



New Pedagogies
for Deep Learning



Microsoft



MOVING FORWARD 1 ORIENTATION



Moving Forward 1: Getting Started

A quick start guide for cluster teams

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References: The following document includes quotes and other information from the following resources:

Fullan, M. & Langworthy, M. (2014) *A Rich Seam: How New Pedagogies Find Deep Learning*, London: Pearson.

Fullan, M., Langworthy, M. (2013) Towards a New End: New Pedagogies for Deep Learning. Retrieved from <http://www.newpedagogies.org/>

And a variety of documents, PowerPoint Presentations, papers, and other materials that have been written or developed for New Pedagogies for Deep Learning: A Global Partnership. We would like to acknowledge all contributors, including Greg Butler, Joanne McEachen, Joanne Quinn, Dolores Puxbaumer, Michael Fullan and Maria Langworthy.



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Who and what is this paper for?

This paper is for cluster teams in countries that have joined the New Pedagogies for Deep Learning global partnership.

It's a quick-start guide to help get things moving, and a succinct summary to help you clearly explain it to others.

What is New Pedagogies for Deep Learning?

New Pedagogies for Deep Learning is a global partnership implementing deep learning goals that are enabled by new pedagogies and accelerated by digital.

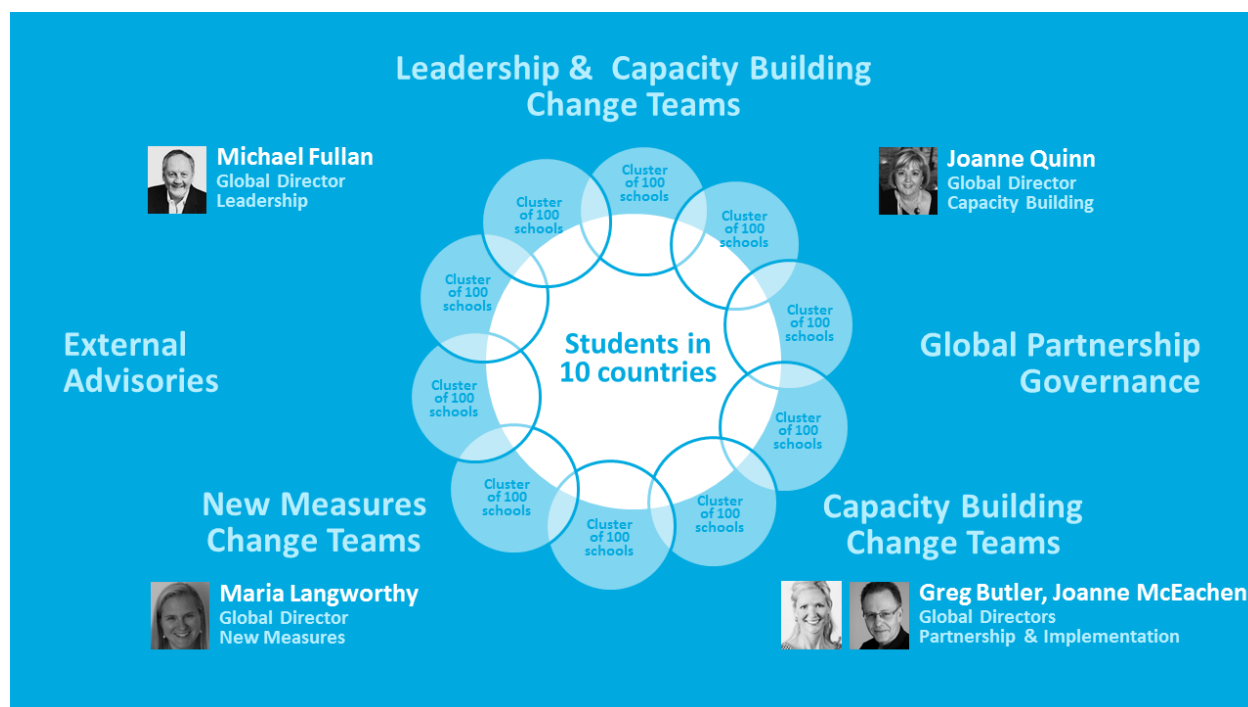


Our goals are to:

- Engage systems in collective effort to mobilize deep learning.
- Identify deep learning work within those systems.
- Capture and cultivate new pedagogies that advance deep learning.
- Operationalize, refine and validate measures for deep learning.

Who is involved?

New Pedagogies for Deep Learning is coordinated by Collaborative Impact, with a team of world-leading education specialists, each overseeing specific aspects of the New Pedagogies for Deep Learning global partnership (see below).



The Global Team acts in a partnership brokering role at the global level, helping initially with the scoping and building of the partnership, and then to support the partnership as it moves through the management, maintenance, review, and revision phases toward scaling and sustainability.

Contributing organizations include government and research agencies such as The British Council and European SchoolNet; industry associations like GSMA; non-profit foundations such as The Bill and Melinda Gates Foundation; and some of the world's largest digital companies including Intel, Microsoft, and Promethean.

Ten countries are part of the Global Partnership that will work with 1,000 schools across the world. Each country has its own leaders who represent their own country, state or city and cluster.

What led to the development of this global partnership?

There is little doubt that education globally is at an inflection point. Studies from many countries show that less than half of high school students are engaged in the classroom. Teachers are growing frustrated and dissatisfied. Although digital holds great potential, too often it saps productivity and discourages critical thinking.

As Michael Fullan and Maria Langworthy (2013) articulate in their recently published white paper *Towards a New End: New Pedagogies for Deep Learning*:

Accomplishing this will require unprecedented levels of innovation, transformation, and highly effective multi-stakeholder partnerships. We are in the midst of a massive transition to a new knowledge-based and globally-linked economy. All stakeholders need to challenge their own assumptions and orthodoxies to truly create new thinking and enable real and lasting change at scale.

New Pedagogies for Deep Learning: A Global Partnership is based on the understanding that no one country, sector or organization has all of the answers. Rather, it is about collective capacity building to identify, apply and measure new and innovative approaches to learning.

The goal is to develop compassionate global citizens who have the ability to communicate effectively, think critically and collaborate to create knowledge and solve real-world problems in an increasingly complex and connected world. This goal will be pursued primarily through extensive and focused pedagogical capacity building efforts within and across partnering school clusters.

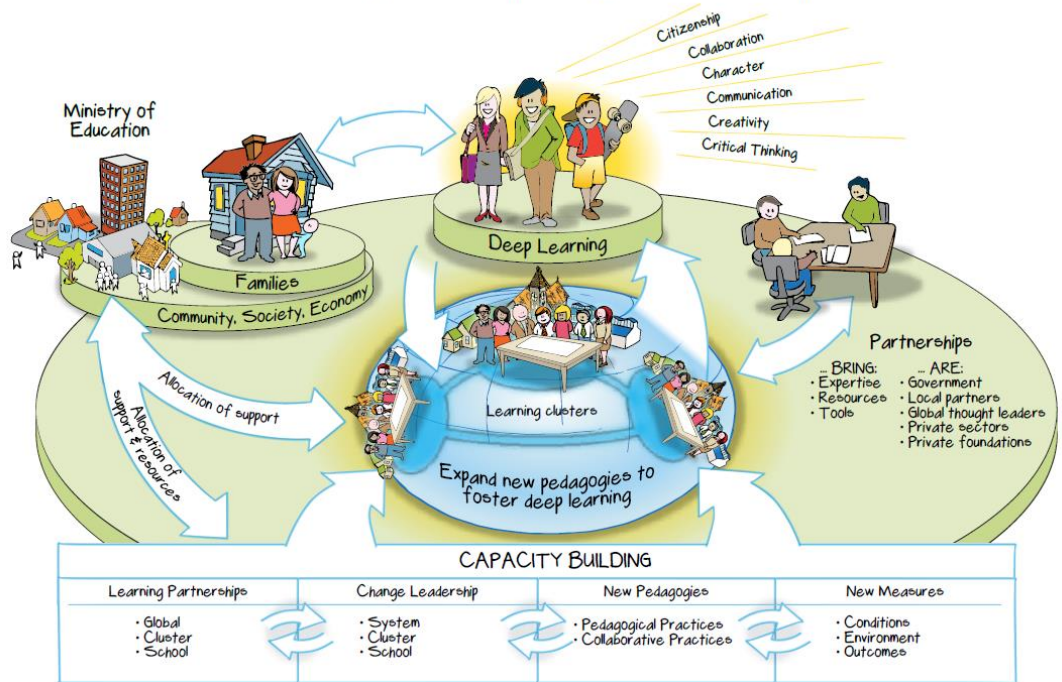
What is fundamentally different about this approach?

The big picture

The New Pedagogies for Deep Learning model is a living and learning system, with integrated components, working together.

“Education ... needs to be radically rethought partly to stop the boredom, but mostly to blow the lid off learning, whereby students and teachers as partners become captivated by education day in and day out.” (p. 1)

New Pedagogies for Deep Learning: A Global Partnership



New pedagogies

The world is becoming more complex with the need for all students to be equipped with skills to be creative problem solvers who can collaborate effectively within and across teams, and who can pursue leadership for action in a sustainable context. While policy makers, school leaders and families worldwide seek to understand how to transform pedagogies and how to adapt learning conditions that facilitate and foster deep learning, students increasingly want to take action, make a positive impact and grasp opportunities that will afford success in career and life.

Now is the time to challenge current assumptions and approaches in learning to empower all students and all teachers to flourish. Digital is changing the roles of teachers from instructors to mentors and activators. Their work increasingly focuses on designing learning experiences that are mapped to students' learning strengths and needs, that create new knowledge full of real-life relevant problem solving and that helps students identify their talents and find purpose and passion in what they do.

New learning goals require changes in how relationships between students, teachers and families are structured and in how learning is measured. The shift towards active learning partnerships requires students to take greater charge of their own and each other's learning in and outside of the classroom. It also requires teachers to build capacity for designing and measuring learning that maps curriculum goals to the development of deep learning competencies.

Digital

In New Pedagogies for Deep Learning, Digital is used to describe a way of thinking and acting around needs, problems and challenges, using information and communication technologies as tools, a medium, context setter, reflector and catalyst to name some functions. This goes beyond information and communication technologies being just tools and teaching aids.

Schools and education systems have invested tremendous resources in Digital. But most of this investment has failed to realize its potential without powerful teaching strategies to unleash the power of Digital – as Michael Fullan and Katelyn Donnelly (2013) pointed out in the *Alive in the Swamp* report.

The New Pedagogies for Deep Learning model leverages Digital to become the foundation of deep learning tasks and extend new learning partnerships, making a completely new kind of teaching and learning possible.

By embedding digital in the new pedagogies, Fullan (2013) points out in *Stratosphere*, learning can potentially be enabled, expanded and accelerated in ways we could never have imagined before.

“Without changes to the fundamental pedagogical models by which teachers teach and learners learn, technology investments have too often simply layered slightly more entertaining content delivery or basic skill practice on top of conventional teaching strategies that focus on the reproduction of existing content knowledge”

Fullan, M. & Langworthy, M. (2014).
Rich Seam: Where the new pedagogies find deep learning. London: Pearson.

Partnership for whole system change

Partnering within the context of the New Pedagogies for Deep Learning: A Global Partnership is based on the growing realization that none of the world’s major challenges: environment, energy, food, sustainability, or critically, education can be solved by one organization or one sector working in isolation.

As the world grows increasingly globalized, interconnected, and complex we need to become more efficient at collaborating and partnering around the big challenges and, in doing so, challenge the current assumptions and orthodoxies that bind us to what is not working today. Business as usual, or incremental solutions, rarely solve challenges like the one we wish to address.

The partnership model, coordinated by Collaborative Impact, brings together the best knowledge of Deep Learning, System Change, Capacity Building, New Measures of student and school outcomes, Digital Enabled Pedagogies and the latest understanding of effective partnership creation and implementation to bring about real and lasting impact at a global level.

New Pedagogies for Deep Learning will also involve the broader communities of the clusters, engaging parents and family, and working towards community goals and outcomes. This is where we want the work of the clusters to also feed into the broader policy environment, and support learning within government education agencies in each cluster. The local cluster partnerships will be important enablers of the work needed.

How do we mobilize and foster new pedagogies for deep learning in all schools and systems infused by the power of digital?

Capacity Building is the process of developing the knowledge, skills and commitment of individuals and organizations to transform learning. Effective Capacity Building produces new skills, generates greater clarity and results in ownership.

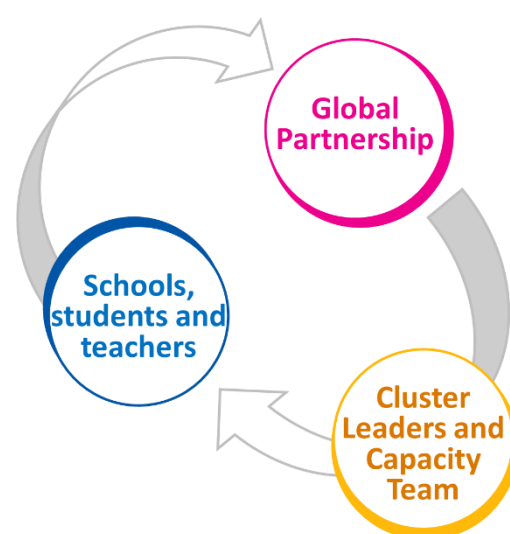
Capacity building in the area of pedagogical practices will be critical to our success and this will include exploring pedagogical models and strategies that work best, sharing these within and across clusters using collaborative work practices.

The Global Partnership will support Cluster Leaders and Cluster Capacity Teams to build the knowledge and skills needed to transform learning in their clusters.

Cluster Leaders and Capacity Teams will in turn support students, schools, teachers and leaders to shift practices.

By building pedagogical capacities alongside strong leadership and partnerships, we integrate and leverage the digital, systems, and leadership that enable students' deep learning across whole systems.

These, in turn, lead to changes in practices, conditions, and ultimately the outcomes we seek to instill (i.e., deep learning competencies in students).



Deep Learning Competencies Framework

New Pedagogies for Deep Learning: A Global Partnership is an international innovation partnership involving students, teachers, school leaders, families and education communities working together to address a key education challenge: how to design teaching and learning that leads to more successful lives for all students. The partnership will mobilize proven new pedagogies and change knowledge, leveraging Digital to enable deep learning and whole system transformation that advances all learners' capacity to confront and address challenges, and flourish in a complex world.

We need our learning systems to encourage youth to develop their own visions about what it means to connect and flourish in their constantly emerging world, and equip them with the skills to pursue those visions. This expansive notion, encompassing the broader idea of human flourishing, is what we mean by “deep learning.”

The six elements in the Deep Learning Competency Framework are:

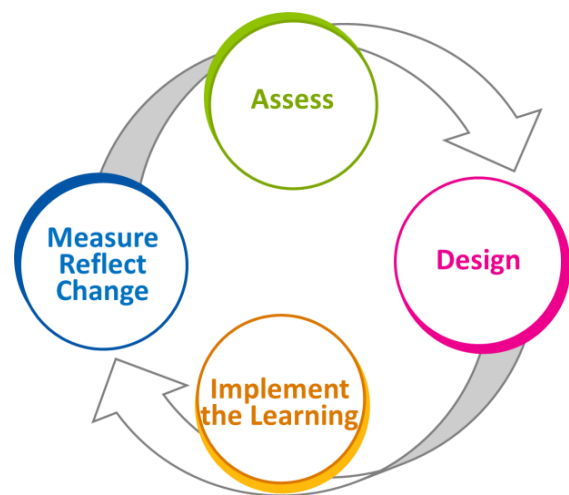
- Critical Thinking
- Collaboration
- Communication
- Citizenship
- Creativity
- Character

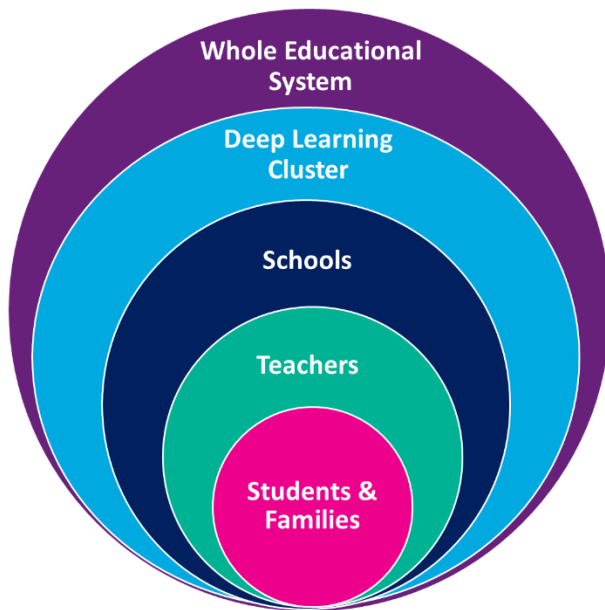
Please note: *Leveraging Digital* applies across all Deep Learning competencies

The Collaborative Inquiry Cycle

At every level of New Pedagogies for Deep Learning (i.e., within schools, within clusters, and across the entire global partnership), we follow the collaborative inquiry cycle:

- Assess needs and aspirations, successes and disappointments, and the true underlying causes of them;
- Design an approach that addresses the needs and aspirations by leveraging the power of deep learning;
- Implement and track the new approach to deep learning;
- Measure the key outcomes and evaluate the effectiveness of the approach; reflect and change the approach as needed; then reassess (start the cycle again).





A suite of tools and processes support each level to assess their capacity and mobilize change at the classroom, school, cluster, and whole system levels.

Creating system change

As Michael Fullan and Maria Langworthy (2014) noted in the *Rich Seam* whitepaper, getting new pedagogies adopted and effectively implemented is a system-wide challenge. The right policy context and system levers are essential, as outlined in the various writings of Sir Michael Barber, Michael Fullan and colleagues, on the topics of whole-system reform and change leadership (Fullan, 2010; Fullan, 2011; Barber, Rizvi, & Donnelly, 2012).

Effective realignment at the systems level requires the use of a wide range of change levers, including human resources, professional learning, assessment tools and accountability measures, and financial resources. Genuine system-level realignment is needed in order to influence culture and build the required capability and capacity for the new pedagogies to take effect.

At the core of the New Pedagogies for Deep Learning whole-system realignment is a clear focus on deep learning. This helps ensure that formal curriculum, assessment and accountability structures are fully aligned with new pedagogies rather than at odds with them. The system needs to facilitate and encourage – rather than be a barrier to – real innovation.

Leaders in systems where new pedagogies are effectively implemented invest in the right drivers in the right order to powerfully enable change (Fullan & Langworthy, 2014, p. 77):

- a clear vision and focus on deep learning first,
- then collaborative learning cultures,
- pedagogical capacity building,
- digital ubiquity, and
- other enabling conditions.

Digital Requirements

The level of accessibility to Digital is a critical consideration for each cluster in the New Pedagogies for Deep Learning Global Partnership. A key goal of our partnership work is to accelerate learning by leveraging Digital. Thus, it is expected that all cluster partners offer or plan to offer a Digital-rich environment in the majority of the schools involved in the clusters. Both you and the wider Global Partnership need to be satisfied that the access to Digital provided to learners is sufficient for your schools to participate fully in the project.

In the simplest of terms, we would expect that schools offer access to Digital (computers, laptops, tablets, other devices and a reasonable speed of internet connectivity) for all learners, both in and out of school. While we don't want to be overly prescriptive, a level of ubiquity of access for learning is critical. As the project will involve learners focusing on the creation of content, it is important the Digital available supports such creation rather than just consumption.

Roles of the key people leading each cluster

Possible key roles for leading the clusters in New Pedagogies for Deep Learning are as follows:

Role Name	Key Strengths	Primary Role
Cluster Lead	Strengths in using strategies, approaches and initiatives to lead change	Support the implementation at the country level to create a coherent suite of sustainable solutions to achieve and sustain the strategic outcome of students achieving education success enabled by a digitally rich society

Role Name	Key Strengths	Primary Role
Capacity Building Lead	Strengths in system wide design of learning experiences and support structures for deep implementation of changes in practice	Work collaboratively with support from the Global Partnership to: • Design a cluster capacity building strategy • Develop local learning experiences and version of training • Support implementation of the Collaborative Inquiry Cycle • Support the design of Deep Learning Tasks • Provide coaching and modelling collect student work products • Foster contributions of student work products and learning designs to the Deep Learning Hub
New Measures Lead	Strengths in system-wide assessment and accountability measures' implementation and in using evidence to inform decision-making	Responsible for: • Implement New Measures across Cluster • Presentations of key data and findings at the cluster and country level • Implement the New Measures in schools: ○ Use rubrics and Learning Progressions ○ Conduct surveys with students, teachers, parents, school leaders and cluster leaders as needed ○ Collect learning tasks from teachers ○ Collect student work products ○ Local achievement data [aggregate scores] • Use of feedback back reports by school clusters • Publishing findings in country

Resources and enablers

Each cluster has access to a range of resources and enablers that will help them bring about the change. The following is a brief summary of what is available.

Capacity Building Strands

Tools and resources for capacity building will be provided in four strands of support:



- Global
- Cluster
- School



- System
- Cluster
- School



- Pedagogical Practices
- Collaborative Practices



- Conditions
- Environment
- Outcomes

Three formats are available for accessing support: consultation, learning experiences face to face, and the Deep Learning Hub (see diagram below).

Formats for accessing support



Consultation

- Scheduled monthly on-line meetings
- Consultation via phone and virtual meetings to strategize and implement cluster plans



Learning experiences face to face

- Annual Deep Learning Forum
- Cluster Leader Institute
- Cluster Capacity Team Institute



Deep Learning Hub

Virtual platform providing access 24/7 to all partnership members

- Deep learning tools, practices and protocols
- System capacity tools and practices
- Learning experiences
- Knowledge library
- Measurement tools

Local Partnerships

Each cluster should explore the resources and expertise available to them through their own local partnerships, which will include:

Student(s): Students who represent all groups in your country

Ministry or Government Representative/Policy: Strong voice to support whole system change approach and strengths in determining the value of outcomes and/or the quality or effectiveness of an approach, initiative, program, policy or other entity and then making changes

Education Leader(s): Strengths creating a shared understanding about what matters most, what's most urgent, and why.

Teacher(s): Strengths in rigorously and transparently questioning pedagogy approaches

Community and Industry: Parents and families, cultural and community leaders, business leaders

The Global Team

Each member of the Global Implementation Team has a specific role in designing, coordinating, and supporting the implementation of New Pedagogies for Deep Learning across the ten participating clusters.

Name	Role Title	Role Purpose
 Michael Fullan	Global Director Leadership	To lead the whole system change at the global level for New Pedagogies for Deep Learning
 Joanne Quinn	Global Capacity Building Director	To design and support the capacity building component of the global partnership. This includes the coordination, design and development of both on site events and virtual resources
 Greg Butler	Global Partnership Director	To provide coordination, management, support for the strategies and operations of the Global Partnership

Name	Role Title	Role Purpose
 Joanne McEachen	Global Implementation Director	To lead and mobilize the implementation of the new systems and processes of the Global Partnership and to be the primary point of contact for Cluster Leaders
 Maria Langworthy	Global Director New Measures	To support, research and evaluate the effectiveness of the system of new measures for New Pedagogies for Deep Learning
 Dolores Puxbaumer	Global Communications Director	To provide management and coordination of external communications and support of internal communications as related to the Global Partnership

New Measures Advisory Board

An advisory group was formed to support the development New Measures Working Group. This included leaders on measurement from each of the 10 school clusters engaged in the global partnership. The list of members is shown in the table below.

Name	Organization
Deirdre Butler	University of Dublin
Russ Quaglia	Quaglia Institute for Student Aspirations
John Hattie	University of Melbourne
Peter Hill	Independent, formerly ACARA
Patricia Wastiau & Roger Blamire	European SchoolNet
Jon Price	Intel
Daniel Light	EDC

The role of the New Measures Advisory Board is:

- Review of new measures strategy
- Specific advisory input
- Advocacy and awareness
- School cluster measurement support
- Possible identification of other partners and alliances

Global Industry Partners



Since inventing the microprocessor, Intel continues to spark the imagination of the world and ignite amazing new possibilities for learning, individual growth, and sustainability. The results are new tools and ideas that enhance the classroom experience and inspire the next generation of exploration, awaken the potential of individuals and communities with the power of technology, and encourage environmental thinkers to find new and better ways to preserve our planet. By building intelligence into everything we do, we help the world get smart about what's possible. Because the only thing more amazing than our innovation is what the world does with it to create a future full of possibilities. Visit www.intel.com/education or www.intel.com/teachers.



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How should country leads choose the schools?

The paperwork is already signed, agreements in place. How should country leads choose which schools to include in the cluster?

Willingness

In choosing which schools to form clusters, countries may want to think about how engaged their school leaders are. Participation in this initiative is more likely to be successful if the schools are willing participants and want to learn rather than being required to be participants. The suggestion here is to discuss this with school leaders to assess their needs and aspirations for their schools. The below table provides some question starters and possible places for evidence in helping make this decision.

Questions to gauge the willingness of schools	Possible evidence
Does the school leader get excited by the possibility of participating in New Pedagogies for Deep Learning: A Global Partnership?	Schools volunteer to be part of the partnership.
Are the school leaders willing to shift practices and see this as their daily work?	Discussions / survey
Is there a recognition that the learning environment needs to improve?	Student achievement results are not currently satisfying.
Does the school have the funds to cover the ongoing costs of the project?	Funds targeted, identified and secured.
Do you have business partners within your country that can work with the school?	Business partners identified.

Determining the mix of high vs. low performing schools

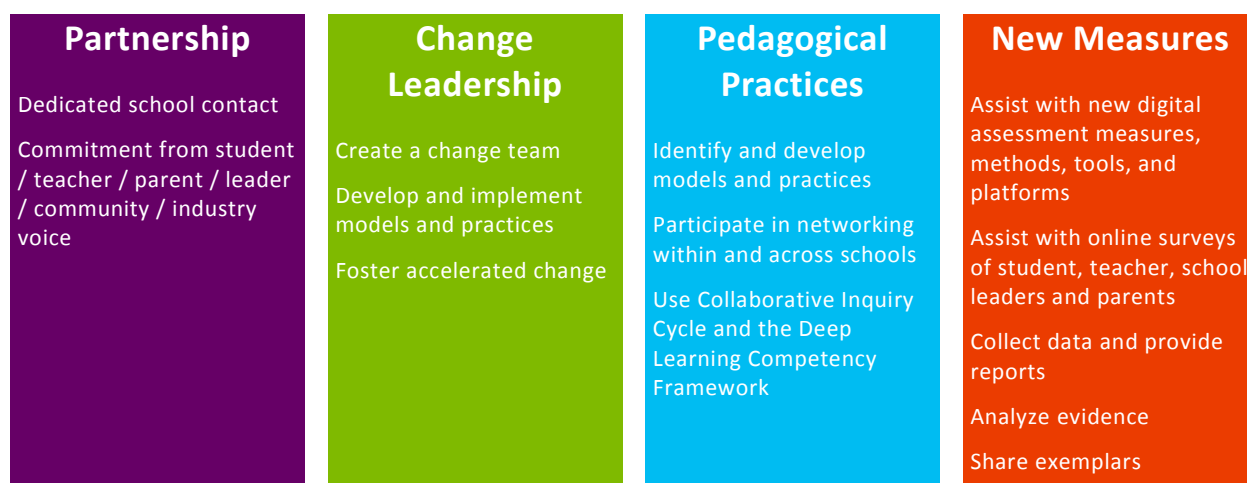
From a systems point of view, it is important to consider whether you want all the schools to be high performing or whether you want a mix of schools. Once you have decided this, consider the following questions when choosing which schools to include in (or exclude from) the cluster.

Questions to gauge the willingness of schools	Possible evidence
Are all students enjoying their learning? Is there a need for improvement in the way the school meets the needs of all students?	Achievement and engagement data for students reflects a need for improvement.
Is the rate of progress appropriate compared with national expectations and comparable to other countries?	What is measured is limited. Current assessment results show the rate of achievement could improve.
How well are different groups of students with diverse needs achieving and progressing compared to other groups in the country and similar groups nationally?	Achievement gap is present.
How and how well is the curriculum being used to develop programs matched to the diverse interests and needs of the students?	Assessment data from PISA, TIMMS, etc.
How well does the school provide for a safe and positive learning environment?	Lesson planning documents and assessment results.
How effective is the strategic planning and goal setting?	Student surveys
How effectively does the school focus its efforts on lifting student achievement?	Surveys.

Frequently asked questions (FAQs)

What will schools actually be expected to do?

Schools will have four sets of obligations – developing and supporting partnerships, change leadership, pedagogical practices, and new measures (see diagram below).



What do Clusters Leads do?

The cluster leader's role is to support the implementation at the country level to create a coherent suite of sustainable solutions to achieve and sustain the strategic outcome of students achieving education success enabled by a digital rich society.

Together, in conjunction with all partners we will do this by creating, and have adopting within education systems/networks, a framework for the new roles, practices and measurements of teaching and learning (formally and informally) that delivers the set of more successful learning outcomes for all students and in so doing articulates and demonstrates the true potential of learning enabled by a digital rich society.

What do New Measures Leads do?

New Measures Leads are responsible for:

- Implementing New Measures across Cluster
- Presentations of key data and findings at the cluster and country level
- Implementing the New Measures in schools:
 - Use rubrics and Learning Progressions
 - Conduct surveys with students, teachers, parents, school leaders and cluster leaders as needed
 - Collect learning tasks from teachers
 - Collect student work products
 - Local achievement data [aggregate scores]
- Use of feedback back reports by school clusters
- Publishing findings in country

What do Capacity Building Leads do?

Work collaboratively with support from the Global Partnership to:

- Design a cluster capacity building strategy
- Develop local learning experiences and version of training
- Support implementation of the Collaborative Inquiry Cycle
- Support the design of Deep Learning Tasks
- Provide coaching and modelling, collect student work products
- Foster contributions of student work products and learning designs to the Deep Learning Hub

Who should to attend the face to face meetings?

Deep Annual Learning Forum:

- Global Partners,
- Cluster Leaders,
- Capacity Leads,
- New Measures Leads
- Government representatives

Twice yearly Learning Institutes:

- Global Partners,
- Cluster Leaders,
- Capacity Leads,
- New Measures Leads
- optional for Government representatives

Where can I get more information?

In addition to the [Deep Learning Hub](http://DLH.newpedagogies.org) - <http://DLH.newpedagogies.org> - and the key people listed earlier in this guide, the following papers provide more information about key aspects of New Pedagogies for Deep Learning.

Towards a New End: New Pedagogies for Deep Learning (2013 whitepaper by Michael Fullan and Maria Langworthy): <http://bit.ly/1j58C36>

New Pedagogies for Deep Learning Partnership Paper (whitepaper by Greg Butler): <http://bit.ly/1nk7yZi>

New Pedagogies for Deep Learning Glossary of Terms: <http://bit.ly/1mxjK7V>

Developing a common language among partners is important for effective communication about New Pedagogies for Deep Learning: A Global Partnership. The Glossary of New Pedagogies for Deep Learning Terms will

- Support you in creating a common language within your cluster
- Provide a reference for core partnership terms
- Help everyone involved get clear on terms essential to the partnership work

Other References

Fullan, M., Donnelly, K. (2013) *Alive in the swamp: Assessing digital innovations*. London: Nesta; Oakland, CA: New schools venture funds.

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