



Creative
Education
Foundation™

Creative Problem Solving Participant Workbook



**“We can all create a desired future instead of
merely accepting what life offers.” — Sidney Parnes**

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Description

Write down three things I bring to Springboard that will make this a great experience for myself and everyone else.

1.
2.
3.

Takeaways

Write down three things I want to take away from Springboard.

1.
2.
3.

My Definition of Creativity

Creativity is:

Bridges to Creativity	Barriers to Creative Thinking
List things that enable you to be your creative best.	List things that stop you from being your creative best.
<div></div>	<div></div>

Notes:

Description

Write down what CPS is.

Core Principles

Write down three things I want to take away from Springboard.

1.

2.

3.

4.

5.

6.

Notes:

Origin

Alex Osborn, in his breakthrough book, *Applied Imagination* (1953), noted that _____ distinct kinds of _____ are essential to being creative:

Divergent Thinking: Generating lots of _____

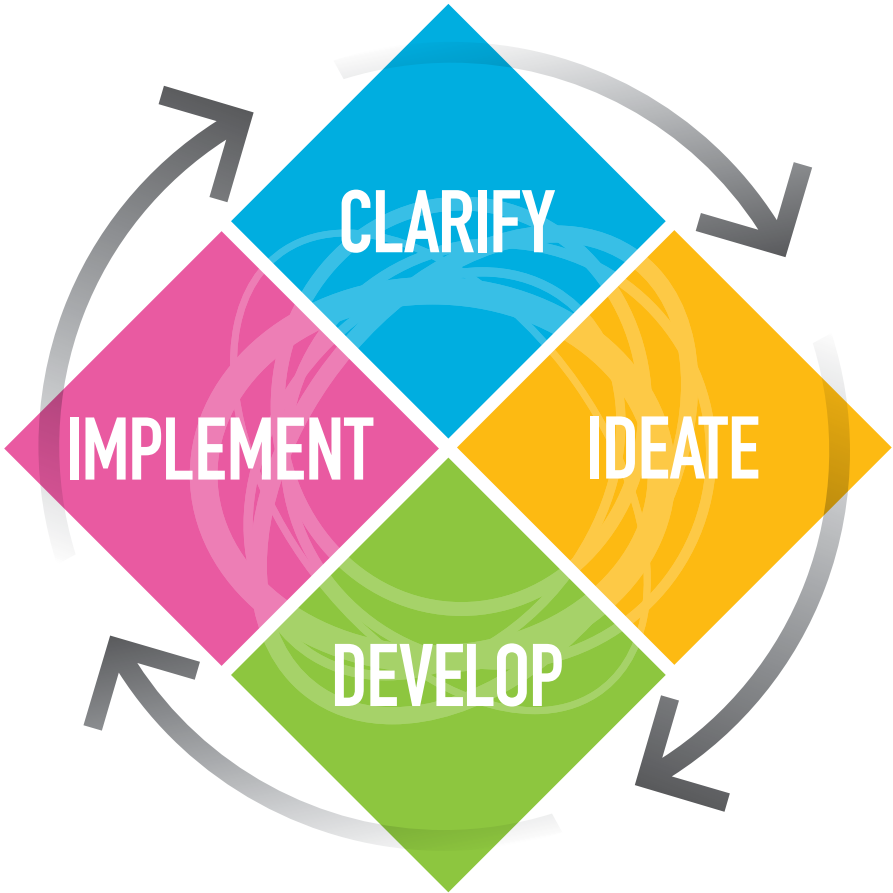
Convergent Thinking: _____ options, making decisions

Each of us does both kinds of thinking on a daily basis. The secret to creating new ideas, however, is to _____ your divergent thinking from your convergent thinking. This means generating _____ and _____ of options _____ you consider evaluating them.

Divergent Thinking Guidelines	Convergent Thinking Guidelines
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
	5. _____

CPS Model

In the most recent iteration of the CPS Model, there are four stages with six explicit steps. Within each stage, each step uses divergent and convergent thinking.



STAGE	STEP	PURPOSE
CLARIFY	Explore the Vision	Identify the goal, wish, or challenge.
	Gather Data	Describe and generate data to enable a clear understanding of the challenge.
	Formulate Challenges	Sharpen awareness of the challenge and create challenge questions that invite solutions.
IDEATE	Explore Ideas	Generate ideas that answer the challenge questions.
DEVELOP	Formulate Solutions	To move from ideas to solutions. Evaluate, strengthen, and select solutions for best “fit.”
IMPLEMENT	Formulate a Plan	Explore acceptance and identify resources and actions that will support implementation of the selected solution(s).

CPS Model based on work of G.J. Puccio, M. Mance, M.C. Murdock, B. Miller, J. Vehar, R. Firestien, S. Thurber, & D. Nielsen (2011).

CPS
PROCESS

Clarify

Description

The Clarify Stage is composed of three separate steps

1. Explore the Vision

Purpose _____

Outcome _____

2. Gather Data

Purpose _____

Outcome _____

3. Formulate the Challenge

Purpose _____

Outcome _____

Notes:

Key Tools

Divergent Tools	Convergent Tools

Notes:

Key Tools

Divergent Tools	Convergent Tools

Notes:

Key Tools

Divergent Tools	Convergent Tools

Notes:

Description

The Ideate Stage has one step.

1. Ideate

Purpose_____

Outcome_____

Notes:

Key Tools

Divergent Tools	Convergent Tools

Notes:

Description

The Develop Stage has one step.

1. Develop

Purpose_____

Outcome_____

Notes:

Key Tools

Divergent Tools	Convergent Tools

Notes:

Description

The Implement Stage has one step.

1. Implement

Purpose_____

Outcome_____

Notes:

Key Tools

Divergent Tools	Convergent Tools

Notes:

Description

FOURSIGHT™ is an innovation assessment instrument that reveals how people approach challenges and how they can perform more effectively as a team to develop innovation solutions.

My FourSight Preference

My FourSight Preference is _____

How might this new knowledge be useful?

Notes:

CASE STUDY

Little Red Riding Hood

Illustration of CPS in Action

Versions of the “Little Red Riding Hood” folktale are told around the world. To illustrate CPS, we follow the Big Bad Wolf as he works through his own challenge.

After repeated failed tries to take over Granny’s house and eat Little Red Riding Hood (Red), the Big Bad Wolf (The Wolfman) decided to use the CPS process on his challenge.

After lining up a skilled facilitator who brought along a resource team, he agreed that:

- A. He was the owner of his problem (Influence)
- B. He had a desire for novel and useful solutions (Imagination)
- C. He was determined to take action (Importance)

My Goal / Wish

- ✓ I wish I could have Red for dinner
- ✓ I wish the woodsman would find another woods
- ✓ I wish granny weren’t so heavy
- ✓✓ I wish I could find a new place to trick Red
- ✓✓ I wish I could find a new way to trick Red
- ✓✓ I wish I could make Red believe she is my friend
- ✓✓✓ I wish I could think of something easier to eat
- ✓✓ It would be great if someone made me dinner
- ✓✓ It would be great if I could share my

Clarify - Explore the Vision

Diverge: The facilitator asked him to Explore the Vision and state some of his goals.

Converge: Next, The Wolfman checked each wish statement that met the 3 “I”s criteria.



Clarify - Gather Data

Diverge: After picking the statement that he had the most passion for, the The Wolfman was ready to **Gather Data**.

Rewriting his goal, The Wolfman began to list the facts.



I wish I could think of something easier to eat.

Facts:

- If I don't eat, I will die
- I like meat
- I don't know what LRR tastes like
- I haven't been successful tricking LLR
- That woodsman really upsets me
- Granny gets heavier each time I stuff her in the closet
- I'd like to dine with others occasionally
- I'd like to not risk death each time I want to eat

Facts:

- I am very hungry
- I'm not that smart
- I try and eat anyone who gets close to me
- I can't eat the woodsman
- He is stronger and smarter than me
- I smelled delicious food at Granny's
- Red seemed like a very nice girl

Converge: After he clustered similar facts together, he named each cluster. He was ready to **Formulate Challenges**.

DIET	STAYING ALIVE	PERSONALITIES
I like meat	I'd like to eat without risking my death each time	I haven't been successful fooling Red
I don't know what Red tastes like	I am very hungry	That woodsman really upsets me
I try and eat anyone that gets close to me	I'm not that smart	Granny gets heavier each time I stuff her in the closet
I smelled delicious food at Granny's		He is stronger and smarter than me
I'd like to dine with others occasionally		Red seemed like a very nice girl

Clarify - Formulate the Challenge

Diverge: Next The Wolfman began to define his challenge by diverging on many questions.

Converge: Using the 3 I's tool, The Wolfman had his problem statement. Now he was ready to move to Explore Ideas.



Questions
HMI develop a different diet?
HMI outwit and outlast the woodsman?
✓✓ HMI get Granny to cook for me?
HMI learn to not eat everyone that comes near me?
✓✓✓ HMI get Red to help me to eat?
IWWMI get Granny, LRR and the woodsman to be my friends?
HMI get other wolves to share their food ?
✓✓ IWWMI use other wolves to get my dinner?
IWWMI pay for my food?

Ideate - Explore Ideas

HMI Get Red to Help Me Eat?
Make her my friend
Don't lie to her
Bring Red and Granny flowers and gifts
Compliment granny on her cooking
Offer to be their helper
Offer to teach Red about the forest
Promise the woodsman not to eat Granny and Red
Offer to let the woodsman be a chaperone each time we are together
Offer them something of value
Start a theme restaurant
Hunt something I can catch
Read books on new diets
Have a spiritual conversion

Diverge: Rewriting his Challenge Question at the top, The Wolfman now generated ideas.



Converge: The Wolfman then clustered all his ideas and named each cluster. He thought the business deal might to be the best way to go, so he restated his idea. He was ready to **Formulate Solutions**.

BUSINESS DEAL	ASSISTANCE	NEW FOOD SOURCE	PROTECTION
Make her my friend	Offer to be their helper	Hunt something I can catch	Promise the woodsman not to eat Granny and Red
Don't lie to her	Offer to teach Red about the forest	Read books on new diets	Offer to let the woodsman be a chaperone each time we are together
Compliment granny on her cooking			
Offer them something of value			
Start a theme restaurant with granny & Red			

Restated idea: *What I see myself doing is (WISMDI) starting a theme restaurant with Granny and Red.*

Develop - Formulate Solutions

Diverge: To strengthen his idea, he generates ideas on Pluses, Potentials, Concerns and ways to Overcome his key concern.

PLUSES	POTENTIALS	CONCERNS	OVERCOME KEY CONCERN
I will have friends. I won't have to do all the work. I won't be chased by the woodsman. I will be hunting for things I can catch.	It might develop my savvy business sense. It might become as big as McDonald's. It might make us all rich. It might allow us to move out of the forest.	HMI convince Granny, Red and woodsman I am sincere? HMI get something to eat before I starve to death? HMI get Granny to cook my meals?	Offer to share a portion of everything I catch. Suck it up & eat some plants. Bring Grannie a present.

Converge: After strengthening his solution, he restated the solution using the most important elements to him.

Now what I see myself doing NOW is working to make Granny, Red and woodsman my friends and future business partners in a fairy tale theme restaurant.

Having developed a more detailed solution, he was ready to Formulate a Plan.



Implement - Formulate a Plan

Diverge: Now that the Big Bad Wolf had begun to look at his initial challenge in a new and innovative way, he brainstormed a number of action steps to help him do it.

Converge: Next, he prioritized and arranged the action items by short-, mid-, and long-term and assigned Who, By When, and Who Checks. He included one action item that would be completed in the next 24 hours.

	What?	Who?	By When?	Who Checks?
Short-term	Eat some plants Make a peace offering to Red and Granny Catch easy things to eat Do fun things in the woods with Red	The Wolfman	Today	The Wolfman's Sis
Mid-term	Set ground rules with woodsman Share what I catch Have Granny cook what I catch Teach Red how to navigate the forest			
Long-term	Start plans for restaurant Invite friends over to test menu Taste menu with friends Ask friends and/or seek investors Open first restaurant			



And they all lived happily ever after.....

Description

Use these prompts to guide you go through the CPS Process, step by step. You don't have to use every prompt, or you may use them all if you'd like and if you have time. Our appreciation to Maggie Dugan, who has graciously agreed to share this script, which has been edited to reflect the language and process of the updated CPS's Model.

(Note: 00:00 = approximate running times)

CLARIFY - EXPLORE THE VISION

Identify your goal, wish, or challenge

Diverge:

(00:00)

- Make a list of your wishes. Use the invitational stems "I wish..." or "It would be great if..."
- What are some of your unfulfilled goals?
- What are goals you'd like to accomplish?
- What's been on your mind? Why?
- What would you like to do differently?
- What have you never done that you would like to do differently?
- What have you never done that you would like to do?
- Imagine yourself one year from today, what goals, dreams or visions have you accomplished?
- If you had unlimited time, funds, and support, what would you accomplish?
- What is going on at home or in your community that should change?
- What changes might you like to introduce in your life?
- What would you like to accomplish?
- What would you like to see happen?
- What would make life a lot easier?
- What would make your life a lot better?
- What do you really wish would happen?

Converge: (07:00)

- Is there a wish or goal that stands out?
- Which is most pressing?
- Which one is most exciting?
- Which wish do you really want to do something about?
- Which is important?
- Which one can you influence?
- Which one requires new thinking and new ideas?
- Select one.

CLARIFY - GATHER DATA

Describe and generate data to enable a clear understanding of the challenge you selected in the previous step.

Diverge: (10:00)

- With regard to this wish selected, make a list of all the facts that pertain to the situation. Ask yourself, "What do I know about this challenge?"
- What is a brief history of the situation?
- What is the origin of this challenge? When did it become a challenge?
- How does this challenge make you feel?
- Who else is involved? What is their role?
- Why is this a challenge?
- Use the 5 W's tool – Who, What, Where, When and Why.
- What is your influence over the situation?
- What are the different components of the challenge?
- What have you already tried?
- What does your gut tell you?
- What is your ideal outcome?
- Who's on your mind? Who's concerned?
- What is or is not happening?
- Why is this of interest to you? Why is it important?
- What prevents you from doing what you need to do?
- What sources of information are available? What sources of help are available?
- What are you feeling?
- What are your hunches?
- What does success look like? Feel like?
- What are the success criteria

Converge:

(20:00)

- As you look at your list of facts, what themes emerge?
- Which concerns seem most important to consider right now?
- What opportunities must be addressed first?
- Review and select the most important data that helps you understand your challenge statement.
- Take all the data that you have checked and group it naturally into clusters with a similar theme.
- Take a moment to restate/label each cluster.
- Select the 3-5 most relevant date.

CLARIFY - FORMULATE THE CHALLENGE

Sharpen awareness of the challenge and create challenge questions that invite solutions.

Diverge:

(25:00)

- Use the facts you selected previously to construct challenge statements. Use the invitational language stems “How to...(H2), “How might I...(HMI), and “In what ways might we...(IWWMW).
- Rephrase the goals, wishes and challenges from the Explore the Vision step as a H2/ HMI questions.
- Rephrase key date as questions.
- Rephrase barriers to success as questions.
- Phrase questions for other perspectives: stakeholders, a child, a mentor, or a famous person.
- Make a list of at least 15
- If you’re stuck remember to use the “Why? What’s Stopping you tool.
- How else can you state the problem, and state it differently?
- How can you ask the question, state the problem in a unique way, a way you’ve never asked yourself before?
- Use the Word Dance tool to add 5 more H2 or IWWMI statements to your list.

Converge:

(35:00)

- Which of these really gets to the heart of the matter?
- Which of these makes you a little nervous?
- Which one looks most promising?

- Which one will take you down a different pathway?
- Which one seems innovative?
- Select the challenge statements that address what really needs to be addressed or solved
- Set aside questions that are really ideas or solutions and revisit them in the next step
- Pick one – check to make sure the challenge statement you selected if brief, focused and beneficial.

IDEATE - EXPLORE IDEAS

Generate ideas that answer the challenge questions.

Diverge:

(40:00)

- Begin by re-write your selected H2/IWWMI statement on the top of the page.
- Start listing ideas. Go for 20.
- What ideas immediately come to mind to answer your challenge question?
- What are all the ideas you can imagine for solving this?
- What ideas would key stakeholders have?
- Imagine you are (a child, the CEO, a movie star, etc.). Now, what ideas do you have?
- What is a terrible idea to solve this challenge, one that will get you fired? Now, reverse or adapt this idea to make with plausible.
- What would you do if you were you had a magic wand?
- What would you do if you were in charge?
- Pick your favorite author, singer or actor. What action would that person take?
- Make a list on the side of 5 action verbs.
- Use each action verb to generate more ideas.
- List 15 more ideas.
- SCAMPER: what can you Substitute, Combine, Adapt, Modify, Put to other uses, Eliminate or Rearrange?
- Who’s your mentor? What ideas would he or she give you to approach this problem?
- Make a side-list of things you really enjoy doing. Use this list to come up with more ideas.
- What if time and money were abundant - what ideas would you add to your list?
- What else? Stretch yourself. Add 10 more ideas to your list.

Converge: (50:00)

- Read through your list of ideas. Circle all the ideas that really catch your eye – that intrigue you.
- Don’t think about which ones seem usable; make choices from your gut.
- How can you make the outrageous ideas more realistic, but keep their spirit?
- Circle all the ideas that really catch your eye, that evoke interest.
- Pick the top 10.
- Group the ideas you have chosen into themed clusters.
- Give each cluster a 1-2 word name that captures its essence
- Select the cluster that appears the best path to take
- Restate the cluster as a concrete solution by using the starter phrase – “What I see myself doing is...”
- If more than one cluster is appealing, you can use the criteria you generated in the Gather Data step to chose the strongest solutions

DEVELOP - FORMULATE SOLUTIONS

To move from ideas to solutions – evaluate, strengthen, and select solu-
tions for best “fit.”

Diverge: (55:00)

- Put your top ideas aside for a moment.
- Check out your original wish: If you went down a different path, that’s fine – just check in with where you started.
- How will you decide which of these to put into action?
- What do you like about your solution(s)? What are its advantages, positive points?
- What could become possible in the future if you were to implement this solution?
- What are the spin-offs or possible future gains? (use the statement starter, “It might...”)
- What are the possible limitations? (Be sure to pose these as questions: “How to...”, “How might I...”, and “In what way might I...”)
- What concerns do you have about your selected solution? What concerns might others have about it?
- Generate ways to overcome some of the limitations or concerns of your selected solution.

Converge: (65:00)

- Now revisit your top ideas.
- How do these measure up?

- Revisit the success criteria from the Gather Data step to see which potential idea meets these criteria.
- How might you improve any one of these ideas to help it measure up?
- Which one most satisfied your needs/concerns?
- Which one will really get the job done?
- Which one will get you to the goal?
- Which idea seems to energize you?
- Which one really hits a hot button for you?
- Which one are you willing to develop into an action plan?
- Select the most important options to incorporate and create a more robust solution that starts with, “Now, what I see myself doing is...”
- Now choose one.

IMPLEMENT - FORMULATE A PLAN

Explore acceptance and identify resources and actions that will support
implementation of the selected solution(s).

Diverge: (70:00)

- What do you think you need to do to get this idea going?
- Who may need to help you? Who are you assisters?
- How might you leverage the help of you assisters?
- What could hinder you? Who are your resisters?
- How might you overcome the challenges posed by your resisters?
- What could slow you down?
- What resources are available? (people, materials, money)
- How can you gain acceptance for this solution?
- How can you build enthusiasm?
- What are some contingencies you might develop for your solution?
- What steps might you take to put your solutions into action?
- What will success look like?
- Where might you start?
- What short-term actions do you need to take? What mid-term actions do you need to take? And, what long-term actions do you need to take?
- How can you persuade people to get signed on?
- What do you need to do in the next 24 hours?

Converge: (77:00)

(77:00)

- Think about the idea you've selected.
- Review your list and select all actions needed to ensure success.
- Now go backwards: What things need to happen first to turn this idea into reality?
- Arrange your actions according to when they need to be completed, from soonest to latest.
- Create a plan: What to do? Who will do it? By when will it be done?
- What "jump start" action can you take in the next 24 hours to start making this idea happen?
- Choose a person you can commit to, out loud, to begin?
- How will you include this person in your plan?
- How might you solicit his or her support?
- Make a commitment to this person and to yourself to bring this idea to life.

CPS WORK-SHEETS

Clarify - Explore the Vision

Make a list of your goals, wishes or challenges by coming up with a series of phrases that starts with:

“I wish....” or “It would be great if...” or “Wouldn’t it be nice if ...”

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slight shadow on the right side, suggesting it's resting on a surface.

Notes:

CPS WORK-SHEETS

Clarify - Gather Data

Write selected challenge statement here:

What do you know about this challenge? Make a list of the facts, history, key players, ideal outcomes and success criteria. Who? What? Where? Why? Why Not? How?

Circle the key data.

Notes:

CPS WORK-SHEETS

Clarify - Formulate the Challenge

Write selected challenge statement here:

Restate your challenge as a question from as many perspectives as possible. Use the statement starters “How to...?” or “How might I ...?” or “In what ways might I...?”

Circle the most promising and intriguing challenge questions.

Now select one that you have the most energy to generate ideas for right now.

Notes:

Write selected challenge statement here:

Ideas:

Review all ideas and select the ones that have the most promise.

What I see myself doing is...

Notes:

Write selected challenge statement here:

PPCO

PLUSES	POTENTIALS	CONCERNS	OVERCOME KEY CONCERN

Review all of the information you wrote for Pluses, Potentials, Concerns and especially ideas for Overcoming concerns. Build on your original idea or rewrite a new and improved statement of solution.

To strengthen my solution I will

Write response: *Now what I see myself doing is...*

Assisters & Resisters

Assisters	Resisters	Overcome
List potential assisters who will help implement.	List potential resisters who may hinder implementation. Use 5Ws & H.	List steps to overcome key Resisters or to get Assisters to help more.

Now generate a list of action steps that will detail everything that might need to happen in order to bring your solution to reality.

Order them using short-, mid-, and long-term. Now select key steps you need to take you make your solution a reality. Make your first step something you can accomplish in the **next 24 - 48 hours**. Momentum is essential.

	What?	Who?	By When?	Who Checks?
Short-term				
Mid-term				
Long-term				

Write response: *Now what I see myself doing is...*

Assisters & Resisters

Assisters	Resisters	Overcome
List potential assisters who will help implement.	List potential resisters who may hinder implementation. Use 5Ws & H.	List steps to overcome key Resisters or to get Assisters to help more.

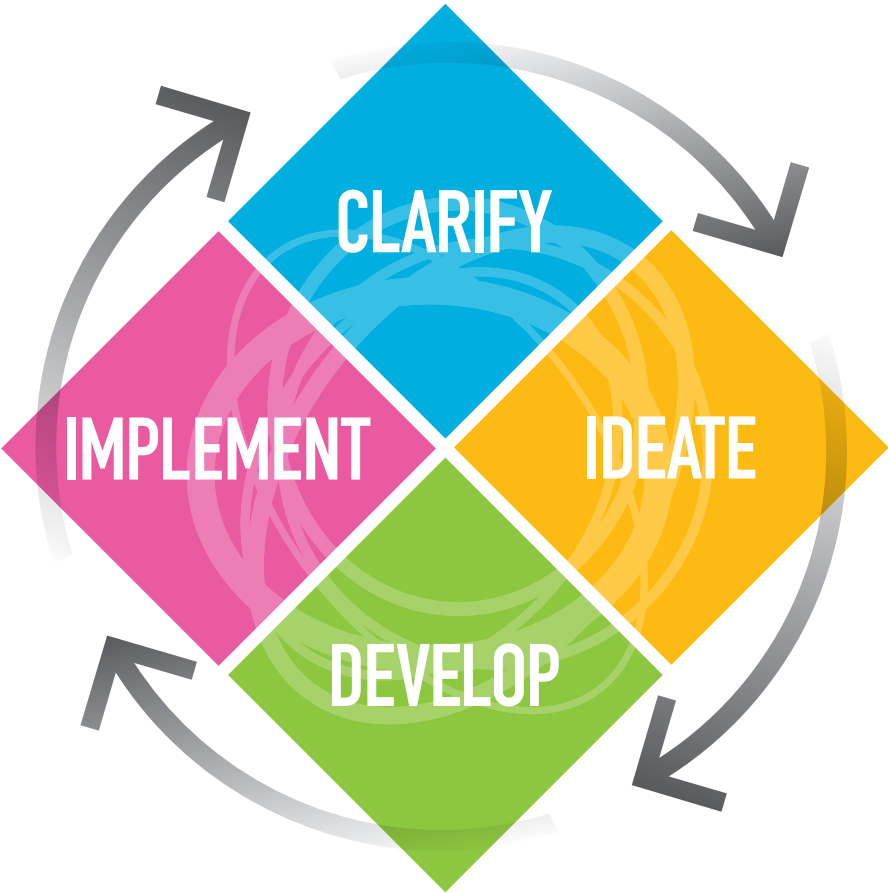
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Long-term				

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