Social-Emotional Learning Through the Lens of Science Education

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July 29, 2020

March 2020

April 2020

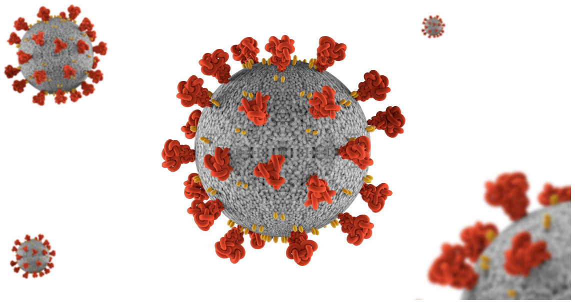
May 2020

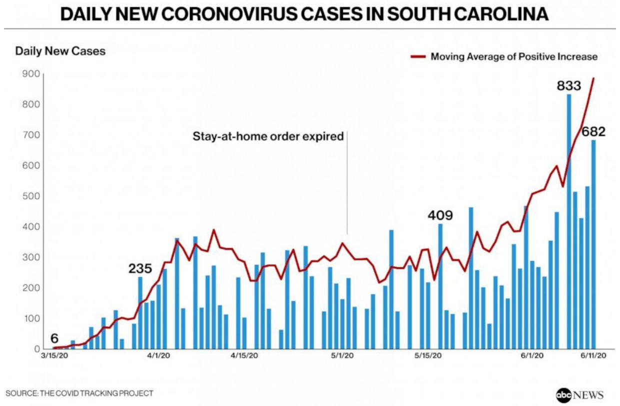
June 2020

July 2020

August 2020

September 2020





Locus of Control

Sense of Identity

FEELING WORDS

Open	Happy	Alive	Good	Love
Kind	Great	Playful	Calm	Loving
Confident	Gay	Courageous	Peaceful	Sensitive
Reliable	Joyous	Energetic	At Ease	Tender
Easy	Lucky	Liberated	Comfortable	Devoted
Amazed	Fortunate	Optimistic	Pleased	Attracted
Free	Delighted	Provocative	Encouraged	Passionate
Sympathetic	Overjoyed	Impulsive	Clever	Admiration
Interested	Gleeful	Free	Surprised	Warm
Satisfied	Thankful	Frisky	Content	Touched

Angry	Depressed	Confused	Helpless	Afraid
Irritated	Lousy	Upset	Incapable	Fearful
Enraged	Disappointed	Doubtful	Alone	Terrified
Hostile	Discouraged	Uncertain	Paralyzed	Suspicious
Insulting	Ashamed	Indecisive	Fatigued	Anxious
Sore	Powerless	Perplexed	Useless	Alarmed
Annoyed	Diminished	Embarrassed	Inferior	Panic
Upset	Guilty	Hesitant	Vulnerable	Nervous
Hateful	Dissatisfied	Shy	Empty	Scared
Unpleasant	Miserable	Atupefied	Forced	Worried

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 (self awareness

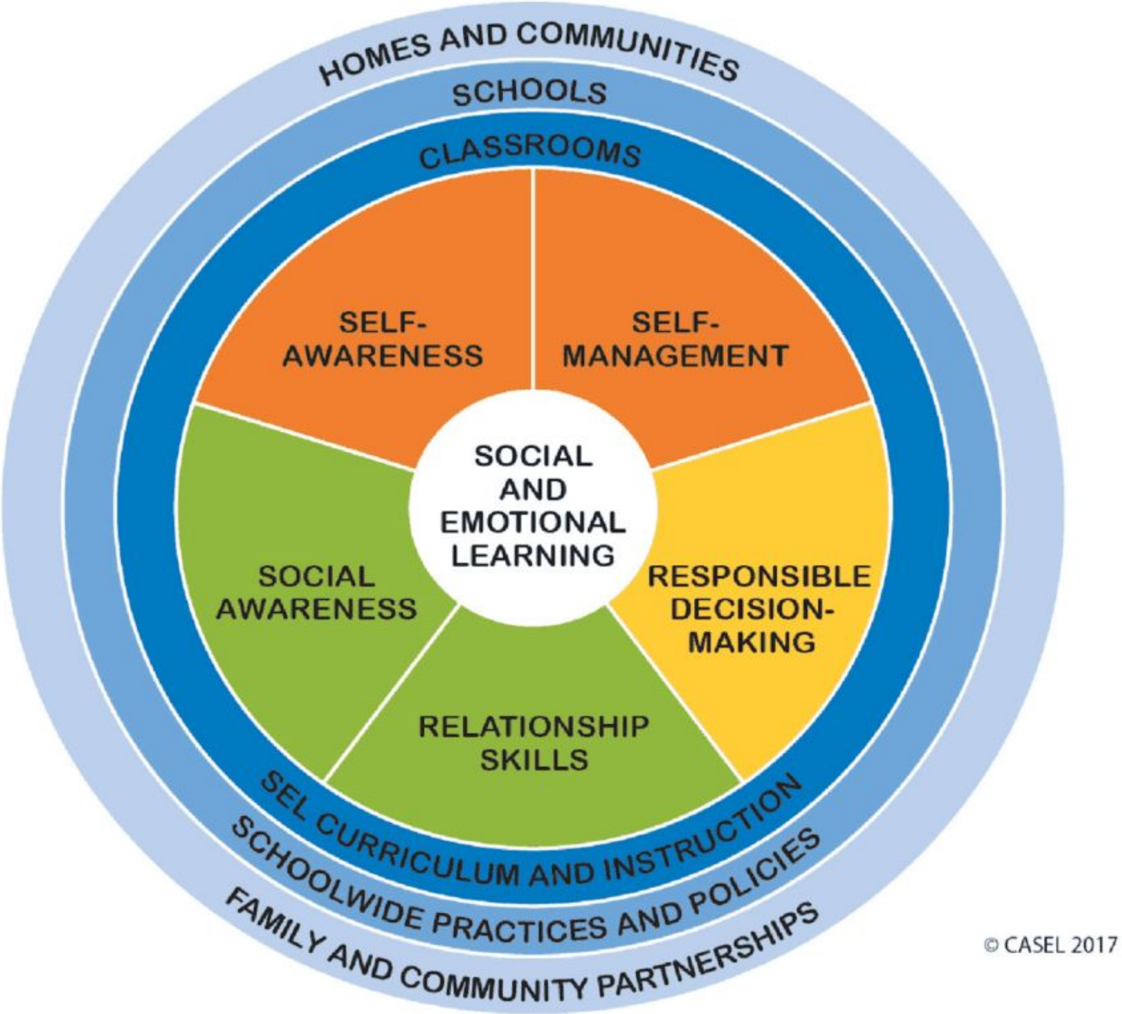
-to feel and show empathy for others (social awareness)

-to set and achieve positive goals (self efficacy)

-to establish and maintain positive relationships

-to make responsible decisions (problem solving)

sel4sc.org


HOMES AND COMMUNITIES
SCHOOLS
CLASSROOMS
SELF-AWARENESS
SELF-MANAGEMENT
SOCIAL AND EMOTIONAL LEARNING
SOCIAL AWARENESS
RESPONSIBLE DECISION-MAKING
RELATIONSHIP SKILLS
SEL CURRICULUM AND INSTRUCTION
SCHOOLWIDE PRACTICES AND POLICIES
FAMILY AND COMMUNITY PARTNERSHIPS
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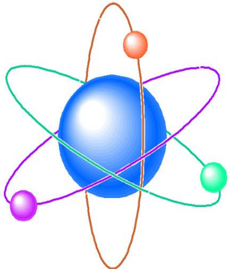
SEL Action Steps

Social-Emotional Learning can take place through ANY content area!

- ELA - Journalling, discussions about reading assignments
- Math - analysis of real data
- Social Studies - celebrate diversity
- The Arts - Students make a collage of their feelings
- Science - incorporate hands-on activities

Science & Engineering Practices



1. Asking questions (for science) and defining problems (for engineering)

2. Developing and using models

3. Planning and carrying out investigations

4. Analyzing and interpreting data

5. Using mathematics and computational thinking

6. Constructing explanations (for science) and designing solutions (for engineering)

7. Engaging in argument from evidence

8. Obtaining, evaluating, and communicating information

https://datalab.marine.rutgers.edu/2019/01/what-makes-a-scientist/

Self-Awareness

- Ability to identify emotions
- Confidence-recognition of strengths, ability to be responsible
- Efficacy-sense of control over circumstances

Self Management

- Ability to control one's on impulsive behaviors
- Ability to manage one's stress
- Ability to set and work towards goals

Social Awareness

- Empathy-the ability to understand others' feelings
- Cultural Competency-Understanding those of different backgrounds

Relationship Skills

- Communication-how to communicate thoughts and feelings in a non-emotional way
- Listening skills-ability to hear and understand other perspectives

Responsible Decision Making

- Ability to make good choices
- Problem-solving skills

Practical Ideas

A. Have students make free-hand folded designs from paper. Teachers may specify certain criteria.

B. Have students make origami designs from given instructions.

SEL

-Builds self-confidence
-Builds problem-solving skills
-Helps with impulse control

SEP

1. Ask questions and define problems
3. Develop & Use models

Practical Ideas

Have students make a scientific model from play dough. Next they would give one another feedback for improvement.

SEL

-Builds self-confidence
-Helps with impulse control
-Helps with stress management
-Builds problem-solving skills
-Helps students learn effective communication skills

SEP

1. Ask questions and define problems
3. Develop and use models

Practical Ideas

Have students combine vinegar and baking soda! Will the reaction be the same with cold vinegar and warm vinegar? Will the reaction inflate a balloon? Does it matter if the baking soda or the vinegar are added to the cup last?

Student pose a question then develop a way to test the ingredients and answer the question.

SEL

-Builds self-efficacy
-Builds self-confidence
-Helps with impulse control
-Builds problem-solving skills

SEP

1. Ask questions and define problems
3. Plan & carry out investigations

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Practical Ideas

Have students create a survey to administer to friends (possibly from another class or on another team). Later they analyze and present their data.

SEL

-Builds self-confidence
-Helps with organizational skills
-Builds problem-solving skills

SEP

1. Ask questions & define problems
4. Analyze & interpret data
5. Math & computational thinking
8. Obtain, evaluate, & communicate info

Anything Else?

- Don’t neglect Science education - students LOVE this content, and NEED it!
- Take students outside.
- Anything hands-on can be adapted to SEL and maybe SEPs.
- With social-distancing, it may be necessary to repurpose the items in your Science kits.
- As we consider SEL, put process ahead of the outcome. The outcomes are immeasurable.

SEL ⟷ SEPs

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