SUPPORTING SELF-REGULATED LEARNING THROUGH PRACTICE-BASED RESEARCH

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2017 Presidential Address
Research Agenda

• How are classroom processes implicated in children’s development of self-regulated learning (SRL)?

• How can researchers and teachers work together to support self-regulation in classrooms and schools?

Presidential Theme

• Bridging theory/research and practice through productive partnerships
This Presentation ...

• How has my research benefited from and contributed to productive research-practice partnerships (RPPs)?

Agenda

• Grounding in SRL theory and research principles
• Current educational and research contexts
• Examples from three projects
• Benefits of and challenges for RPPs
• A Div. 15 initiative
Theoretical and Research Principles

• What is self-regulation?

  • Ability to do your job without being asked, told, or shown (Grade 1, 2, 3 students)

  • Ability to control thoughts and actions to meet goals and respond to environmental stimuli (Zimmerman, 2008)
    • Attending to key features of the environment
    • Resisting distractions
    • Persisting when challenged
    • Responding adaptively and flexibly

• Targets for self-regulation include: cognition, motivation, emotion, learning, behavior ...

• Self-regulation in any domain involves metacognition, motivation, and strategic action (Zimmerman, 1990).
Theoretical and Research Principles

- Self-regulation is a significant source of achievement differences among students (Zimmerman & Schunk, 2011).
- Self-regulation is a developmental process and can be learned.
  - Even children with exceptional learning needs can improve their SRL (Butler; Harris & Graham; Wong).
- Self-regulation supports personal and social forms of learning.
  - Co-regulation (McCaslin)
  - Socially shared regulation (Hadwin; Jarvela; Whitebread)
  - Socially responsible self-regulation (Hutchinson)
- Self-regulation is an asset that cuts across socio-demographic boundaries (McInerney & Wanless, 2012; Perry et al., 2017).
- Well-known models of self-regulated learning (SRL) are cyclical—describing what learners do before, during and after they engage in all types of tasks (Butler, 2002; Winne & Hadwin, 1998; Zimmerman, 2002).
Global Educational Context

- Learning and living in 21st Century global and knowledge-based societies requires:
  - adaptive, flexible, creative thinking;
  - continuous, life-long learning.

We are: “... [preparing learners] for jobs that do not yet exist, [using] technologies that have not yet been invented, and [solving] problems not yet recognized as problems” (Dumont et al., 2012).

Educational Context in British Columbia

- New curriculum emphasizes personalized learning, social emotional learning, inquiry learning, ...

- Teachers are engaged with innovations that can benefit from and support SRL frameworks
Research Context

• More talk than ever about the role research should play in improving education (Coburn & Penuel, 2016)

• As educational psychologists, we are challenged to “give our science away.”

• Why aren’t our evidence based practices (EBPs) adopted and sustained in practice?
• Could it be that the way we pursue the development of EBPs with teachers actually exacerbates the research to practice gap?
Research Context

• Traditional approaches to research focus on three types of studies:
  - Efficacy: Investigate practice under ideal conditions
  - Effectiveness: Investigate practice under real conditions
  - Dissemination: Investigate whether practices can be implemented by practitioners in real world conditions

• Problem => lots of efficacy studies, fewer effectiveness studies, and even fewer dissemination studies

• Problem => failure to take into account barriers to implementation in the communities where teachers and students are living

Lucyshyn, 2016
Research Context

- Participatory approaches to research:
  - Action research
  - Communities of practice
  - Collaborative inquiry

- Engage teachers in cycles of inquiry, planning, enacting, reflecting

- Goal: teachers generate knowledge about teaching and learning they can use to develop and implement effective practices in their classrooms
What is a Research Practice Partnership

- Long term collaboration between researchers and practitioners
- Addresses mutual interests and goals
- Focuses on problems of practice
- Involves iterative cycles of planning, enacting, and reflecting

Three Examples

- Supporting self-regulation through music education
- A longitudinal study of children developing self-regulating learning (K-6)
- A province-wide initiative aimed at enhancing instruction for young children struggling in reading

Coburn & Penuel, 2016
Supporting Self-Regulation through Music Education
Context

- After school music education program in Vancouver’s Downtown Eastside
- Operates on a philosophy of “music for all”
- Students are children who live and attend school in the neighbourhood
  - From diverse cultural and linguistic communities
  - With high abilities and disabilities
  - Facing various forms of adversity
- Teachers are musicians
  - most have no formal teaching preparation
Shared Purpose

• Empowering children and youth to feel and be in control of their learning and life circumstances

• Fostering self-regulation => metacognition, motivation, and strategic action

• Fostering self-determination => meeting fundamental needs for autonomy, belonging, and competence
Participants & Activities

• 15 teachers
  – 1 music therapist
  – 3 admin/staff
  – 3+ researchers

• 21 focal students
• 200+ enrolled children
• 10 children/youth engaged in the cross-age peer-mentoring initiative
Documentation

- Teachers’ documentation of their process of inquiry
  - Planning and reflecting templates
- Researchers’ observations of teachers’ implementation of SRL supportive teaching practices
  - Classroom observation protocol

Diagram:
- Teacher Learning Teams
- Classroom Visits with 1-1 Debriefs
- Hearing from Children & Youth
- Cross-Age Peer Mentoring Program
SRL Promoting Practices …

Providing structure
- Tasks/Activities
- Clear expectations & instructions
- Familiar routines & participation structures
- Visual prompts

Giving students influence
- Choices, involvement in decision making
- Control over challenge
- Self-reflection, self-assessment

Supporting, scaffolding, co-regulating
- Teacher support
- Peer support
- Lots of metacognitive language
- Modeling

Creating a community of learners—group cohesion
Accommodating individual differences
One Teacher’s SRL Inquiry
How can I foster a greater spirit of teamwork, cooperation, and respect in my classes? How can I motivate my students to be more deeply engaged in classroom activities?

**Plan:**
(a) Involve students in setting classroom goals and developing activities and rules
(b) Be more transparent about goals and teaching strategies and more clear in outlining instructions for class activities
What happened?

**What Rory did**
- Asked students what skills they wanted to work on in class, how they could cooperate better

**What he noticed**
- At first ... didn’t get many serious responses, but then students offered ideas about “signs”/gestures and point systems to cue behavior ... mostly what they experienced in school
Students may not have had many opportunities to give input. Students didn’t generate original ideas, but ... they made the call and held themselves responsible.

Plan:
(a) Continue giving students input and follow through on the systems we’ve put in place and reference them often
Time went by ...
One student was unwilling to participate in group activities and this is disruptive to the class. How can I encourage him to participate? Or can we find an alternative that we are both Ok with?

Plan:
(a) Work with focal student ... help him develop skills that help him feel more comfortable and be more cooperative in a group setting
Meet Bruce

• Teachers describe him as a “bright, energetic, imaginative” child.
• He is on the autism spectrum.
• He is “more” cooperative in a one-on-one setting, but struggles in a group.
• “I’d like to help him feel more comfortable and be more cooperative in a group setting ... [sometimes he] is disruptive and I’d like to minimize that disruption.”
What happened?

**What Rory did**
- Met with Bruce each day before class, outlined the day’s activities, allowed him to choose to participate or choose an alternative activity

**What he noticed**
- Bruce welcomed the opportunity to choose and, working alone, he didn’t disrupt the class
Plan:
(a) Think of a group activity that will be tolerable for Bruce
(b) Take advantage of his imagination, knack for word play and creative description

How can I encourage Bruce to participate in group activities and overcome his anxiety about this?
What happened?

What Rory did

• Encouraged Bruce to write songs for the class
• Offered to guide the group in composing melodies to Bruce’s lyrics and arranging the song to perform

What he noticed

• Bruce was reluctant at first
• But over time, he became a bit more engaged and cooperative in this and other group activities
• Ultimately, they performed one of his pieces at the spring concert
“He was visibly proud.”
Longitudinal Study of Children Developing SRL.2
Context

- Urban/Suburban
- Motto = “Students come first”
- 24 elementary and 7 secondary schools
- 16,000 students
  - From diverse cultural and linguistic communities
  - And the full range of SES communities
  - Do well on provincial examinations
  - Strong record of graduation
Shared Purpose

Support children to develop independent and academically effective approaches to learning, help them self-regulate for learning (SRL)

- Engage in guided and sustained professional learning about SRL and SRL promoting practices
  - Teacher inquiry and collegial collaboration
**Project Design & Activities**

- **District Learning Team**
- **Schools**
- **K – 6 Teachers**
- "The Kindergarten Cohort"

**Meetings**

- Classroom Visits
- Teachers Contributing to Data Collection

**Years**

- 2014
- 2014/15
- 2015/16
- 2016/17
- 2019/20

**Cohorts**

- Kindergarten Cohort
- Grade 1
- Grade 2
- Grade 3
- ...
## The Kindergarten Cohort

<table>
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<tr>
<th>Year</th>
<th>Children¹</th>
<th>Schools</th>
<th>Teachers</th>
<th>Classrooms</th>
<th>French Classrooms²</th>
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<td>7</td>
<td>20</td>
<td>15</td>
<td>4 (54)</td>
</tr>
<tr>
<td>1</td>
<td>193 (112)</td>
<td>7</td>
<td>21</td>
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<tr>
<td>3</td>
<td>189 (99)</td>
<td>6</td>
<td>24</td>
<td>19</td>
<td>4 (28)</td>
</tr>
</tbody>
</table>

1. Boys in parentheses
2. Students in parentheses

*Note.* Families reported 56 individual cultures/ethnicities and represented a range of SES communities
Research Questions

• Does children’s self-regulation in kindergarten predict their self-regulated learning (SRL) in grade 1 and 2? ✔

• How is their self-regulation associated with their overall adjustment to and success in school? ✔

• Who is vulnerable in their development of SRL? How? ✔

• What can we do as educators to support children’s SRL and success in school? ✔
Teachers’ Questions

• What’s going on for you and your learners?
• Where does your focus need to be?

• What have you tried?
• Has it made a difference?
• How do you know?
Supporting Cycles of Strategic Action

Activity in Context

Emotions & Motivation
- History, Strengths, Challenges, Metacognition, Knowledge, Beliefs, Agency
- What’s my plan?
- What am I being asked to do? What do I want to do?
- What adjustments do I need to make?
- How am I doing?
- What strategies can I apply?
- What’s my plan?

Cycles of Self-Regulated Activity

Adapted from Butler, 2002; Butler et al., 2011
What Is Self-Regulation In “Kid Friendly” Terms?

- As part of her learning team project, Kelsey asked: How can we define self-regulation in “kid friendly terms?” How can we help them (her grade 1, 2, 3 students) to understand it?

Kelsey Keller, Baker Drive Elementary, Coquitlam
What Is Self-Regulation In “Kid Friendly” Terms?

1. What is the JOB?
   - the steps (instruction)
   - can you do the job?
   - do you know to ask for help?

2. How to do the JOB?
   - what tools?
   - where to do the job?
   - when to do the job?
   - are there “extra skills” needed?

3. Why do we do the JOB?
   - to learn something new
   - have fun, make friends
   - build stamina
   - to practice Self-Regulation
What is my job?
Getting ready for outside

What are the steps?
1. Put coat on
2. Put outside shoes on
3. Put pinny on
4. Line up & Stay quiet
How do I do my job?

- What tools?
  - outside shoes
  - coat
  - pinny

- Where? With who?
  - cloak room
  - By yourself
Quelle est la tâche?

Les étapes
(l'instruction)

Peux-tu faire la tâche?

Sais-tu à qui tu peux demander de l'aide?

Jenn Ross, Kindergarten, Delta School District
Students Self-Assessing SRL
Students Self-Assessing SRL
Changing Results For Young Readers

Seeks to increase the number children in BC who are engaged, successful readers ... using current research and an understanding of what fosters reading success.
Participants & Activities (2014/15)

• 57/60 school districts
• 672 teachers
  – Classroom
  – Specialist
  – School administrators
• 480 focal students
  – Students not meeting expectations in reading
• 311 completed case studies
• 10,080 enrolled children
Some Results

Changes for Focal Children
- Reading closer to grade level: 61%
- Improvements in reading for meaning: 96%
- Improvements in self-regulation: 70%

Changes in Teaching Practices
- Increased use of evidence-based practices: 80%
  (attributed to participation in CR4YRs)
- Using CR4YRs recommended strategies: 79%
- Using CR4YRs recommended resources: 79%
- Increased collaboration with colleagues: 85%
- Increased use of inquiry approach to solve problems: 69%

Changes in Teachers
- Increase in efficacy for teaching reading (attributed to participation in CR4YRs): 95%

Jeroski, 2015
Testimony from District Advocates (CR4YRs)

“Over the past 3 years the teachers involved with our CR4YR initiative have been immersed in cross-district conversations about best practices in early literacy .... CR4YR grounded the conversations with a focus on research, thoughtful provocations and structured ongoing reflections.”

“So many said, ‘I wish I knew this when I began my career!’ ... Teachers talk so knowledgeably about their students reading, they are more focused on developing each student’s reading process ... and less focused on individual skills. There used to be a lot of talk about just teaching all the sight words, or letter sounds. Now they focus more on the whole process.”
Testimony from Music Teachers

“It’s brought a lot of joy and creativity to addressing challenges in the classroom.”

“Talking with other SRL teachers has given me ideas about things I can try with all of my students. I came to [the music program] with no formal teacher training, so having SRL tools to work with has been very useful.”

“This project has radically shaped my experience of teaching at the music program ... I would have been too discouraged to continue teaching after 2 years on my own, had this program not come in to keep me motivated to experiment and try tools that I know work in other places.”
Benefits for Research Practice Partnerships

• For practitioners
  • Increased access to research —> increased use of research for making practice and policy decisions
  • More usable interventions —> sustainability
  • Increased capacity in systems and stakeholders to engage in research-informed improvement efforts

• For researchers
  • Deeper level of commitment and engagement on the part of teacher participants
  • Opportunities to develop and test theory in naturalistic contexts —> more robust, ecologically valid, practical models of learning/SRL

Coburn & Penuel, 2016
Challenges For Research Practice Partnerships

• Communication
  • Need to develop a common language for discussing concepts and issues
  • Negotiating new roles and responsibilities

• Organizational realities of educational systems
  • Who is the “partner”? 
  • How do you bring others on board?
  • There will always be competing points of view and pressures

• Turnover

Coburn & Penuel, 2016
Research Agenda for RPPs

• We need to study the consequences of RPPs
  • Positive
  • Negative

• We need comparative studies that can reveal how partnership designs might affect outcomes
  • For teachers
  • For learners

• We need studies that examine the strategies that partnerships use to address inherent challenges

• We need to attend to the role politics plays in RPPs

Coburn & Penuel, 2016
Ad Hoc Committee on Professional Learning

“We need to position our organization and membership to better reach out to teachers, administrators, publishers, professional development providers, and other stakeholders” (President-elect Nussbaum).

• Members are representatives from our committees
  • Educational Policy
  • Membership
  • Webinars
  • Publications
  • Executive
  + Communications Director
Ad Hoc Committee on Professional Learning

• Framing thoughts
  • Communication needs to be a two-way street
  • Partners need to be actively involved in setting the agenda
  • We can draw on participatory frameworks
  • Our goal should be to affirm agency and build capacity

• Possible strategies
  • Webinars and/or podcasts
  • More traditional publications (e.g., books)
  • Communications platforms for “other” audiences (e.g., FaceBook & Twitter)
  • Data bases and/or repositories for resources

• We will report next year!
Thank You!

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