The Next Chapter of Education: Join the Revolution or Accept the Status Quo

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The primary aim of education is not to enable students to do well in school, but to help them do well in the lives they lead outside of school.



Education is not preparation for life; education is life itself.

John Dewey



Agenda

- 1. Set the Stage
- 2. The Challenge
- 3. The Future
- 4. Learning
- 5. Future Skills
- 6. Advice



Agenda







We cannot build the future by trying to perfect the past!



Would you agree with me, that the pace of change is amazingly fast?

Well, the pace of change today will be the <u>slowest</u> it will be for the rest of your life!





Volatile
Uncertain

Complex

Ambiguous



Many of us have been raised in a context that the world is predictable. We now need to work with a different mindset.

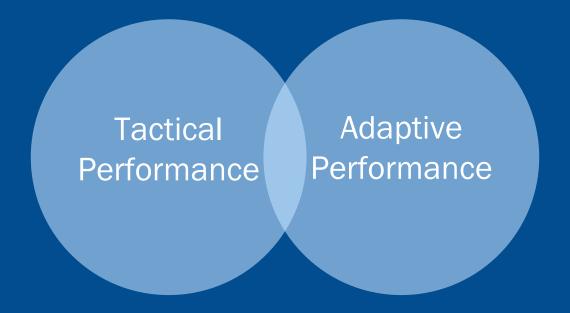


Best Leadership Advice

Be very clear about where you are going, but very flexible about how you get there. Avoid certainty, but seek clarity.



There are two types of performances we must be concerned with in a VUCA world.





Operating Excellence Tactical Performance

Innovation Adaptive Performance

Do what we "Already" do even better?

How to invent a different future for the learner?

Best Practice

Next Practice



Almost everyone wants schools and teaching to be better, but almost no one wants them to be different!

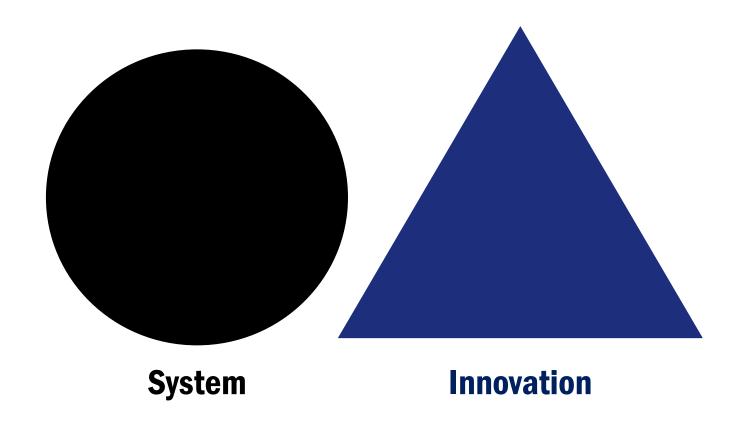


First Different

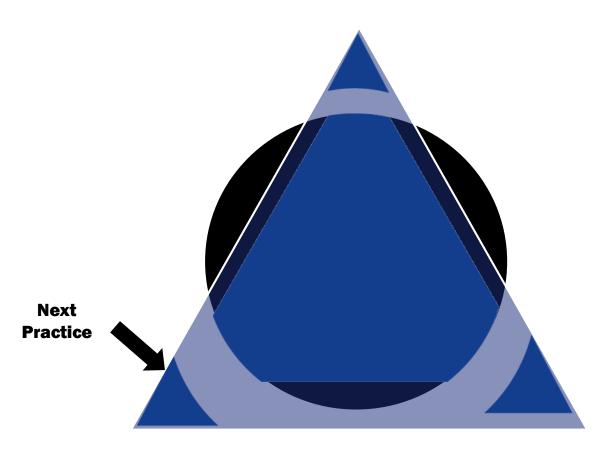
Then Better





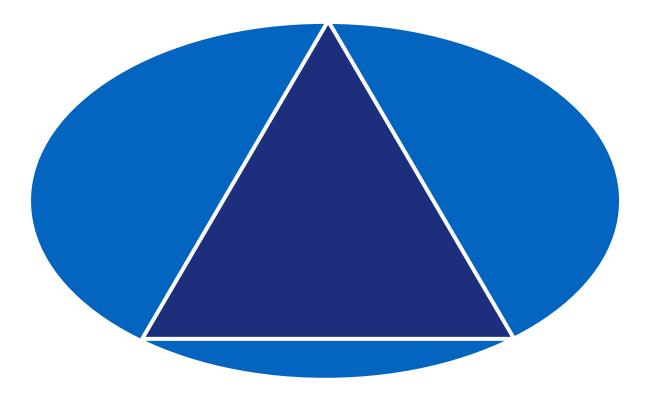






Sustaining Innovation





Disruptive Innovation



Key Messages

Practices that were nice to have are now essential to the education system...

- A Growth Mindset for Everyone in the System
- Innovation is Essential / Next Practices
- Compass, Not a Map
- There is no Finish Line

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"Stop asking me if we're almost there! We're nomads, for crying out loud!"



Key Messages

Practices that were nice to have are now essential to the education system...

- A Growth Mindset for Everyone in the System
- Innovation is Essential / Next Practices
- Compass, Not a Map
- There is no Finish Line
- Transformation is Necessary

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Without transformation, all we are getting in our schools is the digitization of past practice





Learning Has Changed Forever

eLearning isn't the only way: Learners want to learn from multiple devices

Learners are ignoring books and learning from smartphones Learners are learning in different ways, mostly at the point of need

Learners prefer self-paced learning, so search engines are very popular

Learners want quality information, but also value speed and convenience

Learners are prioritizing their own professional development



The hardest part of change is not accepting the new....

It's in letting go of the old!



Our biggest challenge is... The "Status Quo"





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Change almost never fails because it is too early. It almost always fails because it is too late.

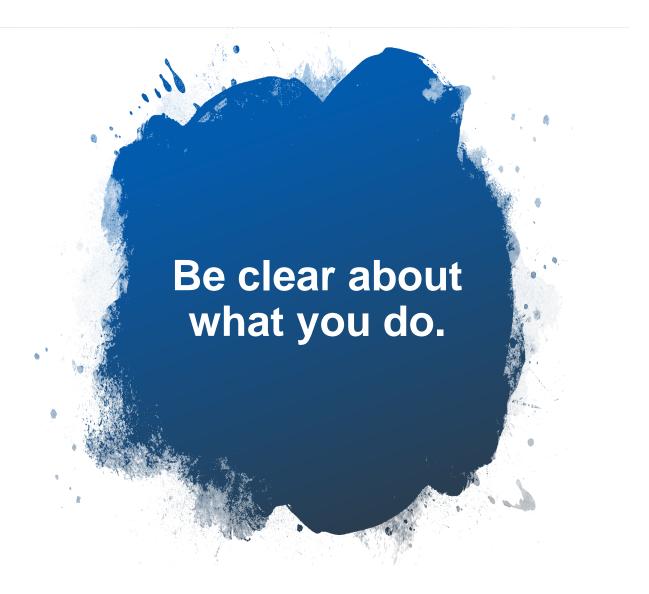


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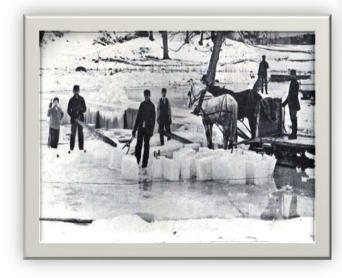








Ice







The mistake we make.....

We define ourselves by what we do, rather than what we "provide".

You limit your ability to innovate if you define yourself by what you do.



WE ARE IN THE LEARNING BUSINESS



Learning

Today teaching is "one" but "not" the only way to achieve learning.



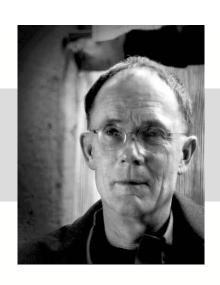
Learning has expanded at a rate that has far outpaced our conceptions of teaching.



Agenda

3. The Future







"The future is already here — it's just not evenly distributed." - William Gibson

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The Future of Education Will Be Shaped By:

The proliferation of INTELLIGENT SYSTEMS

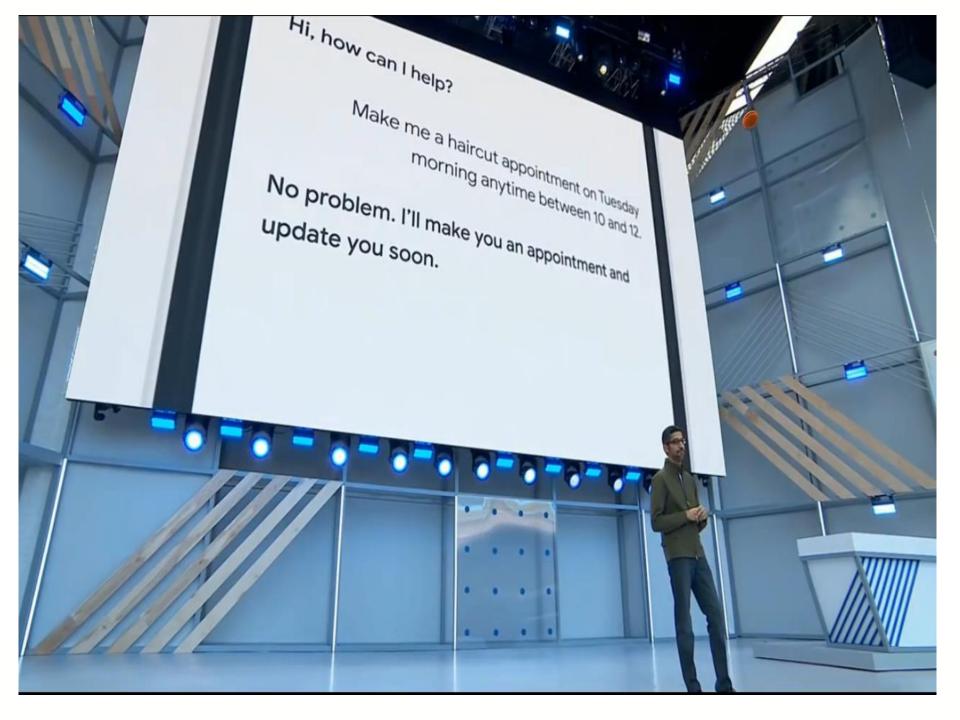
The emergence of FUTURES LITERACY

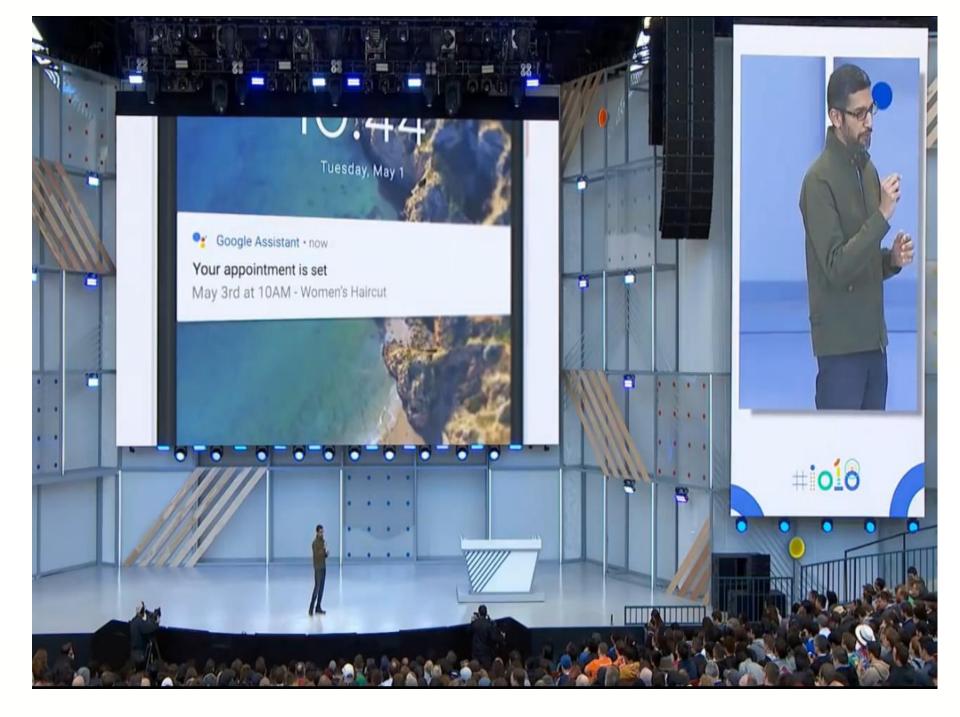
Human-Machine collaboration TO LEARN

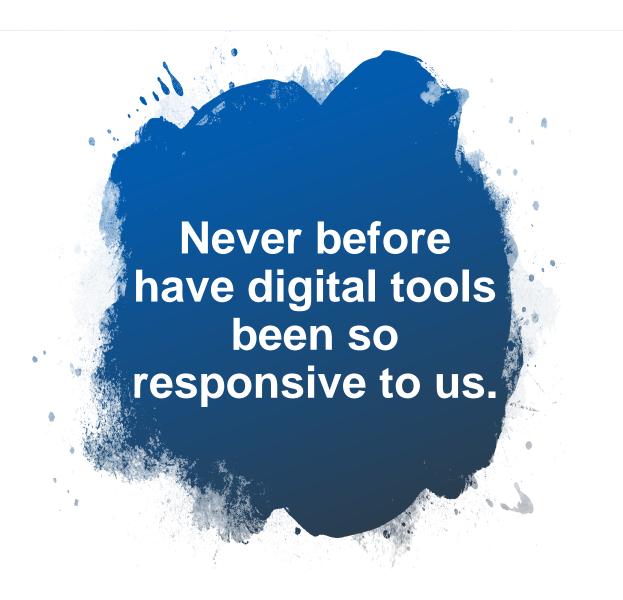


Artificial intelligence is becoming very good at many "Human Tasks" – diagnosing disease, translating languages, providing customer service, and its getting better every day.











While Al will alter how work gets done and who does it, the technology's larger impact will be in complementing and augmenting human capabilities and not replacing them.



Technology won't replace teachers.

But teachers who use technology will replace teachers who do not.





Technology

Technology cannot do everything humans can do.

Technology is good at convergent thinking.

It is not good at divergent thinking.



Humanics

Consider "Content Moderation" at Facebook and other social media sites.

Technology can't understand if a user is posting a racist review or is describing racist behavior.



REPEAT SLIDE

Artificial intelligence is becoming very good at many "Human Tasks" – diagnosing disease, translating languages, providing customer service, and its getting better every day.





I love to drive!

Educators love to teach!



The research tells us that if the motive for using technology is displacing workers, you will only see short term gains.

Most significant performance gain is when there is human machine collaboration.



Human/Al actively enhances each others complementary skill set

HUMAN

Leadership
Teamwork
Creativity
Social Skills
Divergent Thinking

Machine

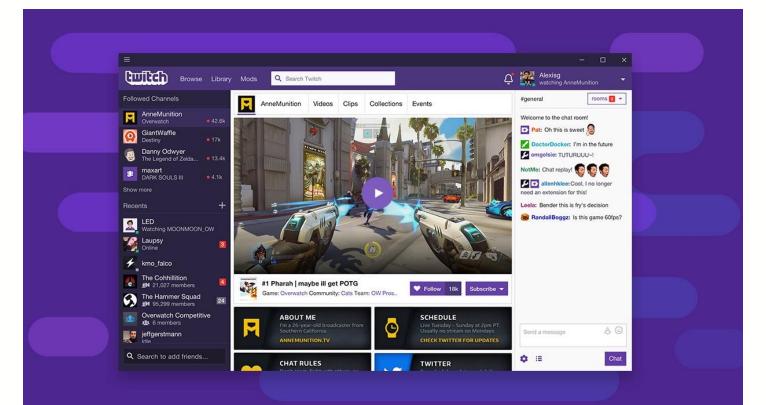
Speed
Accuracy
Replication
Data Collection
Scalability

What comes natural for a human, telling a joke, is tricky for a machine. What is straight forward for a machine is, well somewhat challenging for a human.



Successful Learning Requires Both









What we think of as "video gaming" today will evolve into the most powerful learning medium in our profession.



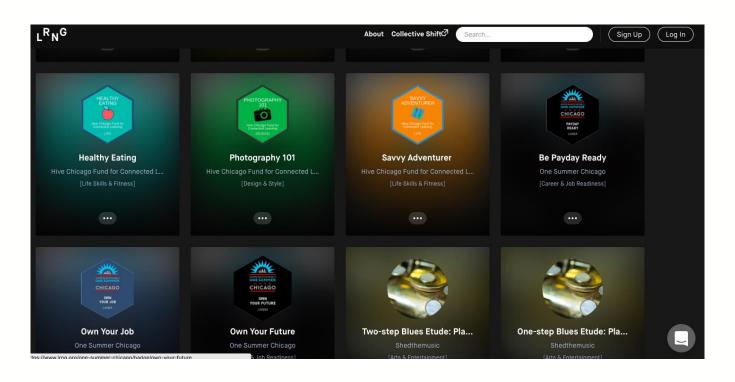
Leaders, teachers, and students will need to be DJ's and VJ's, to help create the optimal media mix for learning in our systems.





LRNG works with cities and organizations to connect learning experiences to career opportunities, ensuring that all young people, especially those from underserved communities, have inspiration and guidance to prepare them for life and work in the modern economy.







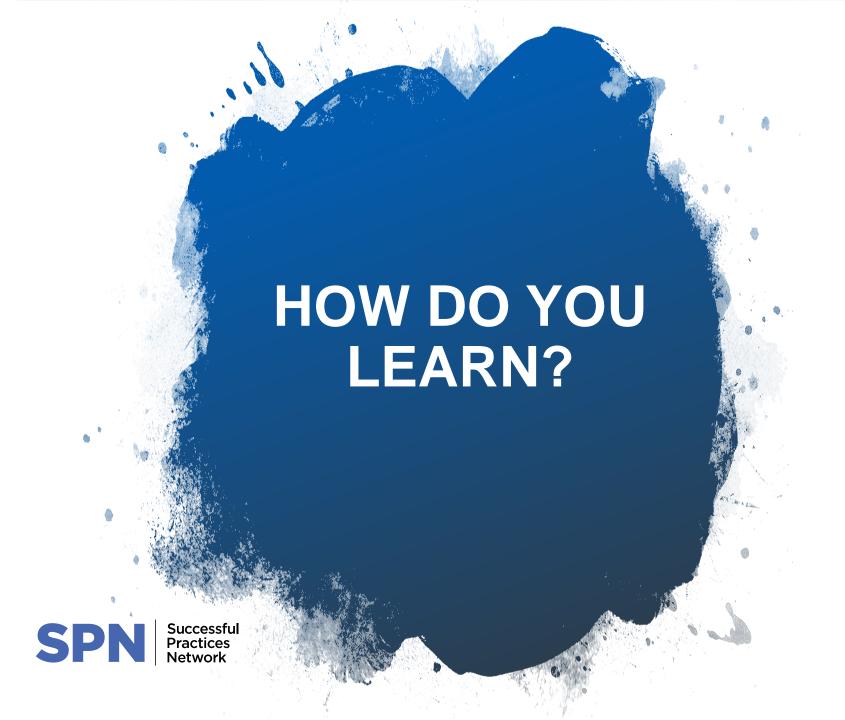


Agenda









Education, Innovation, Experimentation

Pedagogy	Heutagogy	Andragogy
Children's Learning	Self-directed Learning	Adults' Learning
From the Greek word meaning, "to lead the child." The art and science of teaching and learning.	Maintains the learner centered focus but highlights the importance of developing the skills necessary to learn on one's own.	The study of teaching and learning with adults. Andragogy tends to be learner centered and not teacher centered.



Role of The Teacher/Educator/Coach

Pedagogy	Heutagogy	Andragogy
Children's Learning	Self-directed Learning	Adults' Learning
Designs the learning process, imposes material, and is assumed to know best.	Develop the learner's capability to: • Know how to learn • Create • Have a high degree of self-efficacy • Apply competencies • Work with others	Enabler or facilitator, climate of collaboration, respect, and openness.



Dependence

Pedagogy	Heutagogy	Andragogy
Children's Learning	Self-directed Learning	Adults' Learning
The learner is a dependant personality. Teacher determines what, how, and when anything is learned.	Learners are independent. They identify the potential to learn from novel experiences as a matter of course. They are able to manage their own learning.	Adults are independent. They strive for autonomy and self-direction in learning.





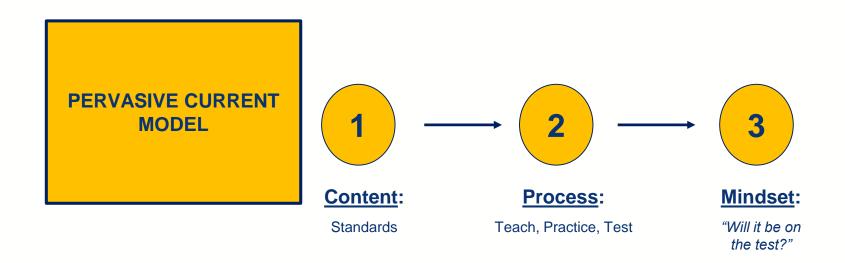
I Tweeted ...

A teacher who teaches a student to learn without her, prepares the student for success in the 21st century...

@Ray_McNulty



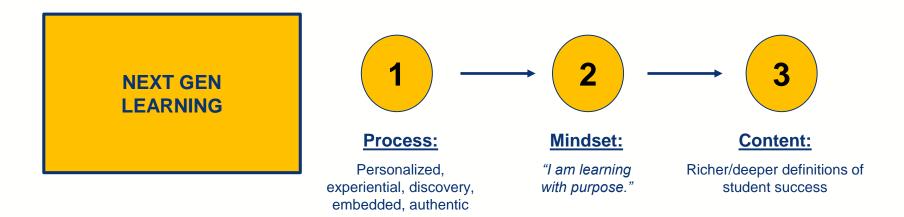
How most school systems are designed and how most of us were trained.





Process drives mindset drives content.

The mindsets of the learner enable absorption of content.







Perhaps a change in how we think?

How would I teach this?

How would I learn this?







A Task

In your groups using technology and all available resources (15 minutes)

Brain storm with your group and then develop your ideas and evidence to support your answer to the following question.

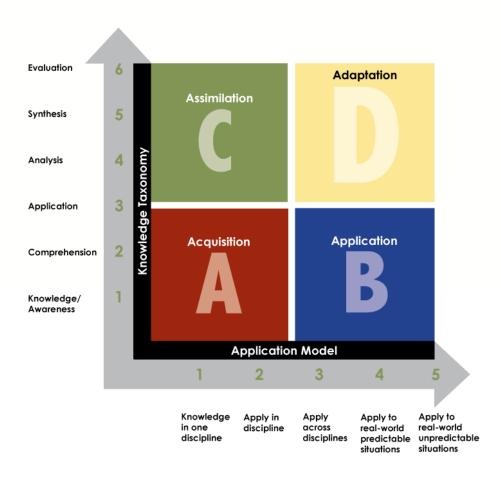
School of Education

Who is a more important ally to the United States, Canada or Great Britain?

Now let's talk about this:

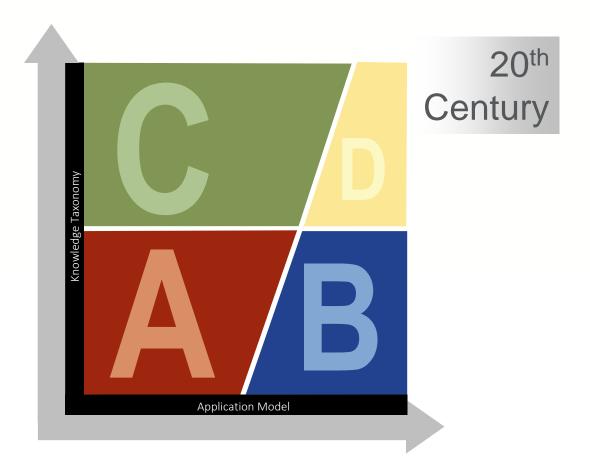
What knowledge and skills did you use in this task?

School of Education

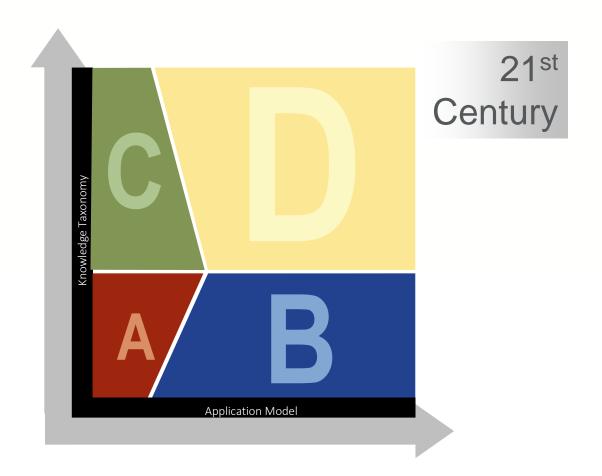


Rigor/Relevance Framework®









Agenda

5. Skills of the Future

10 Skills for the Future

- Sense-Making
- Social Intelligence
- Novel and Adaptive Thinking
- Cross-Cultural Competency
- Computational Thinking
- New Media Literacy
- Transdisciplinarity
- Design Mindset
- Cognitive Load management
- Virtual Collaboration

Sense making

 The ability to determine the deeper meaning or significance of what is being expressed. These are skills that help us create unique insights critical to decision making.

Social Intelligence

 The ability to connect to others in a deep and direct way, to sense and stimulate reactions and desired outcomes.

Novel and Adaptive Thinking

 Proficiency at thinking and coming up with solutions and responses beyond that which is rote or rule-based.

Cross-Cultural Competency

The ability to operate in different cultural settings.

Computational thinking

 The ability to translate vast amounts of data into abstract concepts and to understand data-based reasoning.

New-Media Literacy

 The ability to critically assess and develop content that uses new media form, and to leverage these media for persuasive communication.

Transdisciplinarity

• Literacy in and the ability to understand concepts across multiple disciplines.

Design Mindset

 The ability to represent and develop tasks and work processes for desired outcomes.

Cognitive Load Management

 The ability to discriminate and filter information for importance, and to understand how to maximize cognitive functioning using a variety of tools and techniques.

Virtual Collaboration

 The ability to work productively, drive engagement, and demonstrate presence as a member of a virtual team.

Agenda





Perfection is the enemy of success!



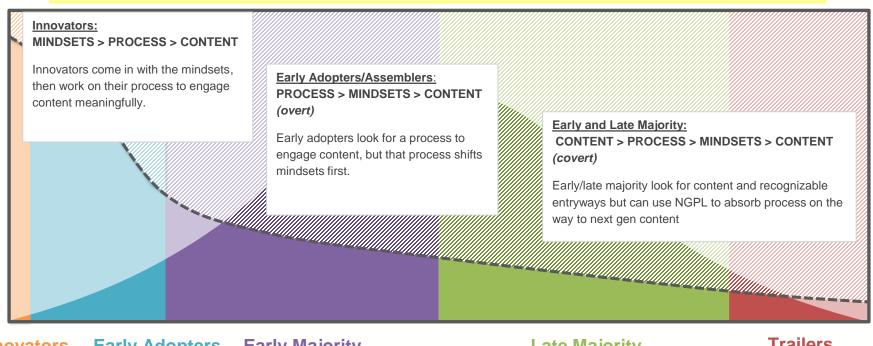
Five Steps to guide You

- 1. Go slow to go fast
- 2. Modify your models but hold to building relationships with students and encourage collaboration
- Stop looking at students as the problem and they need to be saved
- 4. Insure learners are agents of their learning
- 5. Technology is important, but strong support and guidance from you is the back bone of this work



Entryways change at different points on the curve.

While mindsets, processes, and content are optimally connected and reinforcing in a continuous cycle, we believe educators and education systems use different points in that cycle as entryways, depending on where they are in the Adoption Curve. We believe this understanding is crucial to maximizing NGPL for impact.



Innovators 2.5%

Early Adopters 13.5%

Early Majority 34%

Late Majority 34%

Trailers 16%



How To Work To Get There

- 1. Embrace Prototyping
- 2. Continuous Improvement / Versions
- 3. Insure Practices Show Promising Results Before Scaling
- 4. Practice Patience



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