the forum FOR YOUTH INVESTMENT

DAVID P. WEIKART CENTER FOR YOUTH PROGRAM QUALITY

Foundations and Self-Awareness of

Cognitive Development

Participant Notebook

Name: _____

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Improving & Aligning Policies

Planning and Partnering for Impact

Strengthening Practices and Programs

About the Forum

The Forum for Youth Investment provides products and services to help leaders improve partnerships, policies and practices to change the odds so all young people are ready for college, work and life. These products and services are based on best practices in youth development and on our experience working with hundreds of communities around the country since our founding in 1998.

About the Forum's Weikart Center

David P. Weikart Center for Youth Program Quality is a leader in empowering education and human service leaders to adapt, implement and scale best-in-class, research-validated quality improvement systems to advance child and youth development. Training and technical assistance in quality improvement system design, effective performance data and lower stakes accountability has helped OST networks across the country be successful, scale-able and sustainable. The Weikart Center is a critical part of the Forum for Youth Investment's overall effort to build leadership capacity to advance readiness and equity.

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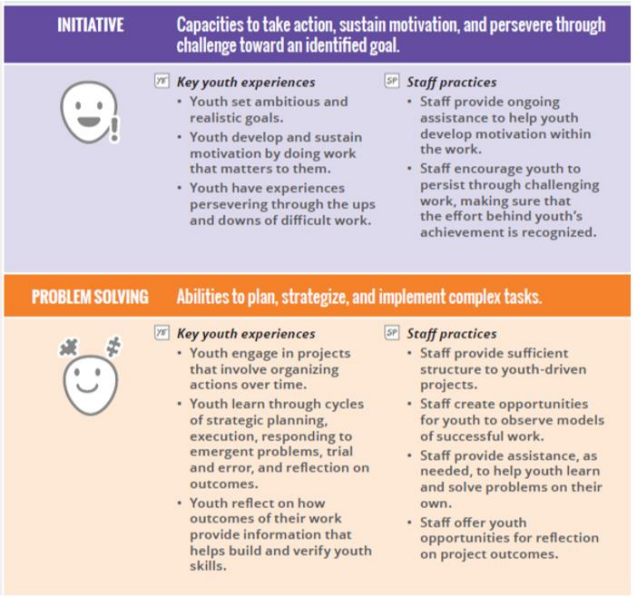
Cognitive Development



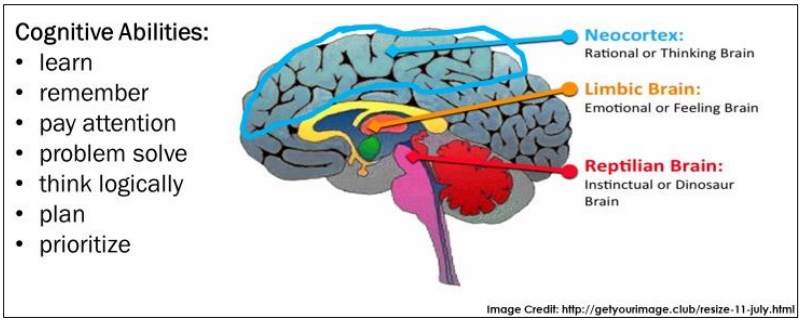
In this workshop, we lay the foundations and self-awareness of our own cognitive development. What we are calling "cognitive skills" are the core skills the brain uses to think, learn, remember, problem-solve, and pay attention—skills which are also related to motivation and impulse control. Cognitive development is the continuing development of those skills from birth through adulthood. The purpose of this workshop is to enhance our practices as staff who support initiative and problem-solving skills in the youth we serve.

Initiative (capacities to take action, sustain motivation, and persevere through challenge toward an identified goal) and problem solving (abilities to plan, strategize, and implement complex tasks) are two of the six social-emotional learning (SEL) domains outlined in *Preparing Youth to Thrive: Promising Practices in Social and Emotional Learning.*

Commonly referred to as the *Thrive Guide*, this publication outlines the research and findings generated from a partnership with the Susan Crown Exchange, the David P. Weikart Center for Youth Program Quality, the University of Illinois Urbana-Champaign, and staff teams from eight exemplary out-of-school time programs focused on social-emotional skill building with opportunity youth. The *Thrive Guide* is an integrated set of stories that reveal a framework of the youth experiences and staff practices needed for effective SEL to occur within youth programs.

More information about the *Thrive Guide*—including a free digital download of the publication—can be found at selpractices.org.

The Brain and Learning



When we think of cognitive development, we typically think of the brain and learning. The front part of the brain is most closely associated with higher order thinking, problem solving, and learning, although the entire brain is integrated and is always working together. A popular, convenient way to categorize areas of the brain is to think of the brain as having three parts:

1. Pre-frontal cortex, or the front part of the neocortex, for rational thinking
2. The limbic brain—where key emotional or feeling processes are centralized
3. The brain stem or, as it is referred to on this slide, the reptilian brain, which regulates basic survival functions like breathing and heart rate.

However, we want to stress that these areas of the brain all affect one another and are connected to one another—you can't disconnect learning from your social and emotional experiences! When people are under stress or in fear, their reptilian brain kicks in and overrides their ability to engage their pre-frontal cortex, impairing their ability to think clearly and learn.

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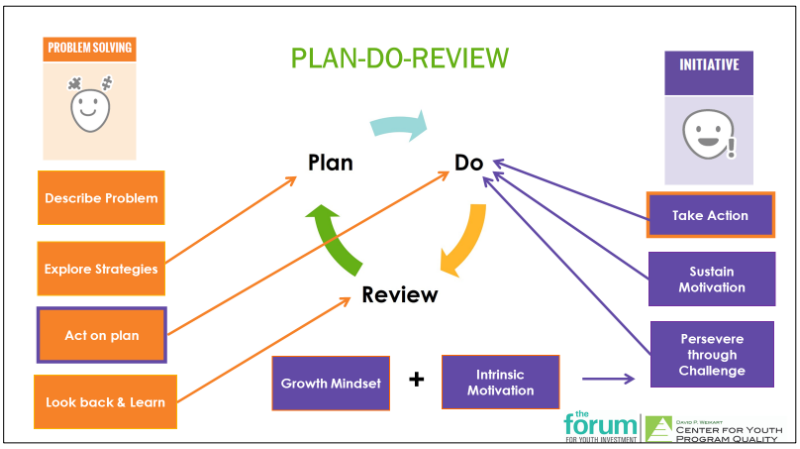
Plan-Do-Review



The Forum for Youth Investment's Weikart Center is named for David P. Weikart, who founded the HighScope Educational Research Foundation following his launch of two seminal projects in the late 1960s. The first project was the Institute for IDEAS, a summer camp program for high school students. The second was the Perry Preschool Project, a longitudinal study on the benefits of quality early childhood education.

Central to both of these projects was a pedagogical approach to supporting young people's development in learning environments. Although this is sometimes spoken of as simply "active learning," active learning was only one aspect of a sophisticated approach to engaging youth. When Dr. Weikart was preparing to retire as CEO of HighScope in 2000, he emphasized that while active learning was important, Plan-Do-Review was at the heart of his work. Creating and carrying out a plan fosters a sense of agency, initiative, and accomplishment, and helps young people regulate themselves to work toward a goal. More recently, a major synthesis of research on learning and development by the Chicago Center for School Research resulted in a model of learning that shows the interplay of action and reflection as core to learning. In promoting learning, this research highlights the role of making meaning of experience through reflection. (From *Foundations for Youth Success,* 2015*).*

The graphic above shows how problem solving, initiative, Plan-Do-Review and staff practices that support growth mindset and intrinsic motivation are related. Action is part of both problem solving and initiative. Supporting a growth mindset and tapping into intrinsic motivation by offering young people the opportunity to choose what they are naturally interested in helps them to persevere through challenge.

The Aspen Institute National Commission on Social, Emotional, & Academic Learning (SEAD Commission)

Quotes on Cognitive Development

- "Cognitive skills and competencies underlie the ability to focus and pay attention; set goals, plan and organize; and persevere and problem solve." [2.(p.15)]
- "As humans, we are naturally wired for learning" [2.(p.14)]
- Trauma and adversity "can place our bodies and minds in a constant state of stress or high alert that interferes with learning and growth." [2.(p.20)]
- "Brain development supports learning and vice versa"[1.(p1)]
- Physiological preconditions that must be met for optimal brain development and learning:
  - sleep/rest
  - nutrition and low exposure to toxins
  - physical activity, exercise, green space,
  - emotional well-being, social relationships, safety/belonging
  - cultural well-being [1.(p1)]

[1.] Immordino-Yang, Mary Helen, Linda Darling-Hammond, and Christina Krone. "The Brain Basis for Integrated Social, Emotional, and Academic Development: How Emotions and Social Relationships Drive Learning." The Aspen Institute National Commission on Social, Emotional, & Academic Learning (SEAD Commission), 2018.

[2.] National Commission on Social, Emotional, and Academic Learning "From a Nation at Risk to a Nation at Hope: Recommendations from the National Commission on Social, Emotional, & Academic Development." (2018).

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Initiative and Problem-Solving Scenario Sort

SCENARIO 1: Jorge wants to be a champion hotdog eater at the Super Eater contest next year. Which activity goes with each component of the initiative and problem-solving domains? Write the letter of the corresponding component in each box.		
Problem solving: A. Describe problem B. Explore strategies C. Look back and learn		Initiative: D. Take action/Act on Plan E. Sustain motivation F. Persevere through challenge
Jorge considers several ideas about how to gradually increase the number of hotdogs he can eat in one setting and picks one.	Jorge makes his first attempt at stuffing himself with hotdogs.	Jorge reminds himself that the prize hotdog eater at the county fair wins $1,000. He writes motivational sayings on his refrigerator.
Jorge reviews his progress and compares which eating method helped him eat more hotdogs.	Jorge gets so tired of eating hotdogs, and friends mock his goal. He wants to give up on his goal of winning the hotdog eating contest, but he sticks to his plan.	After reading blogs on food eating contests, Jorge discovers that he does not currently have the skill or stomach capacity to compete in a hotdog eating contest.

SCENARIO 2: LaTonya wants to organize a reunion of her high school zombie club. Which activity goes with each component of the initiative and problem solving models? Write the letter of the corresponding component in each box.		
Problem solving: A. Describe problem B. Explore strategies C. Look back and learn		Initiative: D. Take action/Act on Plan E. Sustain motivation F. Persevere through challenge
LaTonya wonders whether the reunion will be worth the effort, but she reminds herself of the friends she's already enjoyed getting in touch with.	When the only venue available for the reunion costs twice what she'd budgeted for, LaTonya has to do some unexpected fundraising to make the reunion happen.	LaTonya uses what she found out about options for hosting a reunion party to backward plan the event.
LaTonya starts the process by contacting the zombie club friends she still connects with to find out how to contact the others.	LaTonya reviews how many RSVPs she has gotten and whether she is keeping up with the schedule she created.	LaTonya writes out what she wants for a reunion and what she already knows and doesn't know about planning a reunion.

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Addressing Effects of Stress and Fear

Think about common stress or fear activators people and youth may experience. What impact do these have on the brain or one's ability to function? What can be done to move back into our rational brain? Note your thoughts below.

Stress/Fear Activator	Ways to Address the Impact

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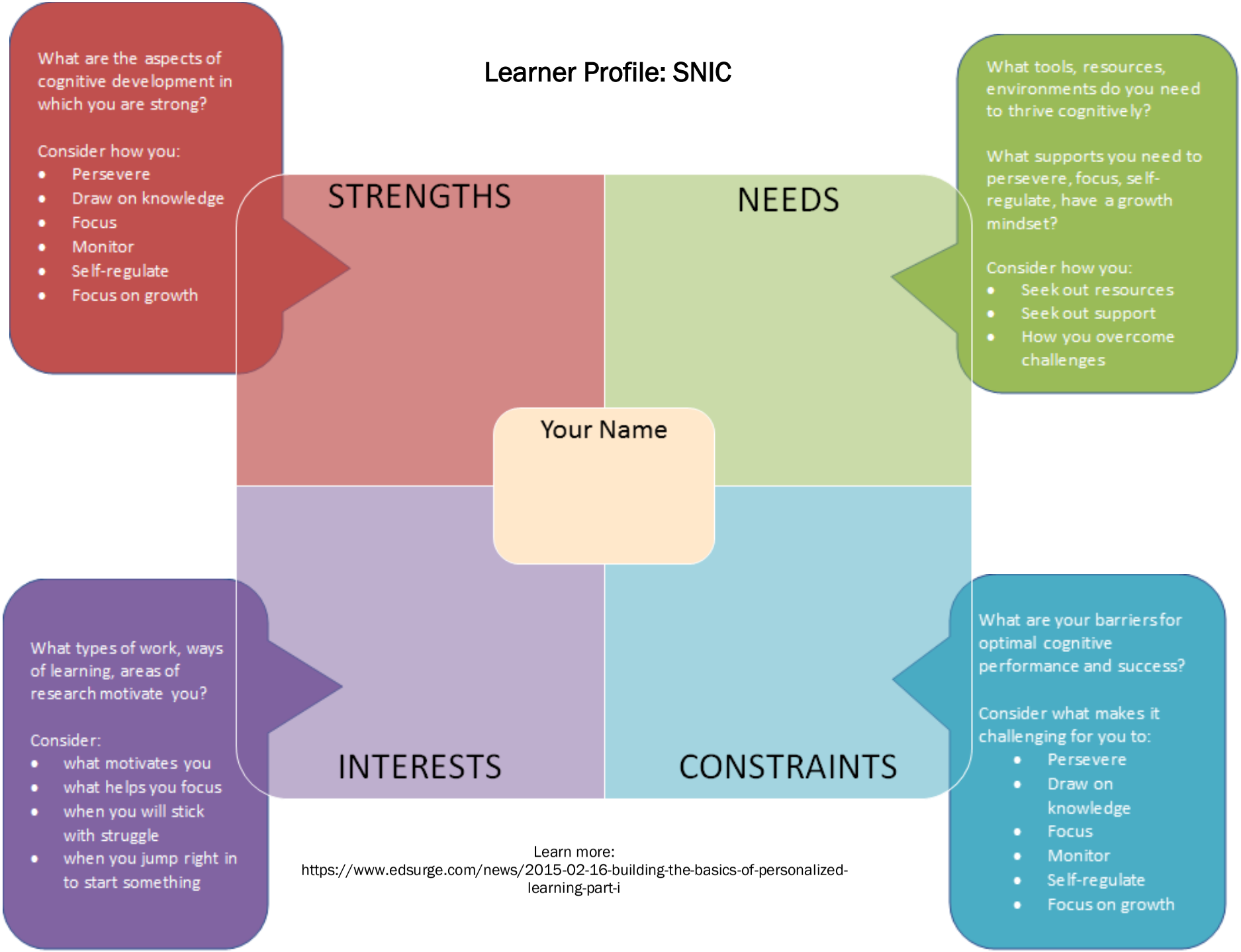
Learner Profile: SNIC



Learn more:
https://www.edsurge.com/news/2015-02-16-building-the-basics-of-personalized-learning-part-i

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Reflection Questions

1. What did this activity show me about my attitude toward learning and problem solving?

2. Experiences that have affected me as a learner include:

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Implementation Plan

Goal: _____

Plan-Do-Review	
What is my plan?	
What is the first thing I will do?	
When and how will I review my progress?	
Initiative	
How will I take action?	
How will I sustain motivation?	
How will I persevere through challenges?	
Problem Solving	
Describe the problem: What am I trying to accomplish?	
Explore strategies: What strategy would work best?	
Act on plan: What actions will I take?	
Look back and learn: How will I examine what happened and learn from it?	

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Reflection Quotes

1. **Learning is social and emotional.** Ross Weiner, Aspen Institute

2. **I got my start by giving myself a start.** Madame CJ Walker

3. **A very great vision is needed and the man who has it must follow it as the eagle seeks the deepest blue of the sky.** Crazy Horse, Sioux Chief

4. **Feeling successful is essential. Set mini-goals to get to your larger goal.** Yaneth Medina

5. **Start where you are, with what you have. Make something of it and never be satisfied.** George Washington Carver

6. **Life isn't perfect, any failures you have are actually learning moments. They teach us how to grow and evolve.** Philippa Soo, Actress

7. **Not everything that is faced can be changed, but nothing can be changed that is not faced.** James Baldwin

8. **Every medal I have won is a story of a difficult struggle.** Mary Kom, Olympic Boxer

9. **Do not wait: the time will never be "just right". Start where you stand, and work with whatever tools you may have at your command and better tools will be found as you go along.** Napoleon Hill.

10. **Would you like me to give you a formula for success? It's quite simple, really. Double your rate of failure.** Thomas Watson

11. **Ask 'How will they learn best?' not 'Can they learn?'** Jaime Escalante

12. **You're in charge of your mind. You can help it grow by using it in the right way.** Carol Dweck

13. **It is better to solve one problem five different ways, than to solve five problems one way.** George Pólya

14. **You can increase your problem-solving skills by honing your question-asking ability.** Michael J. Gelb

15. **You're not obligated to win. You're obligated to keep trying to do the best you can every day.** Marian Wright Edelman

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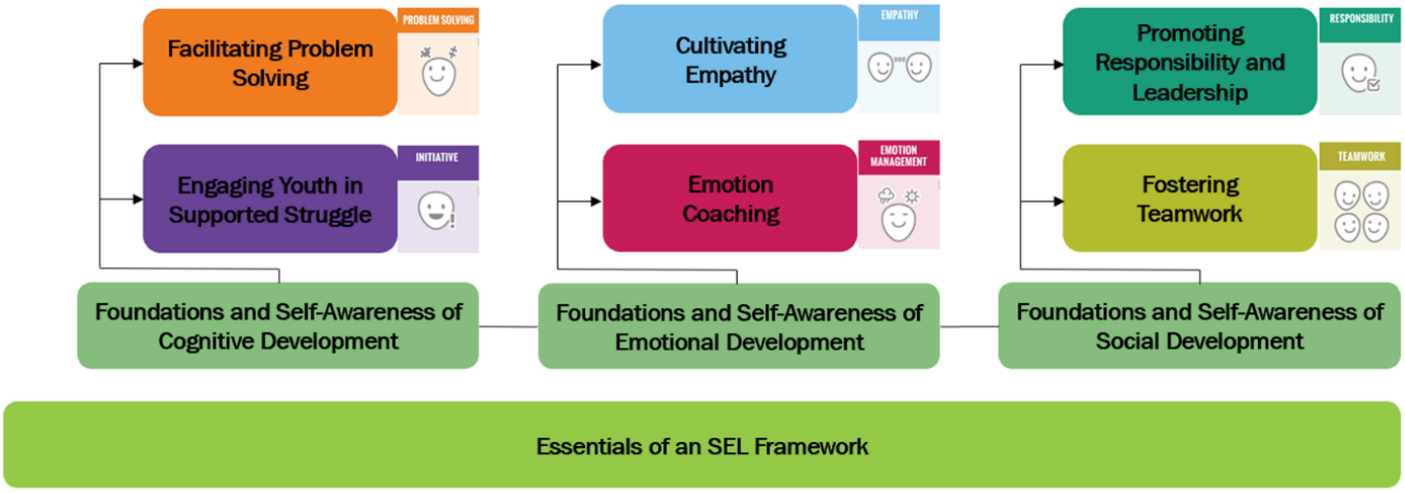
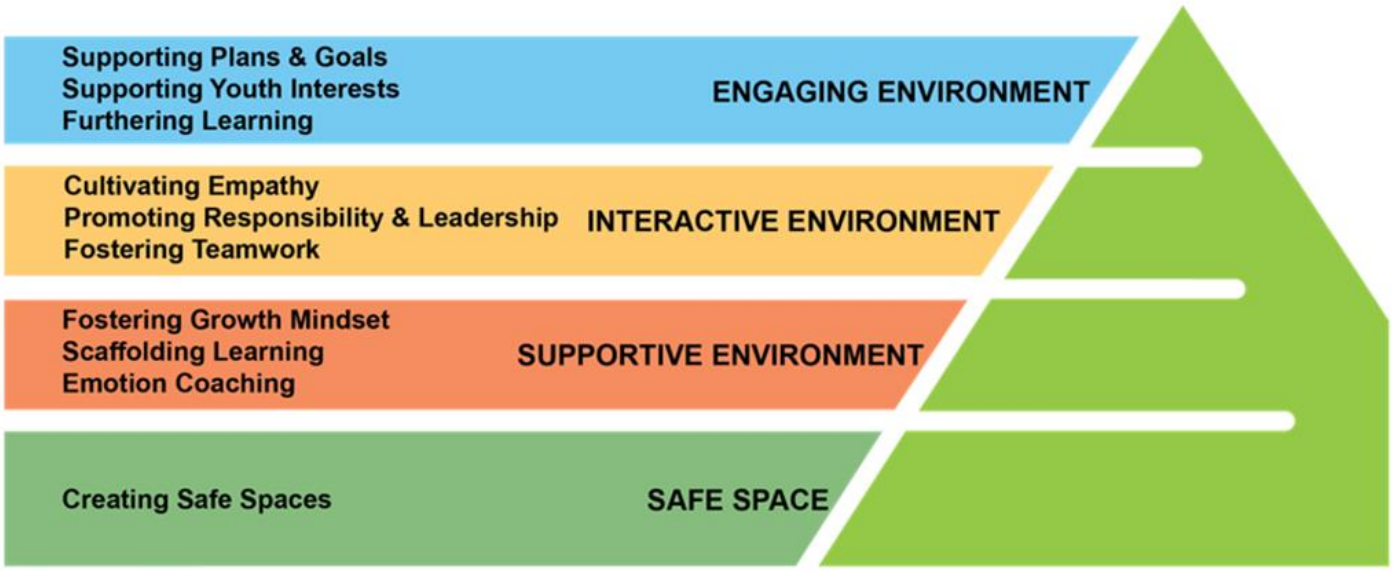
Social Emotional Learning Methods Sequence



with *Preparing Youth to Thrive* Domains

Social Emotional Learning Pyramid of Program Quality with SEL PQA Scales



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Preparing Youth to Thrive	Youth Work Methods	SEL Methods	SEL PQA
			ENGAGING ENVIRONMENT
Problem Solving	Active Learning	Facilitating Problem Solving	**Furthering Learning**
			Support connections to previous knowledge
			Link examples to principles
			Encourage extending knowledge
			Encourage logical reasoning
			Guide discovery
Initiative	Youth Voice		**Supporting Youth Interests**
			Provide open-ended choice
			Provide multiple opportunities for choice
			Support creativity
Problem Solving, Initiative	Planning and Reflection	Facilitating Problem Solving	**Supporting Plans and Goals**
			Set up planning opportunities
			Ensure young people record or represent plans
			Facilitate monitoring progress toward goal
			Support problem-solving alternatives
			INTERACTIVE ENVIRONMENT
Teamwork	Cooperative Learning	Fostering Teamwork	**Fostering Teamwork**
			Promote active collaboration
			Establish shared goals
			Provide group-process opportunities
Responsibility	Youth Voice	Promoting Responsibility & Leadership	**Promoting Responsibility and Leadership**
			Assign responsibility for tasks
			Support carrying out responsibilities independently
			Provide mentoring opportunities
			Provide leadership opportunities
			Provide opportunities to present
Empathy	Building Community	Cultivating Empathy	**Cultivating Empathy**
			Structure activity for sharing and listening
			Encourage understanding other's emotions
			Structure activities for showing kindness
			Support valuing of differences
			SUPPORTIVE ENVIRONMENT
Management Safe Space (Curriculum Feature)	Reframing Conflict	Emotion Coaching	**Emotion Coaching**
			Acknowledge emotions
			Support young people to name emotions
			Discuss constructive handling
			Discuss emotion causes
Responsibility	Active Learning, Intro to Active Participatory Approach	Engaging Youth in Supported Struggle	**Scaffolding Learning**
			Break task into steps
			Model skills
			Encourage young people to improve performance
			Monitor challenge level
Initiative	Ask-Listen-Encourage	Engaging Youth in Supported Struggle	**Fostering Growth Mindset**
			Guide young people to self-correct
			Use non-evaluative language
			Attribute achievement to effort
Safe Space (Curriculum Features)			**Creating Safe Spaces**
	Building Community, Reframing Conflict	Fostering Teamwork	Foster positive emotional climate
	Building Community,	Fostering Teamwork Cultivating Empathy	Convey warmth and respect
			Provide support for safe space
	Structure & Clear Limits Reframing Conflict		Demonstrate positive group management style
			Demonstrate mutual accountability
	Building Community	Cultivating Empathy	Show active inclusion

Crosswalk of Weikart Center's SEL Resources and Supports

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