Deepening Learning
In Classrooms, Schools and Districts

Michael Fullan and Joanne Quinn

Agenda Map   Bit.ly/cass18JQ

| Deep Learning the Momentum Maker | What's Deep About Deep Learning | Deep Dive: Designing Deep Learning | Powerful Protocols Shift Practice | Mobilizing Whole System Change |

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3 Big Ideas

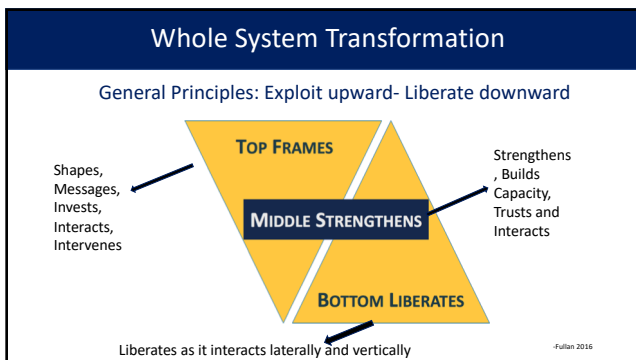- Whole System Change
- Pedagogy
- Causal Pathways

The Allure of Deep Learning

- Society is more complex
- Traditional schooling is outdated
- The labor market is askew
- Promising examples of Deep Learning are evident

Fullan, Quinn & McEachen, Deep Learning, 2017

Whole System Transformation

General Principles: Exploit upward- Liberate downward

TOP FRAMES

Shapes, Messages, Invests, Interacts, Intervenes

MIDDLE STRENGTHENS

Strengthens, Builds Capacity, Trusts and Interacts

BOTTOM LIBERATES

Liberates as it interacts laterally and vertically

-Fullan 2016

NPDL: Global Knowledge Building Partnership

- Finland
- Netherlands
- Canada
- USA
- Uruguay
- Australia
- New Zealand

Social Movement

"This model has the **characteristics of a social or cultural movement** in which people are attracted to new ideas that connect with or activate basic unmet needs or values, and **promise dramatic new outcomes.**"

Fullan, Quinn & McEachen, Deep Learning, 2017

Deep Learning the Momentum Maker

MODULE ONE:

- The Allure of Deep Learning
- The Coherence Framework
- The Deep Learning Framework

Making Deep Learning the Momentum Maker

"The new set of crises is forcing humankind to reconsider its relationship to each other, and to the planet and universe; it is essential that we proactively change the world through learning."

"Resolving the equity/excellence miasma is at the heart of societal survival, and deep learning is capable of bringing together excellence and equity for all, thereby reversing the deadly trend of growing inequality in the world.

This is not just a moral question; it is a matter of survival, and even better prosperity."

Fullan, Quinn & McEachen, Deep Learning: Engage the World Change the World, Corwin 2018

QUOTE WALKABOUT

Template 2

" We **cannot rely on** individual teachers to **turn the tide one by one**, but rather we need an approach that **mobilizes whole schools, districts and systems**."

" If the teachers and leaders are not thinking deeply, its unlikely they will create those conditions for their students."

"Students have **untapped potential** but given **voice and choice through deep learning** we see them influencing dramatic changes to organizations, society and pedagogy."

" Quite often things that look **"cool"** are not deep with respect to learning."

*"Make deep learning the **pull factor of the decade**- people are ready for it even if they don't know **until they experience it."***

"We take the position that learning is the foundational driver and technology can be a great accelerator."

" Making the walls of the school transparent is **not just about redesigning space** but requires taking stock of the ways we can **connect inside and outside** the classroom."

Fullan, Quinn & McEachen, Deep Learning: Engage the World Change the World, Corwin 2018

The Coherence Framework

Focusing Direction

Cultivating Collaborative Cultures

Leadership

Securing Accountability

Deepening Learning

Fullan & Quinn. Coherence: The Right Drivers in Action for Schools, Districts and Systems, Corwin, 2015

Coherence is …

**the shared depth of understanding about the nature of the work**

Focusing Direction

- Purpose driven
- Goals that impact
- Clarity of strategy
- Change leadership

Fullan & Quinn. *Coherence: The Right Drivers in Action for Schools, Districts and Systems, Corwin, 2015*

Cultivating Collaborative Cultures

- Culture of growth
- Learning leadership
- Capacity Building
- Collaborative work

Fullan & Quinn. *Coherence: The Right Drivers in Action for Schools, Districts and Systems, Corwin, 2015*

Deepening Learning

- Clarity of learning goals
- Precision in pedagogies
- Shift practices through capacity building

Fullan & Quinn. *Coherence: The Right Drivers in Action for Schools, Districts and Systems, Corwin, 2015*

Securing Accountability

- Internal accountability

- External accountability

Fullan & Quinn. *Coherence: The Right Drivers in Action for Schools, Districts and Systems, Corwin, 2015*

Template 3

Say and Switch

Fullan & Quinn. *Coherence: The Right Drivers in Action for Schools, Districts and Systems, Corwin, 2015*

The Deep Learning Framework
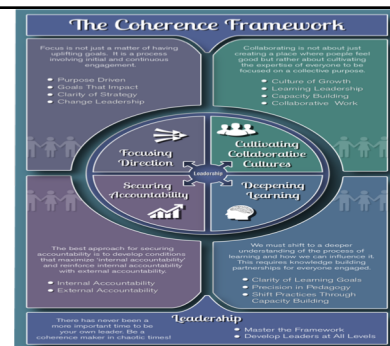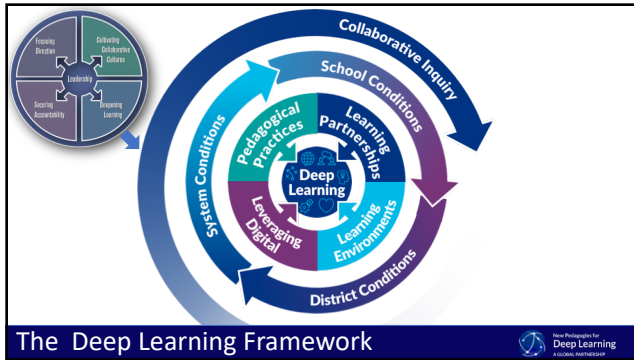
WHAT'S DEEP ABOUT DEEP LEARNING?
"If we want learners who can **thrive** in **turbulent** and **complex times**, apply **thinking** to new situations and **change** the world, then we **must** *re-imagine learning*."

Clarity of Learning Goals- The 6 C's

A focus on the 6 C's **immunizes and protects against social and emotional difficulties** thus building positive mental health and resilience... **levels the playing field for kids from challenging backgrounds**." Jean Clinton, p22

Global Competencies for Deep Learning – 6 C's
Six Global competencies define what it means to be a deep learner.
Deep Learning experiences are engaging, relevant, authentic and build the 6 C's.

Template 4

CREATIVITY
Having an 'entrepreneurial eye' for economic and social opportunities, asking the right inquiry questions to generate novel ideas, and leadership to pursue those ideas and turn them into action.

CRITICAL THINKING
Critically evaluating information and arguments, seeing patterns and connections, constructing meaningful knowledge, and applying it in the real world.

COMMUNICATION
Communicating effectively with a variety of styles, modes, and tools (including digital tools), tailored for a range of audiences.

CHARACTER
Learning to deep learn, armed with the essential character traits of grit, tenacity, perseverance, and resilience; and the ability to make learning an integral part of living.

CITIZENSHIP
Thinking like global citizens, considering global issues based on a deep understanding of diverse values and worldviews, and with a genuine interest and ability to solve ambiguous and complex real-world problems that impact human and environmental sustainability.

COLLABORATION
Work interdependently and synergistically in teams with strong interpersonal and team-related skills including effective management of team dynamics and challenges, making substantive decisions together, and learning from and contributing to the learning of others.

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EAT Fit — Avon Maitland DSB, Ontario

What evidence of the 6 C's do you observe?

Turn & Talk
In what ways were the competencies evident?

What similarities did you notice with your district work?

LTPF Implementation Planning Guide

1. **Student Centered Learning**

2. Research and Innovation

3. Professional Learning

4. Leadership

5. Access, Infrastructure and Digital Learning Environments

Outcomes:
Students use technology, online learning and digital learning to:
a.   access, share and create knowledge
b.   discover, develop and apply competencies, as described in the Ministerial Order on Student Learning to enable students to:
  - *know how to learn*
  - *think critically*
  - *identify and solve complex problems*
  - *manage information*
  - *innovate*
  - *create opportunities*
  - *apply multiple literacies*
  - *demonstrate good communication and cooperation skills*
  - *demonstrate global and cultural understanding*
  - *identify and apply career and life skills*

c.   develop and apply digital citizenship and technological skills
d.   demonstrate what they know and are able to do through   effectively using a range of resources and media
e.   monitor their learning progress and inform decisions through the use of data and evidence--based reasoning

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Global Competencies	Ministerial order: Goals and Standards To enable all students to discover, develop and apply competencies across subject and discipline areas for learning, work and life.
Character	• know how to learn: to gain knowledge, understanding or skills through experience, study, and interaction with others; • identify and apply career and life skills through personal growth and well-being
Critical Thinking	• think critically: conceptualize, apply, analyze, synthesize, and evaluate to construct knowledge; • identify and solve complex problems; • manage information: access, interpret, evaluate and use information effectively, efficiently, and ethically;
Creativity	• innovate: create, generate and apply new ideas or concepts; • create opportunities through play, imagination, reflection, negotiation, and competition, with an entrepreneurial spirit;
Communication	• demonstrate good communication skills and the ability to work cooperatively with others;
Citizenship	• demonstrate global and cultural understanding, considering the economy and sustainable development;
Collaboration	
	• apply multiple literacies: reading, writing, mathematics, technology, languages, media, and personal finance;

Share and Swap

Read your story and be ready to share your observations:
- Round 1 What makes deep learning deep?
- Round 2 What is changing for students? What's changing for teachers?

Contribute your best Collective Thinking!

What's deep?	Student impact	Teacher impact
http://bit.ly/whatsdeep17	http://bit.ly/studentimpact17	http://bit.ly/teacherimpact17

Learning Experiences that foster the 6C's

1. Involve **higher order cognitive processes** to reach a deep understanding of content and issue

2. **Often include immersion** in addressing areas or issues that are cross disciplinary

3. **Integrate academic and personal** capacities

4. Are **active, authentic, challenging** and **student centered**

5. Are often designed to **impact the world,** locally or more widely

6. Take place in a range of settings and **increasingly use the digital and connectivity**

Fullan, Quinn & McEachen, Deep Learning: Engage the World Change the World, Corwin 2018

Measuring Growth: Linking the 6 c's to curriculum standards...
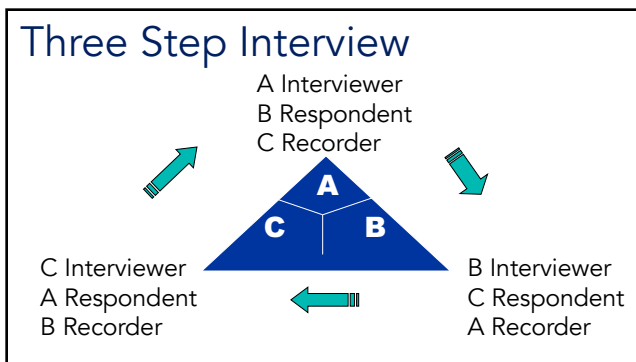
Slide 1 — Learning Progressions

Collaboration Deep Learning Progression
Work interdependently and synergistically in teams with strong interpersonal and team-related skills including effective management of team dynamics and challenges, making substantive decisions together, and learning from and contributing to the learning of others.

Dimension	Limited Evidence	Emerging	Developing	Accelerating	Proficient
Working interdependently as a team	Learners either work individually on learning tasks or collaborate informally in pairs or groups but do not really work together as a team. Learners may discuss some issues or content together, but skip over important substantive decisions (such as how the process will be managed, which has significant adverse impacts on how well the collaboration works.	Learners work together in pairs or groups and are responsible for completing a task in order for the group to achieve its work. At this level, tasks may not be well matched to each individual's strengths and expertise, and group members' contributions may not be equitable. Learners are starting to make some decisions together, but may still be leaving the most important substantive decisions to one or two members.	Learners decide together how to match tasks to the individual strengths and expertise of team members, and then work effectively together in pairs or groups. Learners involve all members in making joint decisions about an important issue, problem, or process, and developing a team solution.	Learners can clearly articulate how they work together in a way that is interdependent and uses each person's strengths in the best possible way to make sound substantive decisions and develop ideas and solutions. Interdependent teamwork is clearly evident in that learners' contributions are woven together to communicate an overarching idea and/or create a product.	Learners demonstrate a highly effective and synergistic approach to working interdependently in a way that not only leverages each member's strengths but provides opportunities for each to build on those strengths and learn new skills. This includes ensuring that substantive decisions are discussed at a deep level that ensures each team member's strengths and perspectives are infused to come to the best possible decision that benefits all.
Interpersonal and team-related skills	Although learners may help each other on tasks that contribute to a joint work product or outcome, interpersonal and team-related skills are not yet evident. Learners do not demonstrate a genuine sense of empathy or a shared purpose for working together.	Learners report and demonstrate a sense of collective ownership of the work and show some interpersonal and team-related skills. The focus is on achieving a common or joint outcome, product, design, response or the team listens effectively, level the key decisions may be taken or dominated by one or two members.	Learners demonstrate not only good interpersonal skills and collective ownership of the work; an active sense of shared responsibility is also evident. From beginning to end, the team listens effectively, negotiates and agrees on the goals, content, process, design, and conclusions of their work.	Learners can clearly articulate how joint responsibility for the work and its product or outcome pervades the entire task. Strong skills in listening, facilitation, and effective teamwork ensure that all voices are heard and reflected in the ways of working or work product.	Learners take an active responsibility, both individually and collectively, for ensuring that the collaborative process works as effectively as possible, that each person's ideas and expertise are used to maximum advantage, and that each work product or outcome is of the highest possible quality or value.

*Sample of Collaboration Deep Learning Progression

New Pedagogies for **Deep Learning**
A GLOBAL PARTNERSHIP

Slide 2 — Three Step Interview Protocol

	Three Step Interview Protocol		Template 5
Question	**Person A**	**Person B**	**Person C**
1. What is your focus/ framework for deep learning?			
2. What is your strategy to improve deep learning?			
3. How do you engage others in deep learning?			

Slide 3

Three Step Interview

A Interviewer
B Respondent
C Recorder

A

C   B

C Interviewer
A Respondent
B Recorder

B Interviewer
C Respondent
A Recorder

Slide 4

Powerful Conversations

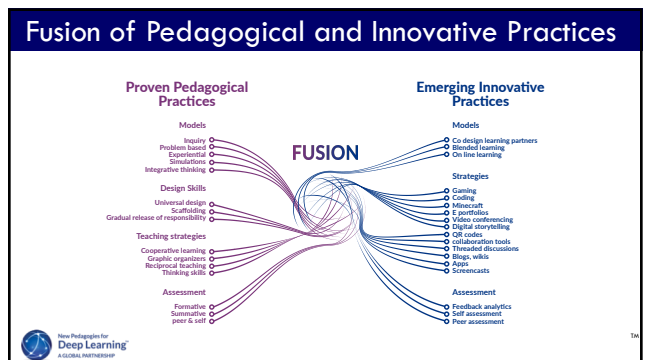1. **What themes emerged?**

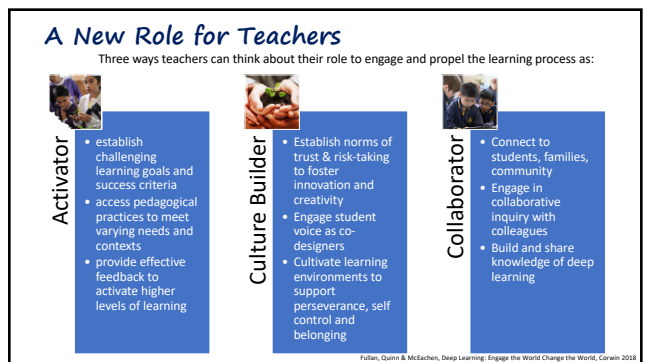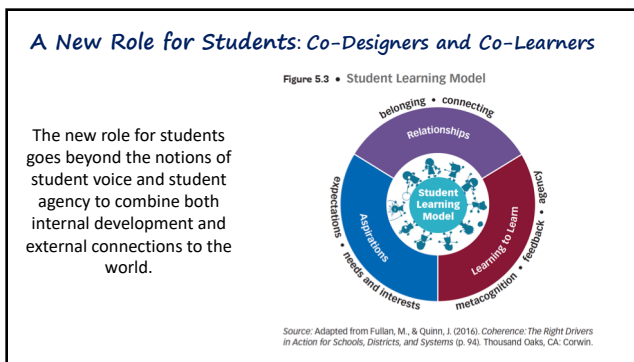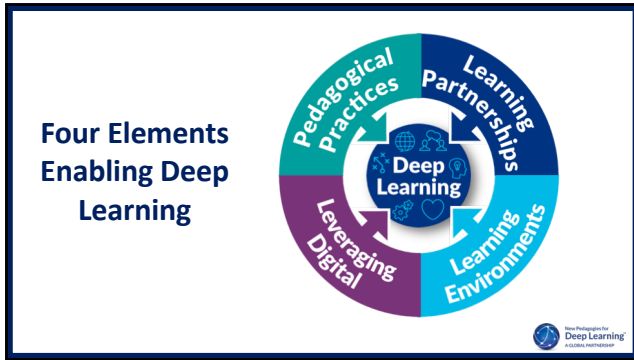2. **How might this strategy be useful?**

Slide 5

Module Three

Deep Dive: Designing Deep Learning

How do we foster deep learning in ALL classrooms?

Slide 6

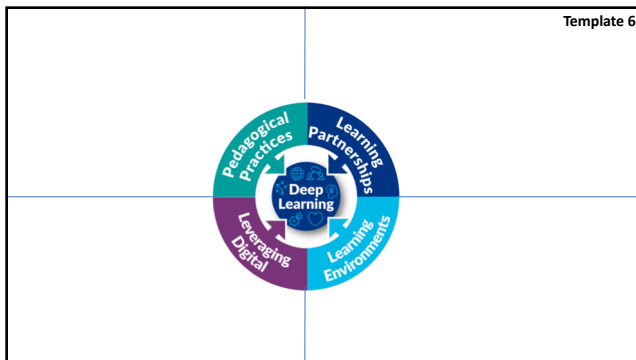# 3 Components to Shifting Practices

Clarity of learning goals (6 C's)

+

Precision in Pedagogy (4 elements)

+

Collaborative work (inquiry cycle)

Slide 1

Four Elements Enabling Deep Learning

Pedagogical Practices · Learning Partnerships · Leveraging Digital · Learning Environments · Deep Learning

New Pedagogies for Deep Learning · A GLOBAL PARTNERSHIP

Slide 2

Learning Partnerships

Slide 3

A New Role for Students: Co-Designers and Co-Learners

The new role for students goes beyond the notions of student voice and student agency to combine both internal development and external connections to the world.

Figure 5.3 • Student Learning Model

belonging · connecting
Relationships
expectations · needs and interests
Aspirations
Student Learning Model
Learning to Learn
metacognition · feedback · agency

Source: Adapted from Fullan, M., & Quinn, J. (2016). *Coherence: The Right Drivers in Action for Schools, Districts, and Systems* (p. 94). Thousand Oaks, CA: Corwin.

Slide 4

A New Role for Teachers

Three ways teachers can think about their role to engage and propel the learning process as:

Activator
- establish challenging learning goals and success criteria
- access pedagogical practices to meet varying needs and contexts
- provide effective feedback to activate higher levels of learning

Culture Builder
- Establish norms of trust & risk-taking to foster innovation and creativity
- Engage student voice as co-designers
- Cultivate learning environments to support perseverance, self control and belonging

Collaborator
- Connect to students, families, community
- Engage in collaborative inquiry with colleagues
- Build and share knowledge of deep learning

Fullan, Quinn & McEachen, Deep Learning: Engage the World Change the World, Corwin 2018

Slide 5

Learning Environment

Interactive learning environments where students are deeply engaged and motivated

Slide 6

Fusion of Pedagogical and Innovative Practices

Proven Pedagogical Practices

Models
- Inquiry
- Problem based
- Experiential
- Simulations
- Integrative thinking

Design Skills
- Universal design
- Scaffolding
- Gradual release of responsibility

Teaching strategies
- Cooperative learning
- Graphic organizers
- Reciprocal teaching
- Thinking skills

Assessment
- Formative
- Summative
- peer & self

FUSION

Emerging Innovative Practices

Models
- Co design learning partners
- Blended learning
- On line learning

Strategies
- Gaming
- Coding
- Minecraft
- E portfolios
- Video conferencing
- Digital storytelling
- QR codes
- collaboration tools
- Threaded discussions
- Blogs, wikis
- Apps
- Screencasts

Assessment
- Feedback analytics
- Self assessment
- Peer assessment

New Pedagogies for Deep Learning · A GLOBAL PARTNERSHIP

Leveraging Digital

Pedagogy as the driver - digital as the accelerator

Young Minds of the Future

What evidence of the 4 elements were incorporated into the design?

Pedagogical Practices

Learning Partnerships

Deep Learning

Leveraging Digital

Learning Environments

What the World Needs Now

NPDL GLOBAL DEEP LEARNING TASK 2018

Building Precision

✓ Common language

✓ Tools and frameworks that foster not constrain

✓ Collaborative Work

Thought Huddle

Share the best way you are **fostering innovation-** slide, video, resource, photo, ...

http://Bit.ly/cassideapad

1. Double click to post   2. Click on 3 dots to upload

Module Four

Powerful Protocols Shift Practice

Shifting Practices

Capacity Building
The process of developing the knowledge skills and commitment of individuals and organizations to achieve improved results

Collective Capacity
The increased ability of educators at all levels of the system to make the changes needed to improve results
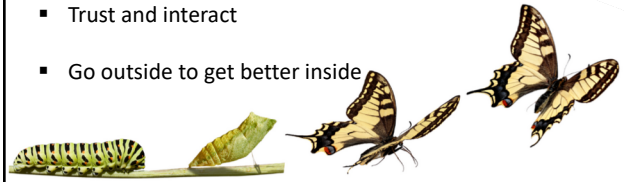
Fullan, Quinn & McEachen, Deep Learning: Engage the World Change the World, Corwin 2018

Insights on Change

"Successful change processes are a function of **shaping** and **reshaping** good ideas as they build capacity and ownership"

- Use the group to change the group

- Trust and interact

- Go outside to get better inside

Key levers for *shifting* practice

"**Collaborative work** is a **key driver** in shifting behavior. It is the **social glue** that **moves the organization toward coherence.**"
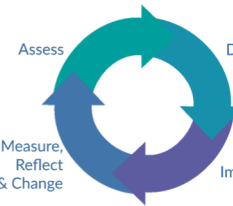
"…there is **no one way** to build a culture of growth or to learn collaboratively, but every success works on the **same focused collaborative agenda relative to system goals.**" Fullan and Quinn p 73

1. Collaborative Learning Design

2. Moderation

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1. Collaborative Learning Design

Assess to identify student strengths, needs and progress. Establish learning goals.

Work with peers to design deep learning units/tasks steeped in a real world problem or challenge of relevance

Use multiple methods evidence to measure the outcomes of learning and effectiveness of the design. Incorporate findings into the next learning design cycle

Implement the deep learning experience, leveraging digital to accelerate and deepen the learning

Assess — Design — Implement — Measure, Reflect & Change

Fullan, Quinn & McEachen, Deep Learning: Engage the World Change the World, Corwin 2018

Shifting Practices

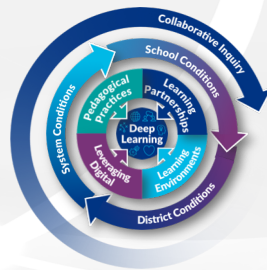**Clarity of learning goals (6 C's)**

+

Precision in Pedagogy (4 elements)

+

Collaborative work (inquiry cycle)

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2. The Power of Moderation

"The moderation process around deep learning activities was a turning point for some, who learned through the process how the tools fit together.
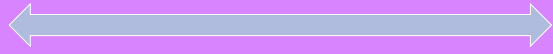
The Learning Design Protocol has been a surprise for us; participants didn't think they would need it and it's turned out to be pivotal. Working with the Protocol resulted in a lot of 'aha' moments."

Our Dragon World

-Lynn Davie, Australia Cluster Lead

Module Five

Mobilizing Whole System Change

Mobilizing Whole Systems

"The change lesson here is that we need to change the culture of learning, not simply the trappings or structures." p26

"**Programs don't scale; culture does.**"

Fullan, Quinn & McEachen, Deep Learning: Engage the World Change the World, Corwin 2018

Five Conditions that Impact the Diffusion of Deep Learning

Five Learning Conditions That Impact the Diffusion of Deep Learning

Vision and Goals
- Goals and clarity of strategy

Leadership
- Leadership capacity
- Role of lead learners
- Change leadership

Collaborative Cultures
- Culture of learning
- Collaborative work
- Capacity building

Deepening the Learning
- Global competencies
- Precision in the new pedagogies
- Processes to shift practice

New Measures and Evaluation
- New tools and methods of measurement
- Mechanisms to measure impact

Fullan, Quinn & McEachen, Deep Learning: Engage the World Change the World, Corwin 2018
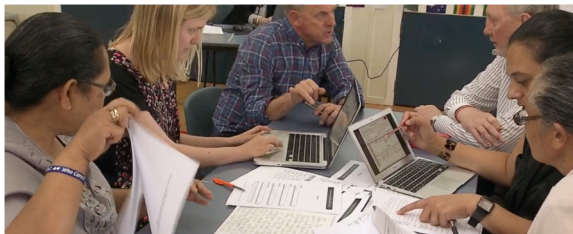

Simulation

Assessing Conditions for Deep Learning

1. Read the *Deepening the Learning* dimension of the rubric

2. Where would you place this school? Be prepared to give evidence for your rating.

3. Compare your ratings and use the evidence to determine a team rating

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Leveraging Lateral & Vertical Connections

WHAT? — What strategies helped the district diffuse deep learning?

SO WHAT? — What are the implications of these concepts?

NOW WHAT? — How might this knowledge be useful?

The New Change Dynamic

Clarity
- build common understanding and language
- develop capacity with tools and processes
- participate in collaborative inquiry learning design cycles

Depth
- build precision in pedagogy
- increase engagement in collaborative inquiry moderation and redesign
- explicit leadership and capacity building strategy articulated

Sustainability
- embed learning design cycles across the whole school/system
- accelerate precision in pedagogy
- amplify shared leadership and engagement

Fullan, Quinn & McEachen, Deep Learning: Engage the World Change the World, Corwin 2018

Moving to Action

1. Planning for Action:
   - Circles of Inquiry
   - Implementation Planning Protocol
   - District Conditions Rubric

2. Consultation Protocol

System Coherence:

Building coherence among Alberta's provincial policies and priorities to support enhanced learning.

- Individual Professional Growth Plans
- School Education Plans
- Improved professional practice focused on enhanced student learning
- Jurisdiction Education Plan
- Alberta Education Goals

Adapted from: A Guide to Support Implementation: Essential Conditions, Alberta Education Partners, 2012.

Circles of Inquiry

Slices for inquiry

Identify the slices for your context. e.g.
- Vision and Goals
- Leadership
- Collaborative Cultures
- Deepening Learning
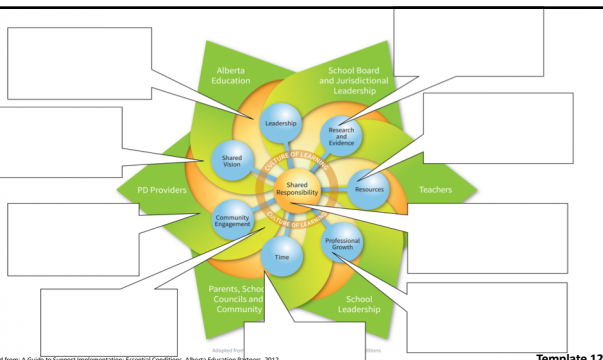- ....

District
School
Classroom
Deep Learning
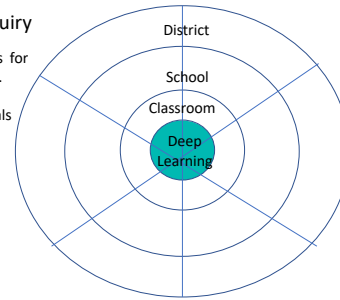
Protocol

Identify supports for deep learning within or across the levels.
e.g. resources, policies, conditions, structures, processes, relationships

Place each example on a post it. Place all post its on the chart

Select one slice. Discuss overlap, gaps, relationships & needs.

-Quinn, 2018

Adapted from: A Guide to Support Implementation: Essential Conditions, Alberta Education Partners, 2012.

Template 12

Implementation Strategies

Collaborative Learning
1. Book study
2. Case study review
3. Conferences
4. Curriculum symposia
5. Internet research
6. Journaling
7. On line curriculum network
8. PD programs
9. Pod-casting
10. Courses
11. Books and journals
12. Professional organizations
13. Professional portfolios
14. Self reflection
15. Summer institutes
16. Video conferencing
17. Viewing videos
18. Webinars
19. workshops

Collaborative Work
1. Action research
2. Classroom/school visitation
3. Collective curriculum development
4. Data analysis
5. Examining student work
6. Focused conversations
7. Hosting a student teacher
8. Integrated curriculum planning
9. Lesson study
10. Mentoring a colleague
11. Peer coaching
12. Professional learning community
13. Study groups

Figure 1. Essential Conditions to Support Implementation

Adapted from: A Guide to Support Implementation: Essential Conditions, Alberta Education Partners, 2012.
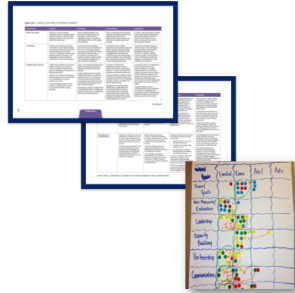
Assessing our District Conditions for Deep Learning

Individually:
- Select a dimension
- Highlight descriptors that apply and think about evidence for the choice.

Group
- For each Dimension, take a dot and place it on the large chart
- What are the trends we see?
- How might we address those trends?

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2. Two Consultation Protocol

1. Select one challenge or issue facing your district as it moves towards Coherence and Deep Learning.

2. Present your challenge or issue using the steps of consultation protocol and receive feedback and suggestions from learning partners.

3. Be sure to record a summary of suggestions that you may wish to incorporate into your 100 day plan.

4. 2 Rounds of 8 minutes each

-Quinn, 2017

Emergent Discoveries

- Helping humanity
- Life and learning merge
- Students as change agents
- Working with others is an intrinsic motivator
- Character, citizenship and creativity are catalytic
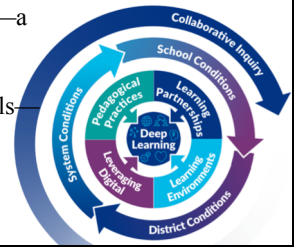- Attack inequity with excellence

Fullan, Quinn & McEachen, Deep Learning: Engage the World Change the World, Corwin 2018

Whole System Change

We are seeing change because…

"we have a strong mechanism—a partnership with powerful frameworks, strategies and tools—to invite, propel and support progress."
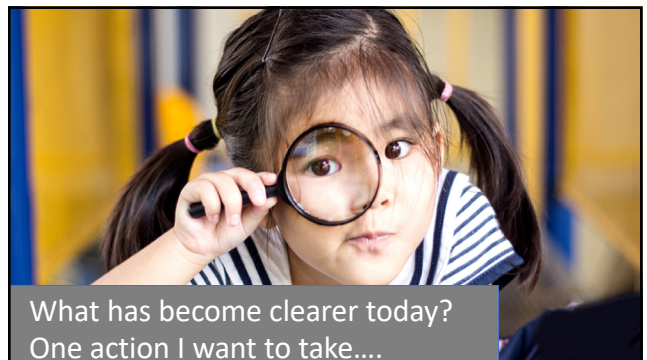
Fullan, Quinn & McEachen, Deep Learning: Engage the World Change the World, Corwin 2018

False Signals

- ☐ Alignment without Coherence
- ☐ Activity without Movement
- ☐ Tools that blind
- ☐ Championing Deep Learning without Precision
- ☐ Dashboards without Steering Wheels

-Fullan 2017

What has become clearer today?
One action I want to take….

Our best hope collectively is that deep learners inherit the world!