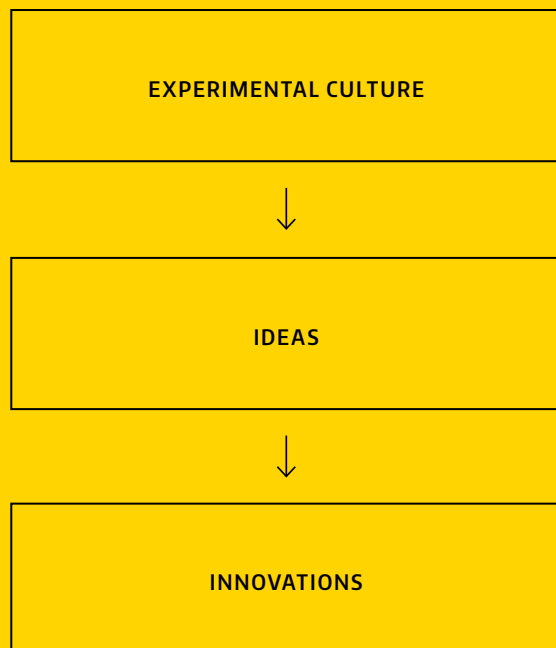
Any innovation that works well strengthens confidence in the potential for change and improves the atmosphere. At best, this becomes a positive circle, where problems are solved in an enthusiastic atmosphere. Experiment bravely and accept the nature of experimenting – not everything works as expected at all times. In the case studies different learning organisations described this development process in different ways; some of them selected key focus areas where every member of

the organisation was encouraged to experiment solutions whereas others picked special development task forces which were coordinating these actions in a smaller scale. Common for all of them was that results were monitored carefully.

At best, an innovation solves a problem which the school community itself recognises or observes a need that has not yet been met. An innovation fit for diffusion is almost invariably relatively easy to understand, easy to experiment with, and relatively effective to demonstrate as efficient. At best, the benefits of adopting an innovation begin to implement as word of mouth in 'success stories' that inspire people to experiment with the innovation and thus help implement the innovation further. All case studied organisations were underlining the importance of communication in this matter; it was seen as the most efficient way to reduce misunderstandings and to accelerate the wanted way of implementation.

To achieve this, inspirational and visionary leadership in schools are needed – not forgetting restraint and sufficient resources. In this context, it is worth stressing that while money is often important, resources may mean many other things – such as time. For example, time allocation towards the development work was the biggest challenge for Escuela Nueva facilitator in their case study.

All this requires careful justification for the need for change. Unless the community sees a need for change, its implementation will be very challenging. For example, professor Martti Hellström states that in order to implement innovations, their clarity, feasibility and necessity and their usefulness for the school (or the destination) are important<sup>99</sup>, while Everett M. Rogers talks about relative advantage, compatibility, testability/trialability and observability.









## The paradox of development

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In a school which has fallen into crisis, no one questions the need for change. Paradoxically, as innovation research has shown in many contexts, the development of a reasonably well-functioning model is much more challenging than falling into a crisis. The “If it works, don’t fix it” thinking is deeply rooted.

**The key question is:** why develop if everything works just fine?

In all areas, including in schools, if development is neglected, the result is a situation where everything does not work anymore, and then it is much more difficult to implement change. Studies have shown that it makes more sense to make continuous improvements when everything is still working reasonably well. This requires an innovation-friendly attitude in schools.

*So, it is not about changing everything, but about continual improvement, the systematic improvement of many small things.*

In this context, the importance of the language used, and communication, cannot be overlooked. School development should not be talked about in a way which automatically creates polarisation and resistance or makes accusations. “Must change,” “not changed enough” or “need to be disrupted” are all examples of terms whose use is likely to do more harm than good.



*Instead, few are opposed to the idea that the best education schools in the world must be developed determinedly and in the long term.*

Let's start by accepting the need for change. When you follow public debate, it often seems that even the need for development is questioned, as is the change in the world outside the school. Probably the criticism is at least partly targeted at something else than calling the need for development into question –it is frustration targeted rather at the erratic nature of development activities. Too many new things are introduced, and their high-quality implementation has not been invested in sufficiently.

In the current debate, the negative gets more visibility than the positive, and it is clear that this will adversely affect the preconditions for developing an innovation-friendly school. The negativity should be addressed through education opinion leaders who would be capable of justifying the need for development to the vast majority, including outside the school, in an inspiring and respectful way for all parties concerned. However, there is a lack of leaders willing to participate in the debate relating to the development of schools - many of them are concerned about the amount of negativity they need to face. As a result positive examples and messages do not come through and the public opinion is not created evenly.

In addition, negativity makes change especially tricky, when remembering, for example, Michael Fullan's list of factors that cause opposition to change. These include, but are not limited to, the change taking place outside the comfort zone, its complexity and unclarity, and the difficulty of assessing benefits and lack of support.

However, schools are constantly evolving. In many respects, there is relatively unanimous agreement on the objectives of development. However, it is worth considering whether the change has been implemented with sufficiently high quality in all respects. It may be that attempts have been made to bring about change too quickly in relation to its dimensions and that not all parties feel they have been heard. The implementation may not have been given enough attention and resources and expertise have not always been sufficient.

As the OECD states in its study, *"Effective government-level governance includes capacity building, open dialogue and stakeholder involvement."*<sup>100</sup>

Creating an innovation-friendly school requires at least the following:

- **An inspirational vision:** As many as possible need to understand in depth why change is necessary and regard the change not only as necessary, but also as inspiring and realistic. This requires not only clear and profound thinking but also high-quality leadership. Creating and writing a vision is not enough. It is essential that it is accepted and internalised by the target group.
- **Recognising realities:** Change is a long and demanding process, which requires determined action and the ability to accept criticism.
- **A large amount of implementation expertise:** defining how change is managed at field level from day to day.
- **Success stories:** A sufficient number of simple, effective innovations are needed to demonstrate that innovations can deliver good results. No single innovation can solve everything, but it does help in getting the things going in the right direction.

As stated above, there is room for improvement in all areas. Not everyone has experienced the vision as inspiring enough, the change has been implemented with great haste, and even justified criticism is too often responded to with criticism rather than genuine listening. Change management skills are uneven, as are implementation skills, and consequently, there are relatively few success stories and no long-term investment has been made in the few there are.

However, there is hope. Through collaborative approaches described by Hargraves education sector is sharing the responsibility and making different stakeholders engaged and accountable. Case studies summarise the power of community. As it is said it takes a village to raise a child, the same applies for creating an innovation-friendly school.

# 10 steps for a successful learning organisation

An innovation-friendly school generates innovations that take the whole learning organisation in the right direction, experiment quickly enough and allow high quality implementation. This requires simultaneous action on many fronts.

This report divides innovation success into three key areas. In order for the innovation to meet users' needs, it must be constantly developed. Innovation very rarely implements without work. Therefore, it must also be implemented. And in order to have the resources for all of the above, resources for it must be secured - especially time.

The following is a summary of the key findings based on the review and results of this report.

## 1. Find the leaders for the process

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“We have continually hired principals within the network who are living based on our values and ideals, rising in their career and supporting their staff members.” - Andrew Coburn, Big Picture Learning

One core individual or group must take overall responsibility for the school learning cycle and innovation implementation process. Development work often takes years and very often it should be done more or less on a *full-time* and *long-term* basis. *When there is a committed team engaging others into the process, the innovation diffusion can happen and solutions are understood from an asset point of view.*

Changes call for creative and credible leadership which is often atypical for education. There needs to be a small team of experts that makes all the key decisions and is able to prioritize, if and when needed. Since the future is often not clear, it is important that leadership is able to mobilise the best available experience, knowledge and insights.

1. Who has been leading the education ecosystem (country or city level) during the crises, if anyone
2. Has the leadership been credible and inspiring? Why / why not?
3. I don't agree with the need, because ... (please explain why)

## 2. Create a communication plan

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“Communication is a way to collect information, reflect the way we present ourselves and produce stories amplifying our message.” - Laura Poy Solano, Escuela Nueva

Put an emphasis on clarity of communication. Select the main target groups, right tools to reach each of these audiences, and keep your message consistent and empowering.

1. Has the provided information been clear and consistent, taking all target groups into account?
2. What have been the most effective tools used?
3. I don't agree with the need, because ... (please explain why)

### 3. Start with a common vision

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“Shared vision is broader than just us. We share the same vision as our students and their parents which allows them to come to our second chance program. It is authentic and driven by ambitions.”

– Maretta Silverman, Speed School

Establish a solid, evidence-based picture of where you are at the moment and then create a compelling and clear shared vision (direction) about where you want to go from here. Start with identifying root causes of the current situation (problems), be open about the challenges but also try to empower everyone. Be sure to distinguish causal relationships of the key elements related to the current situation.

1. Has someone communicated an empowering vision / direction? If so, what has been the key message?
2. Has the vision been realistic, understanding the challenges?
3. I don't agree with the need, because ... (please explain why)

### 4. Engage people

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“Have a culture and structures in place which says to staff and students that people's interests are important here. Act on it - no lip service.” – Elliot Washor, Big Picture Learning

Everything starts with the people. Building an innovation-friendly culture takes time. Often months or years, even decades of determined work is needed. Therefore, the horizon of expectations and goals must be clearly defined. Accept these challenges and be ready to make mistakes and learn from them with the people involved.

Listen to the concerns and expectations of all parties involved. The community should not have a feeling that the vision / direction comes from the top down. It should not be regarded as a superficial and superimposed activity. Make sure you give a special place to those often marginalised in educational change, i.e. students and teachers. Both visionary leadership and world-class storytelling is needed. Students as storytellers can be particularly effective.

1. Have leaders been actively listening to all the parties and their needs?
2. If so, what have been the tools & means?
3. I don't agree with the need, because ... (please explain why)



## 5. Look for solutions

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“If you always focus on the solutions you tend to grow in more healthy ways instead of focusing on the problems. Also with students - they are not problems but solutions even in our counselling.”  
– Jamie Steckart, THINK Global School

Look for solutions that can take you to the desired direction and that you can implement within the tools and time you have available. In an uncertain situation like this, try to minimize overly complicated and time-consuming solutions. Try to identify solutions that are relatively easy to implement, are likely to bring some visible results, and will be accepted by teachers, parents and students. Be curious, also look for global solutions.

1. Has there been a systematic process to identify possible solutions that could be used?
2. Who has been responsible for this?
3. I don't agree with the need, because ... (please explain why)

## 6. Experiment

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“Establish simple protocols to continually examine and refine practice over time.”  
– Santiago, Redes De Tutoria

Poorly chosen innovations can lead the schools in the wrong direction. Verifying the impact of innovation requires expertise, time and professional wisdom (even in this extreme case); it is essential to learn from experiences of others and collect ideas from them, on the basis of which the decision will be made.

An experimental culture makes it possible to distinguish innovations from ideas. Innovation development work must identify the difference between an idea and an innovation – an idea is something new, whose functionality must be verified. Experimenting is important because most ideas do not work. Innovation, however, is an idea that works. Instead of implementing ideas, the focus must be on innovations – the ones which work in the target group's opinion.

1. Has there been a well organized process to test some solutions?
2. How has the process been organized?
3. I don't agree with the need, because ... (please explain why)

## 7. Select the ones to scale

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“We are able to identify solutions easier as we systemise everything we do - we identify blind spots in our system and do interventions in co-creation as we move forward.” – Vicky Colbert, Escuela Nueva

You can't lead the diffusion of innovation by force. It is therefore important to focus on innovations that have a real demand and appeal. This can be perceived by monitoring the results of innovations and listening to the users.

Too often, the first version implemented is perceived as the final product or service, to which at most minor improvements are added. In the worst-case scenario, there are dozens of versions of one idea, some of which work, and some do not. Although case-by-case application is often important, it is also important in development work that the 'core' of the idea is defined so that the idea does not begin to be watered down along the way or develop in the 'wrong' direction.

Put an emphasis on clarity of communication. Select the main target groups, right tools to reach each of these audiences, and keep your message consistent and empowering.

1. Has there been some solutions that are prioritized?
2. Have they been communicated well?
3. I don't agree with the need, because ... (please explain why)

## 8. Create an agile co-development plan

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“The way you learn something well is to share it with someone else. The learning organisation develops when you are sharing your insights so those can be reflected organisationally and tested in the practice.” – Meixi Ng, Redes De Tutoria

Developing and implementing innovations is not easy. It requires leadership, expertise, raw instinct and resources. This cannot be done in twilight hours or as a side job. Assign a small group of your best available people to develop a plan and give them roles in high-quality implementation.

Development concerns all areas of action, from pedagogy to comprehensibility, from induction to leadership, from an operating model to financing, and often requires continuous and creative problem-solving on all fronts.

1. Is there a continuous development plan with the selected innovations?
2. Is there someone leading the process?
3. I don't agree with the need, because ... (please explain why)

## 9. Secure funding & resources

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“Real systemic change takes at minimum 3 years but typically 5 years, if the culture needs to be changed. Short term solutions and staff changes challenge this.” – Jamie Steckart, THINK Global School

In order to be able to survive and develop, every innovation requires a sustainable and sufficient financial base. In this case it means that resources must be shared by all involved in the change process. Sometimes in-kind resources are as valuable for the process than simply throwing in cash.

1. Has there been additional resources devoted to scaling these innovations?
2. How has it been divided?
3. I don't agree with the need, because ... (please explain why)

## 10. Be humble

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“We are trying to be as purposeful as we can at the individual level and see ourselves as an organically growing ecosystem of actors having an expansive vision for the world.” – Caitlin Baron, Speed Schools

Building an innovation-friendly education system takes time. Often months or years, even decades of determined work is needed. Therefore, the horizon of expectations and goals must be clearly defined. In a hectic and extreme situation, it is demanding to make this vision clear enough for everyone. Accept these challenges and be ready to make mistakes and learn from them.

1. What have been the main challenges?
2. Do you think that there is a genuine growth mindset with the system?
3. I don't agree with the need, because ... (please explain why)

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# Annexes

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## INTERVIEW QUESTIONS:

### Journey

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- Do you consider yourself a learning organisation?
- Why? What's been your journey to becoming and evolving so far?

### Processes/Management

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- What are your processes and management techniques as a learning organisation?

### Culture

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- How do you create a culture that enables this?

### Measurement & Codification

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- How do you chronicle this process and measure the impact?

### Distribution, Integration + Next Steps

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- How to you share and distribute this learning and to whom?

## CLARIFYING QUESTIONS

- Inspired by/pedagogical approaches?
- What is working well? What not so well?
- Any mistakes you have learnt from in creating LO?

- New + ongoing ideas/experimentation + big/bigger, systemic changes/cycles?
- Time/Space/Resource?
- Roles (are there explicit ones?) + people + involvement of 'outsiders'

- Openness/Trust/Psychological Safety?
- Shared vision/language?
- Growth mindset?
- Rhythms/rituals?

- Technology used? (also: using physical space?)
- Data gathering and sense making?
- Codification of knowledge? Artifacts created?
- Transparency?

- Process?
- Storytelling?
- Partners/responsibilities?
- Ongoing commitment/future plans?





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