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

Ray McNulty, President – rmcnulty@spnetwork.org
Successful Practices Network – spnetwork.org
National Dropout Prevention Center - dropoutprevention.org
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

1. Set the Stage
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 **slowest** it will be for the rest of your life!
We Live in a VUCA World!
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.

- Tactical Performance
- Adaptive Performance
Operating Excellence
Tactical Performance

Do what we “Already” do even better?

Innovation
Adaptive Performance

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
"Stop asking me if we're almost there! We're nomads, for crying out loud!"
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
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”
Change almost never fails because it is too early. It almost always fails because it is too late.
2. The Challenge
Big Mistake in Education
Be clear about what you do.
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
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
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 it’s getting better every day.
Hi, how can I help?

Make me a haircut appointment on Tuesday morning anytime between 10 and 12.

No problem. I’ll make you an appointment and update you soon.
Your appointment is set
May 3rd at 10AM - Women's Haircut
Never before have digital tools been so responsive to us.
While AI 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 cannot do everything humans can do.

Technology is good at convergent thinking.

It is not good at divergent thinking.
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.
Artificial intelligence is becoming very good at many “Human Tasks” – diagnosing disease, translating languages, providing customer service, and it's 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/AI actively enhances each others complementary skill set

<table>
<thead>
<tr>
<th><strong>HUMAN</strong></th>
<th><strong>Machine</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>Speed</td>
</tr>
<tr>
<td>Teamwork</td>
<td>Accuracy</td>
</tr>
<tr>
<td>Creativity</td>
<td>Replication</td>
</tr>
<tr>
<td>Social Skills</td>
<td>Data Collection</td>
</tr>
<tr>
<td>Divergent Thinking</td>
<td>Scalability</td>
</tr>
</tbody>
</table>

What comes natural for a human, telling a joke, is tricky for a machine. What is straightforward for a machine is, well somewhat challenging for a human.
Successful Learning Requires Both
THE AGE OF PERSONAL BROADCASTING
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

4. Learning
HOW DO YOU LEARN?
# Education, Innovation, Experimentation

<table>
<thead>
<tr>
<th>Pedagogy</th>
<th>Heutagogy</th>
<th>Andragogy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children’s Learning</td>
<td>Self-directed Learning</td>
<td>Adults’ Learning</td>
</tr>
</tbody>
</table>

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.

[SPN Logo] Successful Practices Network
# Role of The Teacher/Educator/Coach

<table>
<thead>
<tr>
<th>Pedagogy</th>
<th>Heutagogy</th>
<th>Andragogy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children’s Learning</td>
<td>Self-directed Learning</td>
<td>Adults’ Learning</td>
</tr>
</tbody>
</table>
| 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

<table>
<thead>
<tr>
<th>Pedagogy</th>
<th>Heutagogy</th>
<th>Andragogy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children’s Learning</td>
<td>Self-directed Learning</td>
<td>Adults’ Learning</td>
</tr>
<tr>
<td>The learner is a dependant personality. Teacher determines what, how, and when anything is learned.</td>
<td>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.</td>
<td>Adults are independent. They strive for autonomy and self-direction in learning.</td>
</tr>
</tbody>
</table>
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.

PERVASIVE CURRENT MODEL

1. Content: Standards
2. Process: Teach, Practice, Test
3. Mindset: “Will it be on the test?”
Process drives mindset drives content.

The mindsets of the learner enable absorption of content.

Next Gen Learning:

1. Process: Personalized, experiential, discovery, embedded, authentic
3. Content: Richer/deeper definitions of student success
I NEED SOME HELP.
PLEASE RETEACH ME!

I ALMOST HAVE IT,
BUT I NEED MORE
PRACTICE!

I'VE GOT THIS!
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.
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?
Rigor/Relevance Framework®
#MSC2018

21st Century

Knowledge Taxonomy

Application Model

A

B

C

D
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

6. Advice
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
3. 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:**
  - MINDSETS > PROCESS > CONTENT
  - Innovators come in with the mindsets, then work on their process to engage content meaningfully.

- **Early Adopters/Assemblers:**
  - PROCESS > MINDSETS > CONTENT (overt)
  - Early adopters look for a process to engage content, but that process shifts mindsets first.

- **Early and Late Majority:**
  - CONTENT > PROCESS > MINDSETS > CONTENT (covert)
  - Early/late majority look for content and recognizable entryways but can use NGPL to absorb process on the way to next gen content.

**Distribution of Adopters:**
- 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
The Next Chapter of Education: Join the Revolution or Accept the Status Quo

Ray McNulty, President – rmcnulty@spnetwork.org
Successful Practices Network – spnetwork.org
National Dropout Prevention Center - dropoutprevention.org

@Ray_McNulty