


## Collaborative Tools for a Changing Educational Context

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Most educational professionals will say,

...they joined their profession with a desire to ignite learning in others, to kindle curiosity & creativity, and to light up the potential of the human mind



Fullan & Langworthy, 2014

## Challenges in Education

Cultural Expectations

Curriculum Scope

Classroom Composition




## Cultural Expectations

- Grading culture
  - ✓ knowledge
  - learning skills
- Standardized tests
- Publicly available
- Influences parent expectations



## Cultural Expectations

- ACHIEVEMENT
- Risks
  - Undervalue
    - learning skills
    - interpersonal skills
    - integrity?
  - Increase in accountability & administrative tasks
  - In context of fiscal restraint,
    - changes implemented rapidly & without due consideration
    - constraints on available resources (facilities, times, materials)




## Challenges in Education

Cultural Expectations

Curriculum Scope

Classroom Composition

ACHIEVEMENT  
grading culture




## Curriculum Scope

**Learning Areas**

- English
- Math
- Sciences
- Humanities & Social Sciences
- The Arts
- Technologies
- Health & Physical Education
- Languages

**General capabilities**

- 21<sup>st</sup> century competencies



## Curriculum Scope


### The Information Age

**Knowledge-based society**


- Economy based on information technology
  - 5 zettabytes of information!
- High-tech global economy
- Ease of access to information

**Information Literacy**

- A curious & skeptical mind
- Critical & constructive criticism of information
- Detect disinformation and manipulation
- Life long learners




## Information Management




## Information Literacy

- A curious & skeptical mind
- Critical & constructive criticism of information
- Detect disinformation and manipulation
- Life long learners




## Globally Applicable Skills

- Collaboration
- Innovation
- High tech skills
- Cultural sensitivity




## 21<sup>st</sup> Century Competencies

<b>Character</b>	• honesty, self-regulation, responsibility, perseverance, empathy, well-being
<b>Citizenship</b>	• global knowledge, involvement, sensitivity, respect
<b>Communication</b>	• effective oral, written, and digital communication
<b>Critical thinking &amp; Problem solving</b>	• design & manage projects, make decisions, solve problems
<b>Collaboration</b>	• engage in learning from and with others
<b>Creativity &amp; Imagination</b>	• economic & social entrepreneurialism



Fullan & Langworthy, 2013


## 21<sup>st</sup> Century Competencies



**General capabilities**

- Personal & social capability
- Ethical understanding
- Intercultural understanding
- Critical & creative thinking
- Information & communication technology capability
- economic & social entrepreneurialism

responsibility, well-being  
 vement,  
 and digital  
 make  
 and with others

Western 


## Curriculum Scope

**Learning Areas**

- English
- Math
- Sciences
- Humanities & Social Sciences
- The Arts
- Technologies
- Health & Physical Education
- Languages


**General capabilities**

- 21<sup>st</sup> century competencies
  - Character
  - Citizenship
  - Communication
  - Critical thinking & problem solving
  - Collaboration
  - Creativity & imagination

Western 


## Curriculum Scope

- WIDE
- Risks
  - survey rather than in depth study
  - students on the sideline of their own learning
  - lack of connection with students

Western 

## Arising pedagogy

- Inquiry-based learning
  - active learning
    - the student is encouraged to participate in the learning process by posing questions, exploring materials, and sharing ideas
  - educators & students are learning partners
  - children are viewed as competent learners
    - capable of complex thinking when deeply involved in the process of learning
      - making thinking & learning visible
      - just-in-time instruction suited to the context, personalities, learning modalities
      - evidence of learning

Western 

## Arising pedagogy

- Deep learning
  - creating and using new knowledge in the world
  - focus is on the learning process rather than mastering all required content
  - learning is social constructed & facilitated through responsive relationships

Western  Fullan & Langworthy, 2013

## Challenges in Education

**Cultural Expectations**


ACHIEVEMENT  
grading culture

**Curriculum Scope**


WIDE  
learning areas  
21<sup>st</sup> century skills

Inquiry-based  
learning  
Deep learning


**Classroom Composition**

Western 


### Education for All




- Education for All (Australia, 2015)
- Education Excellence Everywhere (UK, 2016)
- For Each & Every Child (USA, 2013)
- Learning for All (Ontario, 2013)

Western 

### Classroom Composition




- 24 students
- Developmental Language Disorder
- Mental health disorder
- ADHD
- Specific learning disability
- Cultural & linguistic diversity
- Living in poverty

Western 


### Classroom Composition

- DIVERSE
- Risks:
  - unable to meet the needs of all learners

Western 

### Arising pedagogy

- Universal design for learning
  - educational framework guiding the development of flexible learning environments that can accommodate individual learning differences
- Differentiated instruction
  - varying instructional strategies to meet individual needs in acquiring content and making learning evident

Western 

### Meeting the needs of all learners in the classroom




- Bauer et al., 2010
- Myhill & Warren, 2005
- Fordham Institute, 2008
- Hertberg-Davis, 2009
- Silliman et al., 2000


Western 

### Challenges in Education

<b>Cultural Expectations</b>	<b>Curriculum Scope</b>	<b>Classroom Composition</b>
ACHIEVEMENT grading culture	WIDE learning areas 21 <sup>st</sup> century skills	DIVERSE
	Inquiry-based learning Deep learning	UDL Differentiated instruction


Western 

You can't do this alone!




No teacher can possibly possess all the knowledge, skills, time, and resources needed to ensure high levels of learning for all his or her students

Buffum et al. (2009)



No one person/profession has sufficient expertise to execute all of the functions associated with providing educational services to all children in the classroom

Hadley et al., 2000



**Social Capital**

- Educational professionals supporting and challenging each other through regular & focused conversations & interactions focused on instruction




Hargreaves & Fullan 2012

**Social Capital**

- Educational professionals supporting and challenging each other through regular & focused conversations & interactions focused on instruction


**Collaborative Culture!**




Hargreaves & Fullan 2012

**Collaborative Culture - Benefits**


- Opportunities for reflection
- Improves practice
- Re-invigorates members
- Pulls in reluctant members
- Fertilizes new ideas & innovations; fuels change
- Makes for a more responsive organization
  - Helps members to thrive during change
- Boosts members self-confidence





How educators co-construct understandings of their efficacy collectively can have a significant impact on overall beliefs about an educator's individual effectiveness

Takahashi, 2011


Western 


A persistent, collective social capacity is much more powerful than individuals for developing human capital.

Western  Leithwood (n.d.)  
Hargreaves & Fullan (2012)

### Collaborative Culture


Collaborative Inquiry	Collaborative Implementation
Conversations aimed at improving practice	Interactions aimed at implementing effective instruction



Western 


### Brain-based Learning Principles

- Human cognition
  - ability to understand, represent, and act in the world around us
  - develops through changes in the brain
- neuroplasticity

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### Neuroplasticity

- The ability of the central nervous system to alter itself morphologically or functionally as a result of experience
- Obligatory consequence of internal & external pressures
  - sensory input, motor act, association, reward signal, action plan, awareness
  - enable behavioural change

Western 

### Neuroplasticity Across the Lifespan

- YES!
  - Number of neurons in the brain changes little
  - Number of connections between neurons changes greatly

Western 

## Neuroplasticity Across the Lifespan

- Early in development
  - rapid & exuberant formation of connections among neurons
  - ‘overproduction of synapses’
    - axon growth
    - dendrite development
      - complex shapes
      - multiple branches
      - up to 1m in length



## Neuroplasticity Across the Lifespan

- Later on:
  - synaptic pruning
    - increasing modularity
      - reduces metabolic costs
      - emergence of highly specialized, late-developing functions
    - influenced by environmental & self-generated input
    - organizational changes
    - different learning strategies evoke different connections
  - dendritic sprouting ongoing; new synapses; new neurons

Achieving  
stable  
connections = Learning

## Principles of Neuroplasticity

- Ready for change
- Optimize change
- Stabilize change
- Limit change

## Ready for Change

- Arousal matters
  - alert, engaged, motivated, ready
  - e.g., physical movement; activating background knowledge
- Intentionality matters
  - focused on task, making effort, consistent feedback
- Interference matters
  - distinguish new learning through rich & highly separated contexts
  - interleaving topics during studying



## Optimize Change

- Salience matters
  - repeated exposure to same stimuli reduces activation
  - sufficiently noticeable; multidimensional
  - engages motivation & emotions
- Cognitive distance matters
  - not all neuroplastic responses are alike (limits generalizability?)
  - sufficiently similar to real life applications
- Cognitive load matters
  - desirable difficulty
  - optimal challenge that maximizes learning & minimizes performance detriment

### Stabilize Change


- Repetition matters
  - initial changes are temporary
  - transmission facilitated in frequently activated pathways
  - identifies core pathway
  - ‘retrieval practice’
- Intensity matters
  - sufficient training required
  - distributed (vs. massed) practice
- Consolidation matters
  - reactivation (self-generated: images; note-taking)
  - sleep!

Use it or lose it  
Use it and improve it


### Limit Change

- Attitude matters
  - explore preconceptions explicitly
  - fixed thinking deters learning: you have to want to know
  - learning orientation vs. performance orientation
- Cognitive miserliness matters
  - tendency to avoid cognitive expenditures
  - prefer to see (reinterpret) things as familiar
  - complex thinking requires cognitive effort
  - consider cognitive fatigue
    - interleave tasks of differing cognitive demands


Katz & Dack (2012)


### Limit Change


- Dissonance matters
  - intentional interruption of the status quo
  - problem solvers seek alternative perspectives
  - enables different way of moving forward
  - ‘culture of niceness’
- Risk aversion matters
  - belief that harm from action is worse than harm from inaction
  - BUT doing nothing is still doing something!




Katz & Dack (2012)

### Principles of Neuroplasticity

- Ready for change
  - arousal, intentionality, reduce interference
- Optimize change
  - salience, manage cognitive distance & cognitive load
- Stabilize change
  - repetition, intensity of practice, consolidation
- Limit change
  - attitude, miserliness, dissonance, risk aversion








### Collaborative Culture

Collaborative Inquiry	Collaborative Implementation
Conversations aimed at improving practice	Interactions aimed at implementing effective instruction

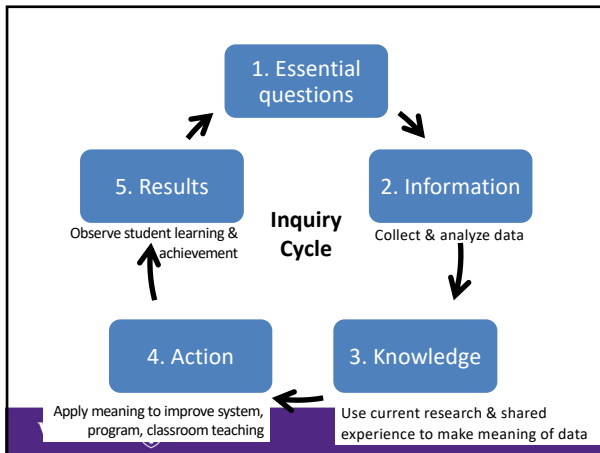


### Collaborative Inquiry

- Views teaching as iterative & improvable
- Intentional coming together to engage in conversation & inquiry about instruction by posing questions, exploring materials, and sharing ideas
- Inquiry-based approach!
  - BONUS! When we engage with 21<sup>st</sup> century learning skills, we’ll be more effective at promoting them in our students!
  - Learners learn from learners!






### Example: Math for Young Children


- Overarching question:  
*What are young children capable of when provided with stimulating classroom environments & with challenging tasks that address foundational mathematical concepts?*

<http://www.mathforyoungchildren.ca/>

Western 


### Bruce et al., 2016

- Participants:
  - Kindergarten to gr. 2 teachers in 1 school (n=7)
  - 3 researchers
- Curriculum area of inquiry:
  - Geometry & measurement
- Essential questions:
  - What do students understand?
  - What do we need to explore further?

Western 


### Bruce et al., 2016

- Co-developed exploratory tasks & specific implementation structures

Western 

### Bruce et al., 2016

- Co-developed exploratory tasks & specific implementation structure


Western 

### Bruce et al., 2016

Teachers observed small group of students trying tasks; discussed & made observation guide

In classrooms, teachers completed more observations; took notes & pictures

Teachers met to discuss & compare data from different ages & grades

Western 

### Bruce et al., 2016

- Observations about practice:

‘What’s been so powerful about it is the intentionality of the planning of the lessons and the careful observations and the next lesson coming out of those careful observations.’

‘You can see the development from one grade to the next when you are all on the same page’



### Bruce et al., 2016

- Observations about practice:

‘...the value of taking the time to think about how the children are thinking and recording. Then coming back together and speaking with other teachers teaching those same grades and being able to see the continuum of learning from kindergarten to grade 2 was huge’



### Bruce et al., 2016

- Observations about student thinking:

‘And in some of the tasks...we tried this notion of high-cognitive demand. And [that has] given us all these sort of treats that we’ve uncovered – like all of a sudden we have increases in persistence and increases in risk-taking and increases in engagement levels that are really quite surprising to us’



### Bruce et al., 2016

- Observations about student thinking:

‘...just giving them the words & challenging them. Not just saying, you’re in kindergarten you can’t do this yet, but, the grade 3s are doing this, do you think you can? ...giving them the challenge to be those mathematicians that they can be’



### Bruce et al., 2016

- Outcomes:

- increased

- teacher confidence in their students’ learning
- estimations of student competence
- student outcomes on standardized math tests
- engagement by teachers in collaboration



- collaborative process

- generated shared curriculum-relevant tasks & knowledge across grades
- enabled teachers to generate increasingly more challenging tasks (sequenced & appropriate)




Collaborative inquiry involving co-operatively planning, implementing, observing, and reflecting is a powerful capacity-building force enabling sustained and precise practice on relevant concepts.

Bruce et al., 2016



## Collaborative Inquiry


- As a collective enterprise, the group is a powerful vehicle for effecting lasting, system change
  
- How do we begin?

Western 

## Transitions toward Collaborative Inquiry

Leadership


- Avoid overuse of...
  - regulating or ‘arranging’ collaboration
  - assigning collaboration as ‘a project’
  - instilling formal, bureaucratic procedures
  - mandating reform
  
- Provide...
  - autonomy; decisional power
  - meeting time over time!
  - it takes time to develop collaborative habits of mind!

Western 

## Transitions toward Collaborative Inquiry



Leadership


- Participate...
  - as a learner
  - set goals & direction collegially
  - be essential but dispensable

Western 

## Transitions toward Collaborative Inquiry


Team Members


- Be a seeker
  - have a mindset open to learning & sharing 
  - recognize
    - instructional practice can be improved
    - anecdotes shared with your most comfortable colleagues are not enough to change a culture!
    - deliberate change requires deliberate measures 
  
- Be inclusive
  - spend time with people who have different perspectives/thoughts/expertise
  - considering unique ideas spurs change
  - diversity lends itself to different insights, capabilities, and teaching strategies

Western 

## Transitions toward Collaborative Inquiry



Team Members


- Be on point 
  - **‘Our Students, Our School’**
  - sustainable & effective practice through
    - deep, widely shared ownership of students & reform by educators, educational support staff, school & school board leaders
    - collective responsibility
    - shared challenges
    - shared successes
  - promote school level planning and responses for struggling students (etc.)
  - shift symbolically, shift linguistically
    - make an intentional shift from ‘my students’ to ‘our students’

Western  Hewson (n.d.)

## Transitions toward Collaborative Inquiry

Team Members

- Be engaged 
  - be determined that you can
    - achieve something together
    - find a solution that fits
  - be trustworthy & interested in your colleagues
  - provide both challenge & support
  - follow through: do what you said you would do
  - peers are a strong source of motivation
  
- Be calm but relentless with leadership 
  - you need time & autonomy
  - practice cannot be prescribed

Western 

## Transitions toward Collaborative Inquiry

### Team Members

- Be the pull for your colleagues
  - be excited about your progress
    - people are motivated by good ideas tied to action
    - people are energized by pursuing action with others
  - nudge with options that make choices likely
    - people choose solutions they like and that fit
  - use the group to change the group
  - change is primarily an experientially based learning process
- Be committed
  - establishing a persistent collaborative culture takes persistence!



Western **It takes time to develop collaborative habits of mind!**



Strive for a school culture reflecting many strong, capable professionals working passionately together, under visionary leadership, so all students succeed

Hargreaves & Fullan, 2012

Western

## Collaborative Culture

Collaborative Inquiry

Conversations aimed at improving practice

Collaborative Implementation

Interactions aimed at implementing effective instruction

Western



No one person/profession has sufficient expertise to execute all of the functions associated with providing educational services to all children in the classroom

Western

Hadley et al., 2000

## Collaborative Implementation

- Working together to achieve shared goals aimed at providing educational access to all learners
- Educational professionals with complementary areas of expertise partnering to improve educational access to struggling learners

Western

## Collaborative Implementation

- What does it look like?
  - Educators partnering with
    - Other educators
    - Other educational professionals
      - Speech Language Pathologists (SLPs)
      - Psychologists
      - Occupational Therapists
      - Physiotherapists
      - Specialist Educators

Western

### Collaborative Implementation

Parallel Services

Consultation Services

Integrated Classroom Services

### Collaborative Implementation

Parallel Services

Consultation Services

Integrated Classroom Services

- Pull-out approach
- Each professional addresses student's needs within their own area of expertise
- Specialist works with student in a setting separate from the classroom

### Collaborative Implementation

Parallel Services

Consultation Services

Integrated Classroom Services

- PRO:**
  - Student receives direct instruction tailored to unique needs
  - May be particularly important for stabilizing initial change in some skills or strategies
- CON:**
  - Reduced opportunities for integration of goals across settings
  - May be little communication between professionals
  - Loss of instructional time & social integration
  - Limited (if any) opportunities to reinforce goals from pull-out service

### Collaborative Implementation

Parallel Services

Consultation Services

Integrated Classroom Services

- Specialist called in to comment on & make recommendations regarding a case
- Educator implements strategies
- PRO:**
  - Strategies integrated directly in classroom 'just in time' to support learning throughout the day
  - May make strategies more salient & reduce cognitive distance
- CON:**
  - Adds additional educator burden!
  - Student support may occur with insufficient frequency to change behaviour

### Collaborative Implementation

Parallel Services

Consultation Services

Integrated Classroom Services

- Co-teaching or co-practice approach
- Professionals work together directly in the classroom
  - support student learning
  - implement differentiated instruction & related supports
- Professional roles may be integrated
  - complementary fashion
  - fully integrated with joint determination of needs, goals, plans, & implementation activities

### Collaborative Implementation

Parallel Services

Consultation Services

Integrated Classroom Services

- PRO:**
  - Inclusive approach
  - Allows strategies to meet unique needs to be integrated directly in authentic learning experiences
  - Increases capacity for differentiated instruction with other 'at risk' students
  - Less instructional time loss & social disruption for the student
  - Reduces cognitive distance, affords repetition, may optimize engagement and intentionality related to classroom learning

## Collaborative Implementation

Parallel Services


Consultation Services

Integrated Classroom Services

- **PRO:**
  - Promotes interprofessional understanding
  - specialist gets to know the curriculum & how the suggested strategies work
  - educator develops greater understanding of underlying learning issues for that student
- **CON:**
  - Fewer opportunities for student to receive direct instruction tailored to unique needs
  - It takes time to plan & implement
  - It takes understanding, flexibility, and respect


## Example - Vocabulary

- Overarching question
  - How effective is a SLP-educator collaborative co-teaching model in improving vocabulary skills of students who do or do not qualify for speech and language services?*




## Throneburg et al., 2000

Pull out	Classroom-based services	Collaborative Co-practice
<ul style="list-style-type: none"> <li>• 50 min / wk</li> <li>• Target vocab &amp; other appropriate goals</li> </ul>	<ul style="list-style-type: none"> <li>• SLP taught same vocab but teacher not involved</li> </ul>	<ul style="list-style-type: none"> <li>• SLP &amp; teacher met weekly (40 min ea.); identified vocab &amp; plan</li> <li>• Team taught in class, 5 targets/wk (40 min, 1/wk; 12wks)</li> </ul>
<ul style="list-style-type: none"> <li>• 1 class ea. K, gr. 1, 2, 3 (n=43; 9 S&amp;L)</li> <li>• Randomly assigned from 2<sup>nd</sup> school</li> </ul>	<ul style="list-style-type: none"> <li>• 1 class ea. K, gr. 1, 2, 3 (n=60; 11 S&amp;L)</li> <li>• Randomly assigned from 2<sup>nd</sup> school</li> </ul>	<ul style="list-style-type: none"> <li>• 1 class ea. K, gr. 1, 2, 3 (n=74; 12 S&amp;L)</li> <li>• Target school</li> </ul>

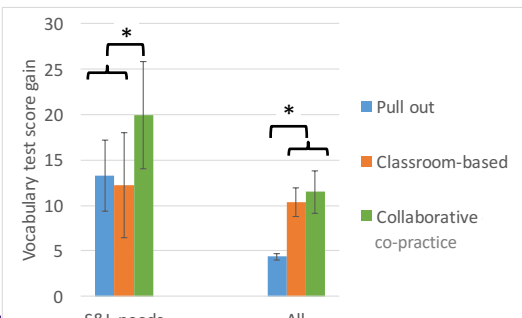


## Throneburg et al., 2000

- Outcome measure
  - Total target word corpus per grade = 60
  - 20 randomly chosen for pre vs. post test
  - Tasks:
    - Define word verbally
    - Use word in a sentence
    - Recognize the word's meaning from choice of 2
  - Scoring:
    - 4 points (precise, vague, incorrect, no response)




## Throneburg et al., 2000




The bar chart displays the mean vocabulary test score gain for two groups: 'S&L needs' and 'All'. For the 'S&L needs' group, the Collaborative co-practice model (green bar) shows the highest gain, significantly higher than both the Pull out (blue) and Classroom-based (orange) models. For the 'All' group, the Collaborative co-practice model also shows a significantly higher gain compared to the Pull out model. Error bars represent standard error, and asterisks indicate statistical significance.

Group	Pull out	Classroom-based	Collaborative co-practice
S&L needs	~13	~12	~20
All	~4	~10	~12



## Throneburg et al., 2000


- Compelling evidence
  - Advantage for classroom-based team-teaching models over pullout intervention for targeted vocabulary
- Lots of planning time!



### Example – Narrative Language


- Overarching question

*Do children at high or low risk for language difficulties benefit from SLP-educator collaborative whole-class narrative instruction?*

Western 


### Gillam et al., 2014

Business-as-usual comparison	Classroom-based services
<ul style="list-style-type: none"> <li>Student SLP assisted classroom teacher on same schedule as expt' l class</li> </ul>	<ul style="list-style-type: none"> <li>Narrative language instruction by SLP in classroom                             <ul style="list-style-type: none"> <li>Story grammar &amp; elaboration</li> <li>Independent storytelling</li> <li>Embedded vocabulary</li> </ul> </li> <li>Educator facilitated &amp; assisted student participation</li> <li>30 min, 3x/wk for 6 wks</li> </ul>
<ul style="list-style-type: none"> <li>Gr. 1 class; low risk (n=7); high risk (n=12)</li> </ul>	<ul style="list-style-type: none"> <li>Gr. 1 class; low risk (n=10), high risk (n=11)</li> </ul>

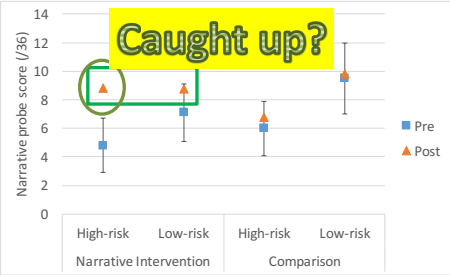
Western  Risk: cut point standard score of 90 on Test of Narrative Language

### Gillam et al., 2014


- Outcome measure
  - Narrative probe (child tells story from a single picture)
    - Rubrics for scoring:
      - Macrostructure – character, setting, initiating event, internal response, plan, attempt, consequence
      - Microstructure – coordinated & subordinated conjunctions, adverbs, metacognitive verbs, elaborated noun phrases
  - Vocabulary probe (criterion-referenced)
    - Story grammar, literacy knowledge, feelings, verbs, adjectives; "Tell me what the X means"
    - Rubric for scoring: incorrect/no response, some related description, accurate information resembling a definition
- Pre & post testing

Western 

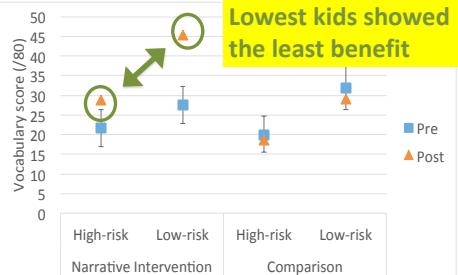
### Gillam et al., 2014




Created based on reported data

Western  High-risk group made clinically significant change in narrative language after receiving intervention in the classroom

### Gillam et al., 2014




Created based on reported data

Western  All children in experimental classroom made gains on vocabulary with greatest gains observed for the low-risk group

### Gillam et al., 2014

- Highly suggestive evidence
  - Classroom-based narrative language with embedded vocabulary instruction can lead to clinically significant change in
    - Narrative language
    - Vocabulary (but perhaps not sufficient for kids with lowest skills)
- SKILL
  - Supporting Knowledge in Language & Literacy
    - <https://www.wvu.edu/Details.cfm?ProdID=228&category=2>

Western 

## Integrated Classroom services

- SLP-educator collaborations
  - Reviewed by Archibald (2017)
    - Targeted vocabulary
    - Narrative language
    - Literacy-related
    - Probably insufficient for
      - specific grammatical targets
      - speech production
- Consultative practice for other school-based professional services
  - OT(Campbell et al., 2012; Ratzon et al., 2009)
  - Mental health programs (Ballard et al., 2015 Han et al., 2015)

**How to begin?**

## Transitions toward Collaborative Implementation

Leadership

- Understand the multiple roles that educational support professionals may play in your school
  - examine the evidence
- Advocate for flexible service delivery with relevant agencies
  - professionals need both agency & autonomy for implementing best service delivery options in the context
- Make educational support professionals part of your team
  - provide opportunities for building co-professional sharing and knowledge development
  - include them in your collaborative inquiries & staff meetings
  - keep them informed about school happenings
  - participate in innovation around practice change

**Acknowledge the resources needed for co-teaching**

## Transitions toward Collaborative Implementation

Educators

- Begin
  - seek consultations around particular students
  - extend an invitation for collaborative co-teaching
- Presume competence
  - be respectful, interested, open to learning
  - learn about your colleague's expertise
- Maximize complementary expertise
  - observe & consider problems together
  - determine goals & implementation activities together
  - explore & define roles & responsibilities
- Establish methods of communication & use them regularly
  - be clear & solution-focused about the time you can invest
- Persist in finding your groove
- Seek administrative support

## Transitions toward Collaborative Implementation

Support Professionals

- Begin with effective consultation
  - listen deeply to educator's concerns regarding target students
  - specifically address educator's concerns in your response
  - make suggestions but don't assume you have the answers
  - be mindful that your language conveys your interest in working jointly
- Start small
  - begin with an educator with whom you have made a connection, particularly around a specific student
  - offer to join with educator in investigating implementation of recommendations
  - target skills with evidence for classroom-based services

## Transitions toward Collaborative Implementation

Support Professionals

- Presume competence!
  - be respectful, interested, open to learning
  - learn about your colleague's pedagogical approach & style
- Maximize complementary expertise
  - observe & consider problems together
  - determine goals & implementation activities together
  - explore & define roles & responsibilities
- Establish methods of communication & use them regularly
  - take the lead in ensuring open communication
- Persist in finding your groove
  - practice change takes investment
- Seek administrative support
  - know the evidence!

## Transitions toward Collaborative Implementation

- Stages of Collaboration
  - Co-activity
    - resembles parallel play; separate instructional activities with little sharing of ideas
  - Cooperation
    - jointly establishing general goals (not individual goals)
  - Coordination
    - sharing opinions & instructional strategies related to specific students; no role release
  - Collaboration
    - informal networking & sharing of responsibilities; high degree of trust & respect



Where practitioners embrace open, fluid relationships, co-practice can result in less reductive thinking & acting in the co-professional space, and a greater capacity to work truly collaboratively to individualize practice to the needs of the child

McKean et al., 2016



## Collaborative Culture – Key Points

- Persistent, collective social capacity is a powerful tool for effecting change & providing peer support
- Achieved through
  - collaborative inquiry
    - conversations aimed at improving practice
  - collaborative implementation
    - interactions aimed at implementing effective instruction



## Collaborative Culture – Key Points

- Considered through lens of principles of neuroplasticity & what matters
  - Ready for change
    - arousal, intentionality, interference
  - Optimize change
    - salience, cognitive distance, cognitive load
  - Stabilize change
    - repetition, intensity, consolidation
  - Limit change
    - attitude, miserliness, dissonance, risk aversion

Applied to  
all learners:  
Educators  
& students!



## Collaborative Culture!

- To support the learning of all students, collaboration is not only desirable but an **essential** part of pedagogy (Head, 2003)
- It isn't about whether or not to collaborate, its about how to **get the collaboration right!** (Leithwood, 2011)



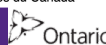
## Thank you!

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Collaborative Tools for a Changing Educational Context  
Mind Brain Education Conference 2019  
Lisa Archibald, PhD  
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