



Toolkit: PIP Problems-Ideas-Plans *creative problem solving model*

POPULATION

This activity is designed for individuals or any size group ages 10 through adult.

FOCUS

Problem solving, creativity, and cognitive flexibility to enhance emotional wellness.

OVERVIEW

Problem solving is an important coping skill and the PIP (Problems-Ideas-Plans) is a fun, creative tool to develop that skill. It is unusual in that it teaches creative problem solving in less than an hour. Deficits in problem solving ability are related to the development of depressive disorders so a problem solving approach is an important strategy for prevention and skill building.

BENEFITS

"It was calming to break it down like that, instead of bottling it up"

- ✓ Deferring judgment on one's and others' ideas
- ✓ Promoting collaboration
- ✓ Promoting cognitive flexibility – generating many ideas and perspectives

Educators will recognize problem solving as an element common to academic constructs (Mindset, 21st Century Learning, and Social Emotional Learning/SEL). The PIP is a practical activity that promotes decision making skills of SEL along with the creative (divergent) and critical (convergent) thinking skills of '21st century learning'. Creative problem solving can also be a strategy in treatment for depression. (Cognitive Therapy and Research 2008 Volume 32, Pages 227-245, Efficacy of a Problem-Solving Therapy for Depression and Suicide Potential in Adolescents and Young Adults.)

COST

None

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CONTACT

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Worksheet for PIP (Problems-Ideas-Plans) Creative Problem Solving Model

A) Problem: What is on your mind? What is something you would like help in solving?

B) Rephrase the problem you wrote above 3 different ways, starting with “How to:”

How to...

How to...

How to...

C) From the list above, select the most important question and write it below.

How to...

D) Divergent Thinking: Generate at least 6 ideas for answering the question above.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

E) Convergent Thinking: From the list above, choose the best idea and create a solution statement that begins with the phrase “What I see myself doing is ...”

SOLUTION STATEMENT: What I see myself doing is ...

→ Go to next page for **F) Action Plan**

F) Action Plan

Reread your solution statement in E) and think of the steps for an action plan to list **who** is going to do **what**, by **when**.



Tips:

- ~ Schedule your first action within 24 hours to build momentum and stay focused*
- ~ Fill in the last line with the ideal date to finish*
- ~ Use actual dates in the rest of the BY WHEN column such as 'by July 4'*
- ~ Add names of people who might help you in the WHO column*

WHO?	DOES WHAT?	BY WHEN?
1.		
2.		
3.		
4.		
5.		
6.		

We are grateful to Nadja Reilly, PhD, Russ Schoen and Gloria Rapport for their assistance in the creation of PIP.

Based on original work by the Creative Education Foundation and the Osborn-Parnes Creative Problem Solving Process, 1954

Facilitator script for PIP Worksheet

Estimated Time: 30 minutes (time may be added for practice individually or in groups)

Description of Activity: This activity presents a brief and accessible model for problem solving. After learning PIP, it can be used to address any problem – whether family, friends, school or work.

Materials Needed:

- ~ Pencil and two PIP Worksheet handouts (example problem plus blank to keep) for each participant
- ~ Optional: Journals to track problems and plans going forward
- ~ Optional: PIP slide presentation on example problem, solution and plan
- ~ Optional: flipchart, markers, and sticky notes for the larger group to address a problem together

Presenter Instructions:

1. Distribute PIP Handout to students.
2. Introduce the activity: "Today we will be learning a new approach to problem-solving, the Problem, Ideas, and Plan. Please think about a particular problem that you would like help with in solving. We'll use the PIP worksheet to address that problem."
3. "First, I need each of you write down some information about a problem that has been on your mind. Take one minute to decide and write it down."
4. "Next, I need you to create at least three different ways to rephrase the problem starting with 'How to.' For example, if my problem were that I'm always feeling exhausted, I might write: How could I feel more energetic? How could I get more sleep? How could I organize everything I have to do better so I have more time to relax?"
5. "Now pick the phrasing of the problem that you think is really the most important or relevant question."
6. "Now that you've identified your re-worded problem, please find a partner."
7. "You and your partner will together generate ideas for addressing each of your problems."
8. "When you are first trying to generate ideas, use DIVERGENT THINKING. Divergent thinking is when you come up with as many ideas as you can, suspending all judgment or value on the idea. Be as creative as you can, the goal here is quantity over quality. You can build on each other's ideas and anything goes! Take turns generating a list of ideas using divergent thinking for each of your problems." (allow for 5 minutes of divergent thinking)
9. "Now look at your list of options and use CONVERGENT THINKING to choose the one idea you like the most. When you use convergent thinking, you focus on ideas that seem realistic and helpful. You consider new approaches and ones that make an improvement on what you've done in the past." (allow for 5 minutes of convergent thinking)
10. "Now once you have chosen the one idea you like most, write it down on your worksheet."
11. "Now it is time to create an action plan. On your worksheet, write down the list of steps you will take to complete your proposed solution. Who is going to do what? By when? Make sure you include the due dates, with at least one action step happening within 24 hours."

Debrief: Encourage volunteers to share with the larger group what they have written on their worksheets. Ask how the process was helpful toward finding potential new solutions (ex. defining a problem gives me control; I learned to break big worries into smaller problems that I can fix; brainstorming ideas with a friend reminds me I am not alone).



Mental Health Initiatives

RAGMHI TOOLKIT: PIP Problems-Ideas-Plans

A brief, fun model for Creative Problem Solving

Reilly, 2012: Slide 1

Based on original work by the Creative Education Foundation
& the Osborn-Parnes Creative Problem Solving Process, 1954

Divergent Thinking



- Everyone is involved
- Think of as many ideas as possible
- Suspend judgment
- Be bold
- Wild and crazy is wonderful!
- Combining ideas is great

Convergent Thinking

- Choose ideas you like best
- Realistic and helpful
- New approaches
- Improvements on the old
- Match the solution to your goal



Reilly, 2012: Slide 3

Creative Problem Solving: The Basic Course (Isaksen & Treffinger, 1985)

Worksheet for PIP (Problems-Ideas-Plans)

A) Problem: What is on your mind? What is something you would like help in solving?

Design a better backpack

B) Rephrase the problem you wrote above 3 different ways, starting with "How to:"

How to...

Make my own backpack better

How to...

Invent the best I backpack in the world

How to...

Imagine the perfect backpack for me

C) Now write the most important question below.

How to...

Imagine the perfect backpack for me

D) Divergent Thinking: Generate as many ideas as you can for answering the question above.

-fireworks when I open my backpack

-battery charger

-water fountain and ice machine

-all my music with loud speakers

-microwave oven for snacks

-Velcro holding everything where I can find it

E) Convergent Thinking: From the list above, choose the best idea and create a solution statement that begins with the phrase "What I see my solution is."

SOLUTION STATEMENT: What I see myself doing is...

Customizing my backpack to have space for fun stuff and school work

Action Plan



- First action within 24 hours is important
- Small, realistic goals
- Who might help you?

Presenter Notes to Slide Presentation for PIP

Slide 1 (No notes)

Slide 2

Introduce the example activity:

“Today we will be learning a new approach to problem-solving, the Problems, Ideas, and Plans, or PIP. This is a fun and creative way to solve any kind of challenge that you might be facing, like how to have better time management for homework, or how to talk to your friends about a very difficult topic. Let me introduce you to the new ways of thinking we’ll be using for problem-solving. Let’s pretend that we have been given the task of creating the perfect backpack. What should be in it? What should it look like?”

*“When we are first trying to come up with these ideas, we will use **DIVERGENT THINKING**.*

→ **Presenter note** - Use hand gestures to make the point of this – arms outstretched as a V.

Divergent thinking is when you come up with as many ideas as you can, suspending all judgment or value on the idea. Don’t think “I won’t say that because that could never happen,” or “That’s a silly idea, I don’t want to say that and be embarrassed.” Be as bold, brave, loud, and creative as you can! The goal here is quantity, so the more wild and crazy ideas the better! You can build on each other’s ideas and anything goes! Are you ready to practice? Let’s take turns using divergent thinking to come up with ideas for making the perfect backpack.” (Allow for 5 minutes of divergent thinking.)

→ **Presenter note** - A visible record must be kept to show the volume of ideas generated during this divergent thinking process. One method is for students to write a single idea onto a post-it sticky note which you collect on a flipchart; a different method is for you to write on the board their ideas as they come up with them. As a note, students seem to prefer the post-it notes as they are visually engaging and colorful.)

In Applied Imagination (1963) by Alex Osborn and in Visionizing (2004) by Sidney J. Parnes, the authors note the importance of removing blocks to divergent thinking. Alex Osborn is credited as being the “Father of Brainstorming.”

Slide 3

“That was great! How did that feel? (The goal here is to encourage kids to reflect on the flexibility and power that deferring judgment can generate).

*Ok, now let’s look at this amazing list of ideas and let’s use **CONVERGENT THINKING***

→ **Presenter note** - facilitator – use the hand gestures to convey the convergence – bringing arms together over your head, palms touching) *to narrow down on the ideas and choose the one you like the most. When you use convergent thinking, you focus on ideas that seem realistic and helpful. You consider new approaches and ones that make an improvement on what you’ve done in the past.” (Allow for 5 minutes of convergent thinking: reflect on the idea chosen for the best backpack ever - elicit student reactions about this portion of the process – encourage connections between collaboration, critical thinking, and finding new perspectives.)*

→ **Presenter note** - If looking for a solution to a personal problem, there should be individual convergence, not convergence as a group exercise.

Slide 4

Re-read the Solution Statement you selected in Section E that begins with 'What I see myself doing is...' and turn over the worksheet to the 'Action Plan' side.

Slide 5

Section F - *"Now it is time to create an action plan. This part is really important, as it is your guide in outlining the steps you'll need to take to solve your problem. In the column labeled DOES WHAT? write down the list of steps you will take to complete your solution.*

Now, for each step consider Who is going to do what? By When? Make sure you add actual due dates, with at least the first action step happening within 24 hours. If you are able to take your first step in these first 24 hours, you will have a much better chance of completing your whole action plan." (Allow 3-5 minutes to develop the action plan.)

Student Discussion: When students finish, encourage sharing with the larger group what they have written on their worksheets. Ask how the process was helpful toward finding potential new solutions. Some questions to guide discussion include:

What was it like to come up with a problem and define it?

What was difficult?

What did they like about it?

What did they come up with for their action plan?

Why does it make sense to break down large problems into smaller portions?

What do they think might happen as they complete each action step?

How might they feel?

PIP wallet card (for Avery 5302 tent cards)

Toolkit online at RAGonMentalHealth.org

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ways, starting with “How to...”
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select the most important question.
- D) Divergent Thinking: Generate at
least 6 ideas answering the question.
- E) Convergent Thinking: Choose the
best idea/s and write the solution as
“What I see myself doing is ...”
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