

How Social Emotional Learning (SEL) Supports Regulation: Executive Functioning Considerations

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Why are we here today?

- To learn why SEL is an evidence based practice that teaches executive functioning (problem solving, emotional control, awareness and reflection or metacognition) needed for regulation.
- To learn the role that executive functioning plays in regulation.
- To learn the role that regulation plays in executive functioning.

This presentation will:

- Review social emotional learning, self-regulation, the stress response, sensory processing, and the relationship of executive functioning.
- Explain the benefit of SEL for students with disabilities learning within a classroom.
- Review findings in SEL research that indicate its impact on self-regulation.
- Share self-regulation lessons that have been developed and implemented in classrooms.

Course objectives

After completion of this presentation, participants will:

- 1. Understand several origins of dysregulation in students.
- 2. Explain why students with self-regulation do better at school.
- 3. Identify how executive functioning supports self-regulation.
- 4. Name strategies in SEL lessons that support student selfregulation.

Welcoming activity- SEL signature practice

I would like to know more about what has brought you to this workshop. Please share with me your name, where you work, and your interest in Self-Regulation and Executive Functioning. Please share with me in the Chat what you would like to learn from this workshop.

The background of SEL

What is Social Emotional Learning?

- A Mental Health Intervention
- Uses mental health promotion and prevention principles and follows the Collaborative for Academic Social Emotional Learning standards (Bazyk, et al., 2013; CASEL, n.d.)

What SEL looks like in practice

Uses the 3 signature practices:

- 1. Welcoming Opening
- 2. Brain Break, Help with Transition, Engaging Activity
- 3. Optimistic Closure (Durlak, et al, 2011)
- Uses SAFE Principles: Sequenced, Action-based, Focused Instruction, Explicit Goals (Durlak, et al, 2011)
- Achieves the goals laid out in social and emotional learning standards using one or more of the four approaches (Durlak, et al., 2015).

Randomized Control Studies

Level 1 and 2 evidence in Social Emotional Learning that supports regulation and executive functioning.

Using Social Emotional Learning to Improve Regulation

- SEL develops classrooms that are psychologically safe (Dowling, et al, 2019).
- 2. SEL develops student's social emotional skills (Muratori, et al., 2017)

Using Social Emotional Learning in Improve Regulation

- 3. SEL teaches students social-emotional problem-solving skills (Lochman, et al., 2017).
- 4. SEL improves teachers experience of teaching and classroom management skills (Domitrovich, et al, 2015).

Transition Activity: SEL signature practice

Using self-calming and affirmation statements:

- Although I am attending a Saturday conference for Charting the C's, I am happy to learning more about executive functioning and self-regulation on my day off from work.
- I can take deep breaths or take stretches in my chair if I need to reenergize myself.

Why we are here today...

To learn the role that executive functioning plays in regulation.

Self-regulation

What is self-regulation?

- The ability to regulate sensation, emotion, and behavior used for goal-directed behavior.
- Has a neurobiological base that varies between individuals
- Four components of self-regulation: sensory processing, emotional regulation, cognitive regulation (executive functioning), and social perspective taking (Kuyper, 2013)

SEL: Development of a coordinated brain

 Self-regulation can be described at the neural, behavioral, and social level. Some characteristics of self-regulation are bottom up processes, such as: genetics, stress physiology, and emotional reactivity. Other characters of regulation are based on top down characteristics such as: emotional competency, use of executive functioning, and motivation for goal directed behavior. (Durlak, et al., 2015)

SEL: Development of a coordinated brain, continued

 Use of executive functioning is a top down skill that is developed and requires effort and practice. Strategies in executive functioning over ride physiological and emotional reactions (Durlak, et al., 2015).

Why we are here today....

To learn the role that regulation plays in executive functioning.

Architecture of Self-Regulation

- Controlled Executive Functioning (working memory, inhibitory control, attention flexibility)
- Attention (alerting, orienting, executive)
- Emotional Reactivity and Regulation (positive and negative emotions)
- Stress physiology (sympathetic, parasympathetic, and HPA)
- Automatic Genes (neuromodulator receptor functions). (Durlak, et al., 2015).

Importance of Self-Regulation at School

- To feel successful in life.
- To be available and present for learning.
- To be available for relationships with others.
- To be able to adjust to

current demands.

- To feel mental health.
- Students that are regulated do better in school (Casel, n.d.)

Brain areas highly related to learning, regulation, and executive functioning

- Prefrontal cortex- reasoning, problem solving, comprehension, impulse-control, creativity and perseverance (Durlak, et al, 2015).
- Limbic System- the part of the brain involved in our behavioral and emotional responses, especially when it comes to behaviors we need for survival: feeding, reproduction and caring for our young, and fight or flight responses (Durlak, et al., 2015).

A Closer Look at SEL Lessons

How do we improve regulation and executive functioning?

The Stress Response

- How the receptors and neurobiology of stress impacts the primary learning areas of the brain.
- Students learn better when their brains are not experiencing stress.
- Stress can come from a disadvantaged background (i.e. poverty), emotional states, and difficulties with sensory processing.
- Co-regulation and responsive and sensitive relationships counteract the stress response.

SEL: Lesson on becoming aware of stress

- Where do I feel stress in my body?
- Activities:
- Take Heart Rate
- Chart on a Body Chart where stress is felt
 - Facial Expression
 - Tone of Voice
 - Tight Hands

SEL: Lesson on supporting selfregulation

- SEL Lesson using triggers and tools for my triggers.
- Learning My Triggers
- Learning Personal Tools

Sensory Processing Needs: How to support Sensory Processing at School

- Movement needs (Dunn, 2013)
- Predictability and routine (Dunn, 2013)
- Interactions with staff and peers (Parham, et al., 2020)
- Teaching students about their sensory patterns and preferences (Dunn, 2013; Parham, et al., 2020).
- Develop problem-solving skills (executive functioning) (Kuipers, 2014; Williams, et al., 1996)

SEL: Lesson on movement needs at school

- Student learning in their preferences for movement
- Using movement during your day to stretch, walk, do heavy work, exercise, or develop breathing skills.

SEL: Lesson in noise and sound preferences

- Students learning their preferences for noise & sound
- Being aware of the noises that distract you, the noises that help you focus, and when you need to be in a quiet space (or use headphones) helps you feel good.

SEL: Lesson in touch preferences

- Students learning their preferences for touch
- Not wanting other people to unexpectedly touch you, or get your hands messy can cause anxiety. Preferences for long sleeve and having difficulty holding a pencil can also happen with people who don't like light touch. Managing these things at school improve your well-being.

SEL: Lesson in how to support my vision

- Students learning their preferences for what they look at
- If things catch your eye and you forget what you were doing, if too much information is on a page and the writing blurs together, if crowded places are overwhelming, it is helpful to manage these things. Your well-being and stress level are important to pay attention to and managing your visual world can help.

SEL: Lesson in how to make transitions

- Students learning about what transitions during the day are difficult for them.
- Transitions happen when you move between activities, changing from something you like to do to something you don't like to do, changing classes, and coming and leaving school.

Optimistic Closure: SEL signature practice

• What did you learn (or were reminded of) today that you will use tomorrow when working with students?

• Write in the Chat what you learned to day about regulation and executive functioning.



Questions and Discussion

THANK YOU FOR COMING!

Google Form Survey Link

Please share your learning experience with me by completing a <u>Survey</u>.

If you would like to learn more about SEL and Regulation, visit my work at:

Using SEL to Improve Regulation and Mental Health: Implications for School Based Practice

References

- Arbesman, M., Bazyk, S. & Nochajski, S. M. (2013).
 Systematic review of occupational therapy and mental health promotion, prevention, and intervention for children and youth. The American Journal of Occupational Therapy 67 (6).
- American Occupational Therapy Association (2015). Occupational therapy for children and youth using sensory integration theory and methods in schoolbased practice. American Journal of Occupational Therapy 69 (Suppl. 3).
- American Occupational Therapy Association (2020). Occupational therapy practice framework: Domain and Process (4th ed.). American Journal of Occupational Therapy 74 (Suppl. 2).
- Bazyk, S. & Arbesman, M. (2013). The AOTA Practice Guidelines Series- Occupational therapy practice guidelines for mental health promotion, prevention, and intervention for children and youth. AOTA Press
- Bazyk, S. (2019). Best practice in school mental health. In G.F. Clark, J. E. Rioux & B. E. Chandler (Eds.). Best Practices for Occupational Therapy in

Schools (2nd ed., 153-160). AOTA Press

- Brukner, L., (2017). Self-Control To The Rescue: SUPER POWERS to Help Kids Through the Tough Stuff Everyday. Jessica Kingsley Publishers.
- Brukner, L. (2014). THE KIDS" GUIDE TO STAYING AWESOME AND IN CONTROL- Simple Stuff to Helpf Children regulate their Emotions and Senses. Jessica Kingsley Publishers
- CASEL (n.d.) <u>What are the foundations of SEL in</u> <u>mental health?</u> (https://casel.org/fundamentals-ofsel/how-does-sel-support-your-priorities/sel-andmental-health/)
- Domitrovich, C., E., Bradshaw, C., P., Berg, J. K., Pas, E. T., Becker, K. D., Musci, R., Embry, D. D. & Ialongo, N. (2016). How do school-based prevention programs impact teachers? Findings from a randomized control trial of an integrated classroom management and social-emotional program. Preventative Science 17, 324-337. <u>Doi.10.1007/s11121-015-0618-z</u>
- Dunn, W. (2007a). Living Sensationally: Understanding Your Senses. Goodreads

References, continued

- Dunn, W. (2014). Sensory Profile 2: Strengthsbased Approach to Assessment and Planning. PsychCorp.
- Durlack, J., Weissberg, R. P., Dymnicki, A., Taylor, R. & Schellinger, K. (2011). The impact of enhancing students' social emotional learning: A meta-analysis of school-based universal instructions. Child Development, 82, 405-432
- Durlak, J. A.,, Weissberg, R., Domitrovich, C., E.,& Gullotta, T D. (2015). Handbook of social emotional learning.The Guiford Press, New York.
- Every Moment Counts (n.d.). Foundations and Initiatives. <u>Occupational Therapy's Role in Mental</u> <u>Health</u>.

(https://everymomentcounts.org/about/aboutoccupational-therapy/)

 Mahler, K. (2019) <u>The Interoceptive Curriculum: A</u> <u>Step-by-Step Framework for Developing Mindful</u> <u>Self-regulation</u>. (www.kelly-mahler.com)

- Parham, L., D., Ecker, C., Kuhaneck, H., Henry, D., & Glennon, T. J., (2021). SPM-2 Sensory Processing Measure Manual 2nd ed. Western Psychological Services.
- Payton, J., Weissberg, R. P., Durlak, J. A., Dymnicki, A. B., Taylor, R. D., Schellinger, K. B., et al. (2008). The Positive Impact of Social and Emotional Learning for Kindergarten to Eighthgrade Students: Findings From Three Scientific Reviews. Chicago: Collaborative for Academic, Social and Emotional Learning.
- Reeve, J. & Cheaon, S. H. (2021). Autonomysupportive teaching: Its malleability, benefits, and potential to improved educational practice. Educational Psychologist 56 (1), 54-77
- Shellenberger, S. &
- Williams, M. S., & Shellenger, S. (1996). How does your engine run? A leaders guide to the Alert Program for self-regulation.

Helpful Online Resources in SEL

- <u>What is the Collaborative for Academic and Social Emotional Learning (CASEL)?</u> (https://casel.org/fundamentals-of-sel/what-is-the-casel-framework/)
- <u>The Minnesota Educational Association has SEL standards for student pre-K through 12th grade</u>. District SEL work is fully endorsed and supported at the state level (https://education.mn.gov/MDE/dse/safe/social/imp/)
- <u>Every Moment Counts website</u> embedded mental health practices and more. (https://everymomentcounts.org/)