LEADERSHIP
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AUTHOR: JOANNE QUINN

What's Deep About Deep Learning?

Dive Into Deep Learning: Tools for Engagement *by Joanne Quinn, Joanne McEachen, Michael Fullan, Mag Gardner, and Max Drummy was published in August 2019. This easy-to-use guide is loaded with tools, tips, protocols and real world examples of how to design and measure progress in deep learning.*

Imagine a world where students are good at learning and good at life. Now imagine you can make it a reality.

If we want students who can thrive in complex, turbulent times, apply thinking to new situations and change the world we must reimagine learning: what's important to learn, how learning is fostered, where learning occurs and how we measure new outcomes. We call this new conceptualization Deep Learning, and it's spreading rapidly because it is meaningful, gives purpose, and unleashes potential.

Stop by a deep learning classroom and you will see students who are voraciously curious and who are encouraged to ask questions of each other, of teachers, families, and experts across the community or globe. There's a constant buzz of conversation as students grapple with solving problems or

investigating ideas so they can make sense of their world. Everyone is highly focused and, if you listen in, you will find students able to articulate what they are doing and why. They are able to describe the skills they are mastering and the ways they will need to get better. They lose track of time because the task is engaging and their imagination and interest have been captured.

In schools where deep learning is taking root, we see similar behaviors in the adults. Wander from classroom to classroom and you will see teachers interacting, asking questions, facilitating access to resources, and giving timely feedback. Teachers are collaborating on the design of learning *as well as* to assessing growth and success. There is a pervasive transparency of practice, common language and shared expectations across these schools. Meetings usually focus on how well the students are learning and how to use the tools and processes to accelerate or amplify learning rather than to discuss 'problem students.' School leaders are frequently in classrooms and in discussions with groups of teachers on how to make the learning better. Parents are welcomed as partners in these schools, where they play an active role in meetings.

Why it matters…

Students and teachers alike find that traditional schooling is no longer up to the task of preparing students for the present, let alone the future, and schooling is less and less engaging as students move through the grades (Jenkins, 2013).

The challenge is how we shift from the kind of content-based learning of the last century to empowering teachers and students to create learning experiences that build on students' innate curiosity and desire to solve complex issues and impact the world. We must unleash the potential of ALL students if our planet is to survive and thrive. Such a massive shift means a *re-culturing of learning* for students, teachers, leaders, and families with new roles and understanding for everyone. We are finding that the payoff is huge because deep learning is good for all but especially for those most disconnected in that it simultaneously tackles the equity and excellence agendas with impact. Equity and excellence are intertwined—BOTH have to be addressed together or neither will flourish.

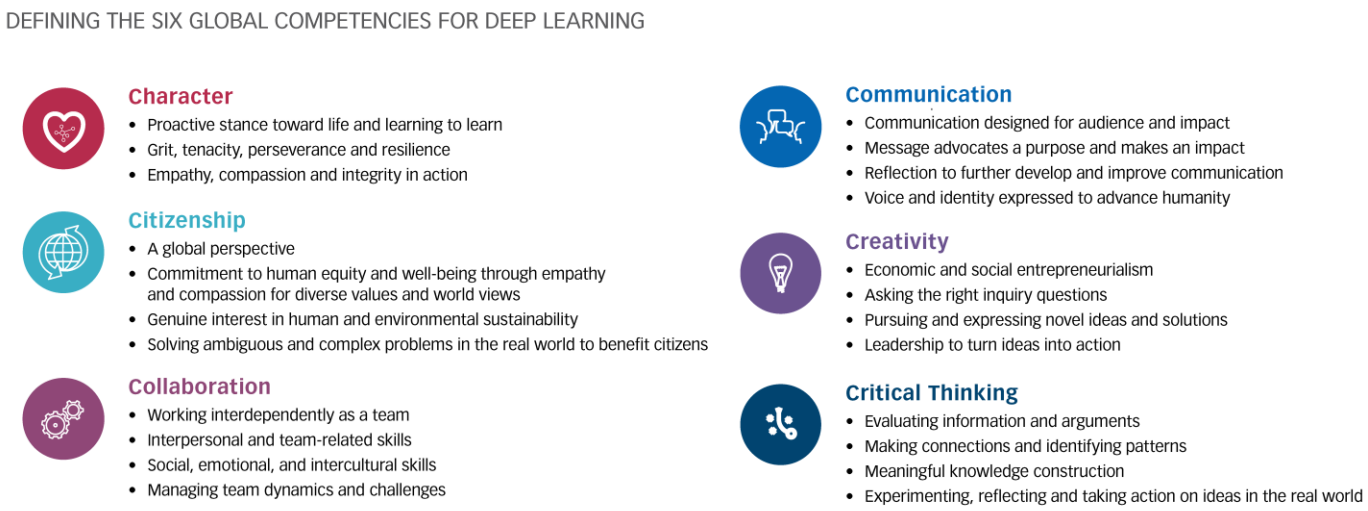
What is Deep Learning?

Deep Learning is quality learning that sticks with you for life. Our first step in reimagining learning was to identify six Global Competencies (6Cs) that describe the skills and attributes needed for learners to flourish as citizens of the world. In our definition, Deep Learning is the process of acquiring these six Global Competencies: Character, Citizenship, Collaboration, Communication, Creativity, and Critical Thinking. When learners are immersed in the 6Cs, they learn more—much more—and this learning contributes to their own futures and often to the betterment of their communities and beyond.

How do we cultivate Deep Learning for ALL?

Massive shifts in practices and outcomes will not happen by chance. Along with our partners in eight countries, we have identified four key components that allow us to cultivate Deep Learning:

- **Focus on the Global Competencies- 6Cs**

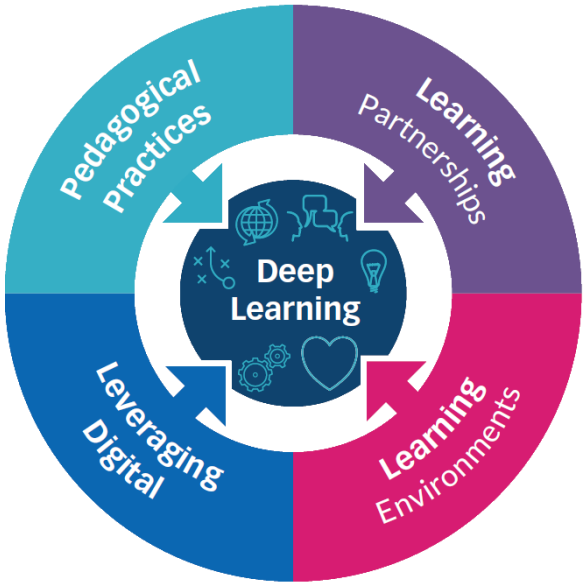


The world is becoming more complex, and the days of set knowledge and accomplishment based on memorizing content are over. Get together with peers to build shared focus and common language as you discuss the question: “What is essential for students to know, be able to do, and to be like as human citizens?”

For our partners, the six Global Competencies (6Cs) describe the skills and attributes needed for learners to flourish as citizens of the world. They provide clarity on what it means to be a deep learner. When students focus on the 6Cs, they learn more—much more—and this learning contributes to their own futures and often to the betterment of their communities and beyond.

- **Design learning experiences using the four elements**

Even when new outcomes are clear, change can be difficult, so we have identified four key elements of Deep Learning and created an organizer that makes it easy for teachers, students, leaders and families to shift their thinking and practice. We learn best when we have time
for powerful conversations, access to quality examples of practice, and time to experiment with effective feedback.
When the Four Elements of Learning Design are integrated during the planning stage, they enable teachers and students to design learning experiences that are mapped to student strengths and needs; create new knowledge using authentic, relevant problem solving; and help students identify their talents, purpose, and passion.
Let’s explore the essential features of each element and the decisions that impact the learning design.



Learning Partnerships
Dramatically new learning relationships shift voice, control, and interactions as students and teachers become co-designers and co-learners connecting with parents, experts, and community. The focus on new relationships accelerates the learning but requires new roles for students, families, and educators.

Learning environments
If we want cultures of learning that cultivate energy, creativity, curiosity, imagination, and innovation, then we need to create learning spaces where students feel safe in taking risks. This begins when teachers intentionally create norms of belonging in which every voice matters, model empathy, deeply listen to student needs and interests, and structure tasks so that students feel competent as learners.
If we want our students to be curious, connected collaborators, then we need to provide physical and virtual multidimensional spaces that offer flexibility for collaboration; quiet places for reflection and cognition; active areas for investigation, inquiry, communication; and rich resources that are transparently accessible.

Leveraging Digital
As we move from asking our students to be consumers of knowledge to asking them to create and apply their solutions to real-world problems, the digital world gives us a mechanism to connect and collaborate locally and on a global scale. This myriad of options generates crucial decision points for teachers regarding the thoughtful use of digital, including media and digital citizenship, as an integral part of the learning. In the learning design, teachers need to select the most appropriate digital choices from a vast array of options and ensure that students have the skills to not simply use these options but to be discriminating in how they employ these options in building knowledge, collaborating or producing knowledge, and sharing new learning.

Pedagogical Practices
Teachers need to know how to scaffold experiences and challenges, finely tune them to the needs and interests of students, and maximize learning through relevance, authenticity, and real-world connections. They need a wide repertoire of strategies to meet diverse student needs and interests and a deep understanding of proven models (such as inquiry and problem-based learning). In addition to these foundational effective practices, teachers develop expertise in innovative practices and uses of digital for both learning and assessment.

When these four elements are explicitly integrated into learning design, powerful magic happens in the classroom!

- **Measure what matters**
  The education world has been grappling with 21st century learning for more than two decades, yet there are very few pervasive ways to measure impact. Rather than standardized measures of moments in time we need to measure what really matters. Learning Progressions describe a pathway for learning for each of the 6Cs that allows us the precision and clarity we so enjoy, with a GPS that recalibrates the moment we take a wrong turn.

The learning progressions help teachers assess starting points, design learning tasks, monitor progress, and measure growth over time. They take the guesswork out of Deep Learning so that all students can thrive.

- **Build conditions to support innovation and learning for ALL.**
  Most schools can point with pride to some classrooms where innovative practices result in students who are highly engaged in inventive learning experiences through STEAM (science, technology, engineering, art, and mathematics) approaches or solving real-life problems. However, the bigger challenge is how to move Deep Learning from a few bright spots of innovation to a pervasive shift in thinking and practices that impact all learners across the entire school.
  It's not about pilots or bolt-on programs but, rather, it's a rethinking of the learning process. This means changing the culture of learning, not simply the trappings or structures. It cannot be done by policies or mandates. It begins with building an internal culture of reflective practice and inquiry where we *use the group to change the group* and *go outside to get better inside* by connecting across schools, districts, and countries to share knowledge.

The way forward….

Young or old, we're all trying to make sense of the world and our place in it. The more we learn about deep learning, the more we realize that everyone needs deep learning to thrive. One of the most encouraging findings has been the unbridled optimism of students, teachers, and leaders who describe a renewed energy, passion and liberation. If you are intrigued, we invite you to learn more by reading *Dive Into Deep Learning*, visiting www.deep-learning.global and joining the Deep Learning movement.

WRITTEN BY JOANNE QUINN

Joanne Quinn is an international consultant and author on system change, leadership, and learning. As co-founder and global director of New Pedagogies for Deep Learning, she leads the capacity building of a global innovation partnership across eight countries focused on transforming learning. Joanne has provided leadership at all levels of education as a superintendent of education, implementation advisor to the Ontario Ministry of Education, and Director of Continuing Education at the University of Toronto. Recent books include *Coherence: The Right Drivers in Action for Schools, Districts, and Systems*; *The Taking Action Guide for Building Coherence in Schools, Districts, and Systems*; and *Deep Learning: Engage the World, Change the World*. Joanne's diverse leadership roles and her passion to open windows of opportunity for all give her a unique perspective on influencing positive change.

https://corwin-connect.com/2019/09/whats-deep-about-deep-learning/