Supporting Self-Regulation and Self-Determination in School

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Agenda

• Self-Regulated Learning (SRL) 101
  – What is it?
  – Why is it important?
  – What can we do to support it in school?

• Self-Determination & Positive Psychology

• Next Steps
  – Resources
  – Opportunities
Getting Started

• What does self-regulation mean to you?
  – What do you know?
  – What do you wonder?
What is Self-regulation?

• Ability to control thoughts and actions to achieve personal goals and respond to environmental demands (Zimmerman, 2008)

• It involves ...
  – Attending to key features of the environment
  – Resisting distractions
  – Persisting when tasks are difficult
  – Responding appropriately, adaptively, flexibly
  – Delaying immediate gratification to meet a more important long-term goal
What Does It Look Like?
Self-Regulation Cycle

1. Goal Associated With a Task/Activity
2. Make a Plan
3. Enact Tactics/Strategies
4. Monitor Progress
5. Make Adjustments
What Do We Regulate?

Cognition & Metacognition
- Makes good judgments about the time it will take to complete a task.
- Makes realistic evaluations of his/her performance.

Motivation
- Enjoys learning new things.
- Is willing to try challenging tasks.

Emotion
- Is able to talk about feelings or describe emotions.
- Copes well with frustration or disappointment.

Action
- Can manage a set of directions.
- Chooses a quiet space to work, free of distractions.
Self-Regulated Learning (SRL) reflects independent, academically effective approaches to learning.
Metacognition

- Self-Awareness
  - Awareness of learning strengths and weaknesses
- Task Awareness
  - Ability to analyze the demands of tasks/activities
- Strategy Awareness
  - Knowledge of effective thinking and problem solving strategies to cope with the challenges tasks present
Motivation

Beliefs About Ability
• Fixed or Growth Mindset

Engagement
• Focus on personal progress/learning
• Willing to try challenging tasks
• View errors as opportunities for learning

Empowerment
• Agency & Control
Fixed Versus Growth Mindsets

http://www.youtube.com/watch?v=TTXrV0_3UjY

Strategic Action

- Choosing from a repertoire of strategies those best suited to the learning situation
- Applying strategies effectively and efficiently
Why Is SRL Important?

• Self-regulated learners are successful in and beyond school.
  ➢ Higher motivation and confidence
  ➢ Productive thinking skills and strategies (cognition)
  ➢ Task relevant behaviour
  ➢ Achievement

• All students benefit from instructional contexts that support SRL, even students with exceptional learning needs.

• SRL promoting practices prompt teachers to consider the needs of all learners.
When Is SRL Important?

Across the lifespan

Early Years
Middle Years
Secondary & Beyond
For Early Success in School ...

- Low levels of self-regulation before school predict academic difficulties in school.
  - Emotional regulation (coping with frustration, persisting)
  - Behaviour regulation (following directions, working independently)
- Children with poor regulation have problems with behaviour, completing academic tasks, and relating to peers and their teachers.
- Performing well on tasks that require self-regulation predicts early school achievement even more powerfully than IQ scores and knowledge of reading and math.
- Successful self-regulation in kindergarten predicts achievement through grade 6.
For Success in Middle Years ...

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<tr>
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We need to create environments that are psychologically safe and intellectually challenging—encourage autonomy but provide appropriate levels of support.

See J. Eccles & Colleagues writings on the topic stage-environment fit.
For Success in High School ...

• Learning to take responsibility for their learning and motivation

• Preparing for transitions to work or post-secondary where they will need to work and learn independently
  – Learning to grapple with complex tasks
  – Experiencing learning challenges – challenges are opportunities to learn to SRL
  – Applying effort appropriately not just applying more effort
  – Recognizing tasks have a bigger purpose, not just “things the teacher needs to have a grade”
SRL Fits With Personalized Learning ...

**Personalized Learning: From a Learner's Perspective**

**Learner**
- I know what I need to do to be successful
- I work by myself and with others in inquiry and project-based learning situations
- I am learning through play, from my teacher and increasingly from others
- I am developing my unique character as a learner
- I am developing my unique character as a learner
- I learn how to read, write and do math
- I am learning about my world and my community
- I am learning about my world and my community

**Teachers**
- Guide me in applying my reading, writing and math skills to a variety of projects
- Provide me with opportunities to build my competencies
- Assist my learning and monitor my progress
- Introduce me to my assessment
- Provide me with rich learning environments and opportunities
- Guide me and my family in planning my learning
- Facilitate and teach me how to read, write and do math
- Where I regularly connect with my teachers and classmates
- Where I get the balance of autonomy and structure and the support I need

**School**
- Where I regularly connect with my teachers and classmates
- Where I get the balance of autonomy and structure and the support I need
- Helps me develop my personal learning plan and work toward my goals
- Receives frequent feedback on my progress
- Has lots of opportunities to discuss my progress with my teachers
- Where much of my learning happens
- Where I get to work with my classmates, teachers and others
- May be a Neighbourhood Learning Centre or another community resource

**Family**
- Has lots of opportunities to discuss my progress with my teachers
- Has people who can help me as I learn
- Supports me in my project and inquiry-based learning
- Has space where I can expand my learning
- Has a public library where I can get information and use technology

**Community**
- Helps me develop my personal learning plan and work toward my goals
- Receives frequent feedback on my progress
- Has lots of opportunities to discuss my progress with my teachers
- Has space where I can expand my learning
- Has a public library where I can get information and use technology
- Has people who can help me as I learn
- Supports me in my project and inquiry-based learning

**Interactive Discussion Table**
How Does Self-Regulation Develop?

• Self-regulation and SRL are influenced by personal and social-contextual factors
  – Brain and biological development
  – Temperament
  – Positive parent-child relationships, and teacher-child relationships
  – Authoritative, autonomy supporting parenting and teaching styles
  – Effective co-regulation
Other Regulation to Self-Regulation

- Observation
  - Of models
  - Receive vicarious reinforcement
  - Requires discrimination

- Emulation
  - Engage performance
  - Receive direct/social reinforcement
  - Involves stylistic duplication

- Self-Control
  - Reflects mental representation of processes
  - Engage self-reinforcement
  - Leads to automatization

- Self-Regulation
  - Reflects self-evaluation of performance outcomes
  - Demonstrates adaptation in dynamic contexts

Co-Regulation

• Co-regulation is a transitional phase whereby learners gradually appropriate SRL through, for example, ...
  – Instrumental feedback
  – Metacognitive and/or motivational prompts

• Co-regulation implies one participant in an interaction has more expertise than another.
  – teachers
  – peers
  – parents
Where Does SRL Break Down?

Self-Regulated Learning (SRL)

Motivation & Emotion

Cognition & Metacognition

Strategic Action
Where Does SRL Break Down?

Self-awareness
Self-monitoring
Task understanding

Self-awareness
Self-monitoring
Task understanding
Where Does SRL Break Down?

Self-Regulated Learning (SRL)

Willingness to try something new or challenging. Attributing success and failure to factors in your control.

Cognition & Metacognition

Motivation & Emotion

Strategic Action

Self-Regulated Learning (SRL)
Where Does SRL Break Down?

Self-Regulated Learning (SRL)

Cognition & Metacognition

Motivation & Emotion

Strategic Action

Knowing strategies AND knowing when, where, and how to use them effectively.
What Derails Self-Regulation?

<table>
<thead>
<tr>
<th></th>
<th>% of students</th>
<th>Areas of Difficulty</th>
<th>% of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpreting Tasks</td>
<td>76%</td>
<td>• Describing task demands</td>
<td>59%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Interpreting assignments</td>
<td>27%</td>
</tr>
<tr>
<td>Strategy Use</td>
<td>76%</td>
<td>• Strategy description</td>
<td>71%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Aware of problems, but not solutions</td>
<td>39%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Implementing strategies</td>
<td>8%</td>
</tr>
<tr>
<td>Monitoring</td>
<td>49%</td>
<td>• Problems defining monitoring criteria</td>
<td>48%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Little evidence of monitoring</td>
<td>10%</td>
</tr>
</tbody>
</table>

Based on 100 case studies of post-secondary learners (Butler, 2003)
What Can We Do To Support Self-regulation and SRL At School?
How Can Teachers Support Students’ Active Engagement?

- Consider *tasks and students’ task understanding*
- Promote *student autonomy*
  - *Choice*
  - *Control over challenge*
  - *Student self-assessment*
- Provide *instrumental support*
  - *Teacher*
  - *Peer*
Task Understanding

• Developing an accurate understanding of tasks is challenging for students.
  – What’s the purpose?
  – How is it structured?
  – What are its components?
  – How do I feel about it?
  – What are my learning strengths and weaknesses in relation to it?
  – Do I know strategies that help me complete it?

• Task understanding is important for SRL and success.
What Is Self-Regulation In “Kid Friendly” Terms?

- As part of her learning team project, Kelsey asks: 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

- Self Regulation =
  Being able to do your JOB without being Asked I told I shown.
Self Regulation:

Being able to do your JOB without being Asked I told I shown.

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

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What Is Self-Regulation In “Kid Friendly” Terms?

As part of her learning team project, Kelsey asks: How can we define self-regulation in “kid friendly” terms to help them understand it? How can we help them (her grade 1, 2, 3 students) to take ownership of their SR ... take pride in their needs ... be honest and self-aware of their needs.
Check Task Understanding

Explicit
• Instructions
• Information in available materials

Implicit
• Purpose
• Standards for success

Contextual
• Knowledge of a domain
• Strategies for help-seeking or collaborating

Hadwin, Oshige, Miller, Fior, & Tupper, 2008
Where does Self-Regulation Break Down? Knowledge of and Control over Strategies

For Studying
“I read it over once and hope to retain it”

For Reading
“[I] just reread and reread and reread”
“I just read and ... hope I get it”

For Learning Math
“If I don’t understand something I’ll keep going over it till I do”
“[I] read, use rules, find a reasonable answer, cheat”
“If I am using them [strategies], I’m not aware of it”

For Writing
“I write my thoughts as they flow through my mind, in sentences.”
“I write down my point and at the end I have a mess.”

(Butler, 1995)
Knowing What Strategies Work Best

• To study for a test ...
  – I concentrate on the things that are easy.
  – I read quickly through my materials twice.

• To write a summary
  – Before I write, I read the text as many times as possible.
  – I try to copy out accurately as many sentences as possible.

• To study for a test ...
  – I review material that is relevant and challenging and
  – I discuss topics on the test with other people.

• To write a summary ...
  – I read through the text, underlining the most important sentences. Then I write the summary.
  – I carefully check whether the most important facts in the text are represented in the summary.

PISA 2009
Knowing What Strategies Work Best

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Surface  Deep

PISA 2009
Be Strategic

• Four SRL profiles (Butler et al., 2011)
  – Actively engaged
  – Disengaged
  – Actively inefficient
  – Passively efficient
Be Strategic

• Four SRL profiles (Butler et al., 2011)
  * Actively engaged
    – Disengaged
    – Actively inefficient
    – Passively efficient
Choices

• Choices can include:
  – What to work on
  – What materials to use
  – Where to work
  – Who to work with

• Choices that promote SRL invite students to consider the demands of tasks and reflect on their learning strengths and weaknesses, then take responsibility for learning (e.g., by making plans and monitoring progress).

• Choices are motivating; when students have choices they are more likely to predict a positive outcome and increase effort and persist longer when difficulties occur.
Challenge

• Tasks that are moderately challenging are best for promoting SRL
  – Not too easy —> Boring
  – Not too difficult —> Frustrating

• Giving students choices often creates opportunities for them to control challenge

• What if students make poor academic choices?
  – Choices can have constraints
  – Model and teach good decision-making
  – Provide feedback about choices made
Self-Assessment

Self-assessment ...

• Promotes metacognition (includes monitoring)

• Should ...
  – Be embedded in day-to-day activities
  – Emphasize process as well as products
  – Celebrate progress
  – Help students interpret errors as opportunities to learn

• Reduces anxiety that often accompanies assessment; learners perceive they have a say in the assessment process —> willingness to try challenging tasks because the cost of errors is small
## My Strategies

### Task:

Name: ____________________________

<table>
<thead>
<tr>
<th>Date</th>
<th>My Assignment</th>
<th>What I will do is . . .</th>
<th>Advice to myself for next time is . . .</th>
<th>Success ?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov 27</td>
<td>Friendly Letter</td>
<td>1) Check letter format sheet</td>
<td>Properly look over the checklist and careless mistakes</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>(Cue for Treason)</td>
<td>2) Refer to friendly letter checklist</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3) Ask friend to proofread or check</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Nov 27</td>
<td>Friendly Letter 2</td>
<td>1) I will check my checklist with more care this time</td>
<td>I should check my content and what I write. To make sure that it's all accurate.</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>(Cue for Treason)</td>
<td>2) Do a second copy maybe to see if I did it properly</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Jan 30</td>
<td>Dear gobby</td>
<td>1) Check mark sheet. Especially the margin</td>
<td>I should check my content as well as my CoPs.</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2) Check Mechanics and punctuation</td>
<td></td>
<td>✓</td>
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Where did my Strategy come from?

- [ ] My Idea
- [ ] Friends Helped
- [ ] Teacher Helped
- [ ] Other

I am happy with what I got but I think that I can do much better.

I thought I was successful. I received a very good mark.

I was very successful. I am very satisfied with this mark.
Peer Support for Regulation

Jennifer-Leigh Gould, Director of Education

“Peer-to-Peer Education Program (P-PEP)
http://www.whitecrowvillage.org/education/for_children_youth.html
Jennifer’s Research

• Purpose
  – To study regulation in school-age children/youth with FASD in naturalistic social situations

• Strategy
  – To observe youth (12-17 years old) as they plan and produce a series of educational and promotional videos
Example

See video:

http://www.youtube.com/watch?v=P9nL6tZI8BU&list=PL6C087DB84D8EA953&index=2&feature=plpp_video
Reflect ...

• What have you learned?
  • What more do you want to know?
  • What questions do you have for me now?
Resources
Who Are We?

SRL Canada is a consortium of researchers who actively collaborate with educators, schools, and learners to improve learning, collaboration, and student engagement. Together we have been engaged with applied classroom research about SRL for over 20 years, frequently in collaboration with educational partners. Our research demonstrates that self-regulated learning (SRL) is critical to success, and that learners from early childhood through adulthood can learn to regulate their learning.
Keys to promoting self-regulated learning

By Nancy Perry and Philip Winne

Ideas associated with self-regulation and self-regulated learning (SRL) are catching hold in BC’s schools. Important markers of this trend are the Ministry of Education’s commitment to supporting students’ development of self-regulation and SRL in the 2011 BC Education Plan, and initiatives such as Changing Results for Young Readers. We are excited but not surprised by these developments. More than 30 years of research about SRL demonstrates how self-regulating learners are successful in and beyond school. They tend to have high motivation and confidence for learning and use productive-thinking and problem-solving skills. These characteristics lead to task-relevant behaviour and high levels of achievement.

What is self-regulation? Broadly speaking, it is individuals’ ability to control thoughts and action to achieve personal goals and respond to environmental factors (Zimmerman, 2008). Effective self-regulating learners attend to key features of tasks (e.g., What am I being asked to do?), resist distractions (e.g., What might I rather be doing?), persist when tasks are difficult and respond to challenges appropriately, adaptively, and flexibly.

SRL is a particular focus for general self-regulation. It involves metacognition, motivation, and strategic action (Winne & Perry, 2000) dedicated to learning. Effectively self-regulating learners are aware of strengths and weaknesses they bring to tasks. They draw from a repertoire of effective-thinking and problem-solving strategies when they encounter challenges. They are motivated to learn with a genuine interest in learning processes and beliefs that effort and strategy use leads to success. This makes them willing to try challenging tasks and inclines them to view errors, when they occur, as opportunities for learning. Importantly, the “self” in SRL identifies who regulates learning—the student, of
Available at Amazon.ca for $24

... effective strategies for optimizing what K–12 students learn by improving how they learn ... easy-to-implement assessment tools, teaching techniques and activities, and planning aids ... numerous whole-class ideas and suggestions ... how to differentiate instruction for students with learning or attention difficulties ... reproducibles are included ...
Available at Amazon for $36

... step-by-step detail ... research-based framework ... how executive skills develop in children and are used in everyday life -- from the self-regulation required for responsible behavior to the planning and initiation abilities needed to complete homework on time ... includes over a dozen reproducible assessment tools, checklists, and planning sheets
Carol Ann Tomlinson
Upcoming Opportunities
CONNECTING SELF-REGULATION TO LEARNING IN BC SCHOOLS

SUMMER INSTITUTE
UBC VANCOUVER
Beaty Biodiversity Museum
Friday, June 21 | 9 a.m.–4 p.m.

Building Supports for Inquiry-Based Professional Learning

SRL Inquiry Hub
Proposed start: Sept 2013

SRL MEd Program
Proposed start: Jan 2014

For more information see: http://pdce.educ.ubc.ca/
PROMOTING POSITIVE LIFE OUTCOMES FOR CHILDREN AND YOUTH WHO STRUGGLE IN SCHOOL

Educators are challenged to meet the needs of youth who struggle in school and in life. Because research is increasingly showing the importance of school context to the effective learning, engagement, and motivation of students, this project examines how features of school contexts attend to the unique needs of at-risk youth. Specifically, it addresses: (1) how features of different educational programs meet the academic, social, and emotional needs of at-risk youth; (2) how at-risk youth perceive these features are keeping them engaged in school, and (3) what sources of support are available to teachers in these challenging contexts. Self-determination theory grounds this research.

Project Manager: Gigi Hofer
References


