Shifting from Reactive to Proactive: Promoting Executive Function and Social Emotional Learning in Early Childhood

Karen Cairone and Jess Gropen

September 19, 2017
Who Is in the Room?

I am part of a national center, technical assistance center, or organization that guides policy and/or supports state and territories.

I work at the state level to promote policy and system-integration for children and families.

I directly supervise the staff who support children and families (administrators, directors, managers, consultants, etc.).

I train or teach our future workforce who will support children and families.

I have a different role in supporting children and families.
Organizational Framework: Social-Emotional Learning and Executive Functions

Self- & Social Regulation

Executive Functions

Cognitive Domain

Regulation

Emotional Domain

Social Domain

Academic Skills and Behavior

Social-Emotional Skills and Behavior

Shifting from Reactive to Proactive | edc.org

Partner Discussions

What does an early childhood classroom look like when it lacks focus on promoting social and emotional learning?

What does an early childhood classroom look like when it lacks focus on promoting executive functioning?
Objectives

- Explore social and emotional learning (SEL) research and state of the nation
- Discuss the impact of executive functioning (EF) research on how we teach today
- Create an action step to promote SEL and EF in your school, community, or state
How can I help you feel better?

Hug  High 5

Fist Bump  Something Else
Connecting and Collaborating

Self-regulation

Patience and turn-taking

Problem-solving

Creativity and fun

Communicating

Following directions

A sampling of SEL skills in action
What is SEL?

Social and emotional learning (SEL) is the process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.

P3 Continuum SEL Before Birth

- Set baby up for success (HV-CoiIN and HV-ImpACT)
- Practice self-care
- Focus on nutrition and exercise
- Avoid exposure to toxins
- Seek medical advice about depressive symptoms
- Explore alternatives to medications, including meditation, light-therapy, and counseling

SEL for Infants and Toddlers

• Empathic distress
• Desire to comfort others
• Initiative
• Attachment/relationships
• Beginnings of regulatory behaviors

SEL for Children Ages 3–5

Kindergarten teachers look for three SE skills in students

- Can follow directions
- Takes turns and shares
- Pays attention

SEL for a School-Aged Child (K–12)
SEL in the Classroom

- Environmental design
- Classroom responsibilities and rules
- Rich social and emotional materials and activities:
  - Books
  - Curricula
  - Visuals in classroom
- Systemic teaching of social skills and emotional competencies
- How we partner with families
- Responsive classroom practices
- Connecting with supports like Infant and Early Childhood Mental Health Consultation, Coaching, and more
School Theory of Action Framework

- Develop a **vision** that prioritizes academic, social, and emotional learning.
- Conduct an SEL-related **resources and needs assessment** to inform goals for schoolwide SEL.
- Design and implement **effective professional learning programs** to build internal capacity for academic, social, and emotional learning.
- Adopt and implement **evidence-based programs** for academic, social, and emotional learning across all grades.
- **Integrate SEL** at all three levels of school functioning (curriculum and instruction, schoolwide practices and policies, family and community partnerships).
- Establish processes to **continuously improve** academic, social, and emotional learning through inquiry and data collection.
“School climate refers to the quality and character of school life. It is based on people’s experiences of school and reflects norms, goals, values, interpersonal relationships, teaching and learning practices, and organizational structures.”

—National School Climate Center

Five components of proven SE programs

- Improve classroom management
- Build students' skills
- Include professional development
- Involve parents
- Integrate with academics

rwjf.org/socialemotionallearning
### SEL across the School District

#### Part 1: Key Activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Benchmarks</th>
</tr>
</thead>
</table>
| 1. Conduct SEL—related resource and needs assessment (District Strength Inventory) across the district and schools. | 4. The district has shared findings from the resource and needs assessment with stakeholders to support SEL planning and implementation at the district and school levels, and has plans to assess resources and needs regularly (every two years or less).  
3. The district has collected and summarized information from its resource and needs assessment.  
2. The district has started to conduct a thorough resource and needs assessment to support SEL implementation district-wide.  
1. The district has initiated their SEL resource and needs assessment process by reviewing the CASEL tool, integrating it with district resources and needs assessment processes, and identifying stakeholders who will lead and participate in this process. |
| 2. Develop a district—wide vision that prioritizes academic, social, and emotional learning for all students | 4. The district has completed a process with opportunities to involve all stakeholders (including students) to contribute to developing shared language, understanding, and ownership for prioritizing the goals of academic, social, and emotional learning for all students. The governing board and district leadership have taken action for public commitment to support implementation of the SEL vision as a priority for student learning.  
3. The district has completed a vision development process, but either did not include all the stakeholders noted in the benchmark above (#4), or have not publicly committed to SEL implementation as a priority.  
2. The district is actively working on developing a vision for academic, social, and emotional learning, but the work is not complete.  
1. The district is beginning to think about plans for developing a district-wide vision that prioritizes academic, social, and emotional learning for all students. |
| 3. Develop expertise in academic, social, and emotional learning theory, research, and practice at the central office level. | 4. The district has developed widespread capacity, commitment, and knowledge in SEL theory, research, and practice across many central office leaders from diverse departments to provide guidance and support for school and classroom academic and SEL development.  
3. The district has developed capacity, commitment, and knowledge in SEL theory, research, or practice for a core group of central office leaders to provide guidance and support for school and classroom SEL development.  
2. The district is implementing a plan to build central office capacity, commitment, and knowledge in SEL theory, research, and practice to provide guidance and support for school and classroom SEL development.  
1. The district is developing a plan to assess central office staff capacity, commitment and knowledge to provide guidance and support for school and classroom SEL development. |
| 4. Design and implement effective strategies and programs | 4. The district has implemented a coordinated professional development program that provides PD to address academic, social, and emotional learning capacity gaps for all students. |

---

---

---
SEL across the States

- States that have articulated learning goals for SEL, with developmental benchmarks at the preschool level
- States that have articulated learning goals for SEL, with developmental benchmarks from preschool into early elementary
- States that have articulated learning goals for SEL, with developmental benchmarks from preschool through high school
Putting It All Together: SEL as a Whole
SEL in New England

Let’s Discuss...
SEL *Now* and Wellness *Later*

- Longitudinal study from kindergarten to adulthood
- 3 major cities and 1 rural community
- Measured “pro-social behavior” at age 5 and linked it to young adult outcomes in education, employment, criminal activity, substance use, and mental health
- What do YOU think they found?


DOI: 10.2105/AJPH.2015.302630

PNID: 26180975
If findings like these aren’t shocking . . . why do we struggle with funding and establishing solid policies for SEL in our schools and also across our communities and states?
Additional Resources on SEL

• CASEL Website
• Social Emotional Learning in Elementary School
• Me, You, Us: Social-Emotional Learning in Preschool Available at Amazon.com
• Social-Emotional Competence: An Essential Factor in Promoting Positive Adjustment and Reducing Risk in School Children
• Promoting Positive Youth Development Through School-based Social and Emotional Learning Interventions: A Meta-Analysis of Follow-up Effects
• Social Emotional Skills: Everyone Loves Them But We Still Can’t Define Them
Objectives

- Explore social and emotional learning (SEL) research and state of the nation
- Discuss the impact of executive functioning (EF) research on how we teach today
- Create an action step to promote SEL and EF in your school, community, or state
What’s Next? Executive Functions (EF)

• What are executive functions?
• Why are executive functions important?
• How can we support executive functions?
Executive Functions: Basic Definition

• A set of cognitive processes that:
  o Manage attention and behavior
  o In order to reach a **goal**

• Conscious control of what you think and do

• When “automatic-pilot” is not enough
consider the consequences of different behaviors

keep goals

and

refrain from responding immediately

information

in mind

SUSTAIN ATTENTION

RESIST DISTRACTION

Tolerate frustration

reflect on past experiences

plan for the future
Orchestra Analogy

Orchestration of basic cognitive processes during goal-oriented problem-solving

- Attention
- Memory
- Emotional response
- Language processes
- Motor behavior

Inhibit or Activate

Image: Neisser, (1967)
Problem Solving and Executive Functions
Three Basic Components

- Ability to stop yourself from doing what you are naturally inclined to do in order to do what is most needed or most appropriate
- Holding relevant information in mind and manipulating or updating it
- Ability to flexibly shift focus from one object or task to another

Working Memory
Inhibition
Set-shifting
Basic Components: Revisited

- **Working Memory**
  - High Maintenance
  - Low Flexibility
- **Goal Representation**
  - High Flexibility
  - Low Maintenance
- **Inhibitory Control**
- **Set-shifting**

- Updating
Executive Function

- Self-control
- Reflective learning
- Deliberate problem solving
- Emotion regulation
- Persistence
- Planning

Higher-Order Processes

Inhibitory Control

Set-shifting

Working Memory

Updating

Goal Representation

High Maintenance
Low Flexibility

High Flexibility
Low Maintenance

High Maintenance
Low Flexibility
Development

- More rapid EF improvements during early childhood and adolescence
- Basic components may be less differentiated early in development
- Higher-order processes build on basic components
- Reactive before proactive control
- Extrinsic before intrinsic goals

Images: Harvard Center on Developing Child; Pellicano (2012)
Why are Executive Functions Important?

EF predicts academic achievement:
• School readiness for both math and reading
• Overall school achievement
• Grades
• High school completion
• College graduation

EF predicts health outcomes:
• Better physical health
• Fewer drug-related problems
• Fewer criminal convictions
• Higher SES status
Executive Functions & Conceptual Change

Carey & colleagues
• Biology
• Physics
• Mathematics

Q: Where are crickets' ears?

A: On their legs!
So What?

- Achievement depends critically on EF-driven conceptual change.
- With respect to EF, we can help reduce achievement gaps in two ways*:
  1. By facilitating the progression of EF skills in individual children.
  2. By structuring school experiences in ways that leverage EF skills.

* Zelazo, Blair, Willoughby (2017)
Can Executive Functions be Changed?

• Laboratory studies support some malleability.

• Influence of early experiences.

• Intervention research…

Monitor the progression of EF skills in individual children
Minnesota Executive Function Scale
*Promising EF Interventions

- Developing emotional regulation through storytelling and teaching positive strategies (PATHS)
- Classroom management (Incredible Years)
- Games that require children to remember multiple rules, attend to cues, shift between different rules
- Motivate EF practice through socio-dramatic play, taking on roles and staying in them, planning (Tools of the Mind)

*Hsueh, J., Lowenstein, A. E., Morris, P., Mattera, S. K., & Bangser, M. (2014) Shifting from Reactive to Proactive | edc.org
Common Goals and Strategies

- External $\rightarrow$ internal regulation
- Reactive $\rightarrow$ proactive control
- Promote reflection
- Exercise the EF muscle without exhausting
- Use play to motivate practice of EF skills
- Practice in multiple contexts
Model for Relating Emotion Regulation to Knowledge Enrichment and Construction

• Moderate stress/arousal is optimal for learning, but differentiated learning is best!

• Learning involves the reciprocal relation between knowledge enrichment and construction, the latter being EF-demanding.

• As learning becomes more automatic, it becomes easier for the learner to regulate emotion.
Additional Resources on Executive Functioning

• IES Report
• MDRC Head Start Cares
• Harvard Center on the Developing Child
• Stephanie Jones | Harvard Graduate School of Education
• Susan Carey | Harvard Laboratory for Developmental Studies
• Reflection Sciences | Minnesota Executive Function Scale
Objectives

• Explore social and emotional learning (SEL) research and state of the nation

• Discuss the impact of executive functioning (EF) research on how we teach today

• Create an action step to promote SEL and EF in your school, community, or state
Action Plan

Social Emotional Learning
1. Learn more about SEL (see additional resources)
2. Consider how SEL is promoted in:
   a) The children
   b) The classroom
   c) Schoolwide
   d) District- or community-wide
   e) State-wide
3. Plan one meaningful change or step you will take to help SEL be more proactive and less reactive!

Executive Function
1. Learn more about EF (see additional resources)
2. Monitor the progression of EF skills in individual children (see MEFS)
3. Facilitate the progression of EF skills in individual children:
   a) Strategies and goals
   b) Interventions
4. Structure school experiences in ways that leverage EF skills
THANK YOU

Karen Cairone
kcairone@edc.org

Jess Gropen
jgropen@edc.org