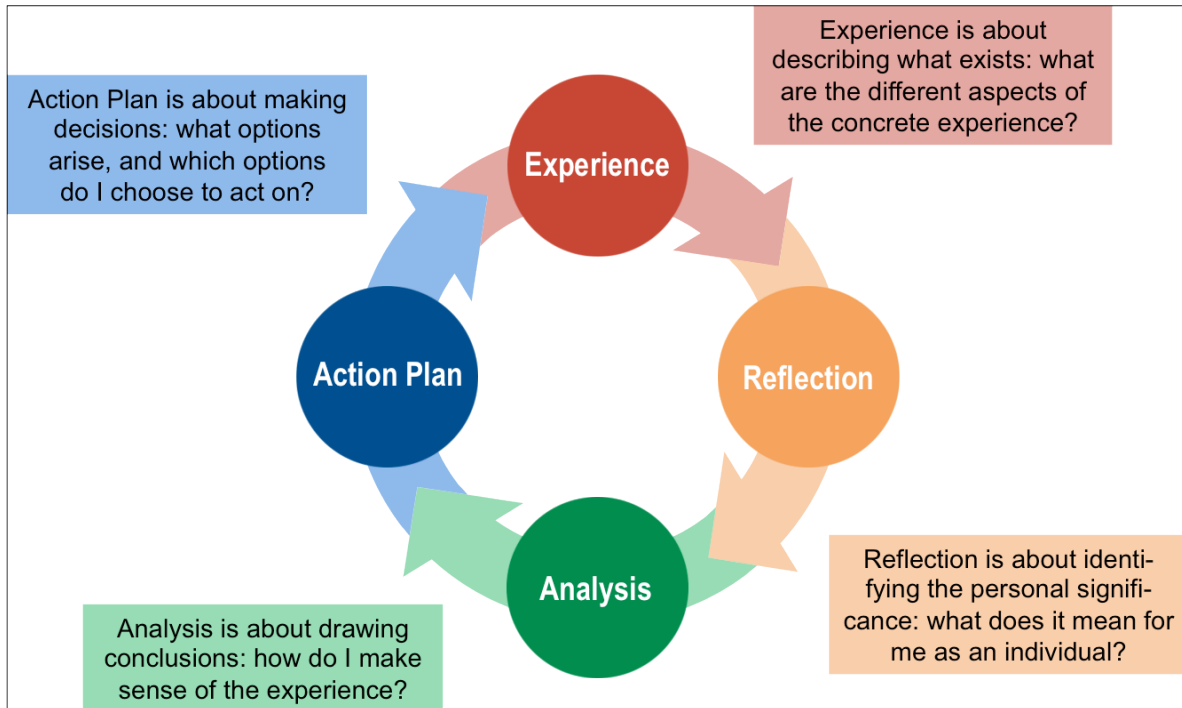


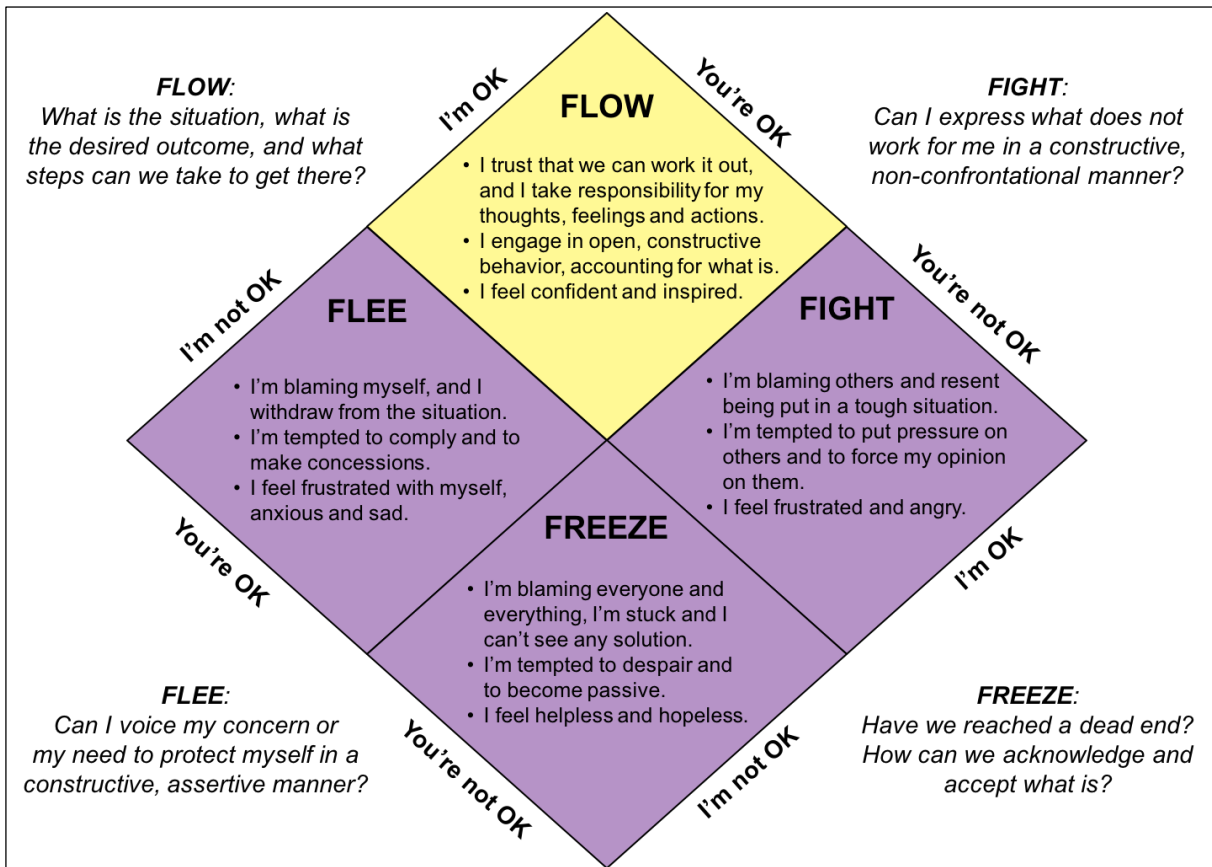
## Worksheet D: Processing a Learning Experience



The figure above explains the four elements of experiential learning (Kolb 2014). Going through every step ensures that an experience is fully processed. The table below illustrates the application for three different learning stages (Worksheet A from Part 1). Choose a column depending on the situation.

Enthusiastic Beginner: <b>Process Significant Learning</b>	Discouraged Learner: <b>Overcome Road Blocks</b>	Cautious Performer: <b>Develop own judgment</b>
<i>Hints: Pick the questions that apply. Answer at least one question per row before moving to the next row. Write answers down in a learning journal.</i>	<i>Hints: Address each question. Avoid jumping to solutions. Trust that solutions will emerge once you have identified the root problem and how it affects you.</i>	<i>Hints: Adapt the learning questions to the type of task as necessary. Answer all relevant questions before moving to the next row.</i>
<ul style="list-style-type: none"> <li>• What happened?</li> <li>• What triggered my learning?</li> </ul>	<ul style="list-style-type: none"> <li>• What is happening?</li> <li>• What is the problem?</li> </ul>	<ul style="list-style-type: none"> <li>• What did I aim to achieve?</li> <li>• What did I do?</li> <li>• What was the outcome?</li> </ul>
<ul style="list-style-type: none"> <li>• How do I feel about it?</li> <li>• How does it relate to my past learning?</li> <li>• Why is it significant for me?</li> </ul>	<ul style="list-style-type: none"> <li>• What feelings are evoked in me?</li> <li>• Why is it important for me?</li> <li>• How does it affect me?</li> <li>• Check: is this the real problem?</li> </ul>	<ul style="list-style-type: none"> <li>• What went well, and why?</li> <li>• What went less well, and why?</li> <li>• What was unexpected?</li> </ul>
<ul style="list-style-type: none"> <li>• What does it mean?</li> <li>• How can I generalize from the experience?</li> <li>• How does it relate to concepts I know?</li> </ul>	<ul style="list-style-type: none"> <li>• What are possible solutions?</li> <li>• Come up with 3 – 5 solutions, good or bad, without evaluating them.</li> </ul>	<ul style="list-style-type: none"> <li>• How could I have foreseen how it would go?</li> <li>• Can I develop new assumptions or rules?</li> </ul>
<ul style="list-style-type: none"> <li>• What will I do differently in the future?</li> <li>• In what other contexts will this apply?</li> </ul>	<ul style="list-style-type: none"> <li>• What can I do about it?</li> <li>• What is my next small step, and when will I do it?</li> </ul>	<ul style="list-style-type: none"> <li>• What conclusions can I draw for the future?</li> <li>• What will I do next?</li> </ul>

## Worksheet E: Maintaining a Constructive Position



The figure above describes the four basic attitudes that we can take towards any given situation, with their thoughts, feelings and behaviors as described in each of the four boxes (adapted from Ernst 1971, Temple 2016). 'Flow' is the only constructive position. If you find yourself not in Flow, the questions in italics may help you identify what is going on for you at the moment and find a way back into Flow. From there, you can take steps to address the situation collaboratively and work toward the desired outcomes.

Use this worksheet, on your own or with a person that you trust, to reflect on **your own** attitudes and behaviors in a specific situation that you experienced and to evaluate alternatives, following the steps listed below. Note that advisors or students may prefer to do this on their own.

1. Think of a challenging conversation, or situation, in your working relationship. What happened?
2. Consider your own attitude at the beginning, your thoughts, feelings and behaviors. Identify the corresponding position in the figure: did you start in Fight, Flee, Freeze, or Flow?
3. How did you feel? How might you recognize in the future when you are in this position?
4. Read the associated question. Does it apply to the situation? What could you have done at this point to maintain or move back into Flow?
5. During the experience, did your thoughts, feelings or behaviors change? What position(s) did you go to?
6. Repeat steps 3 and 4 for each position relevant to your situation.
7. Based on your reflection, are there any steps you plan to take regarding the past experience?
8. What, if anything, will you do differently in the future?

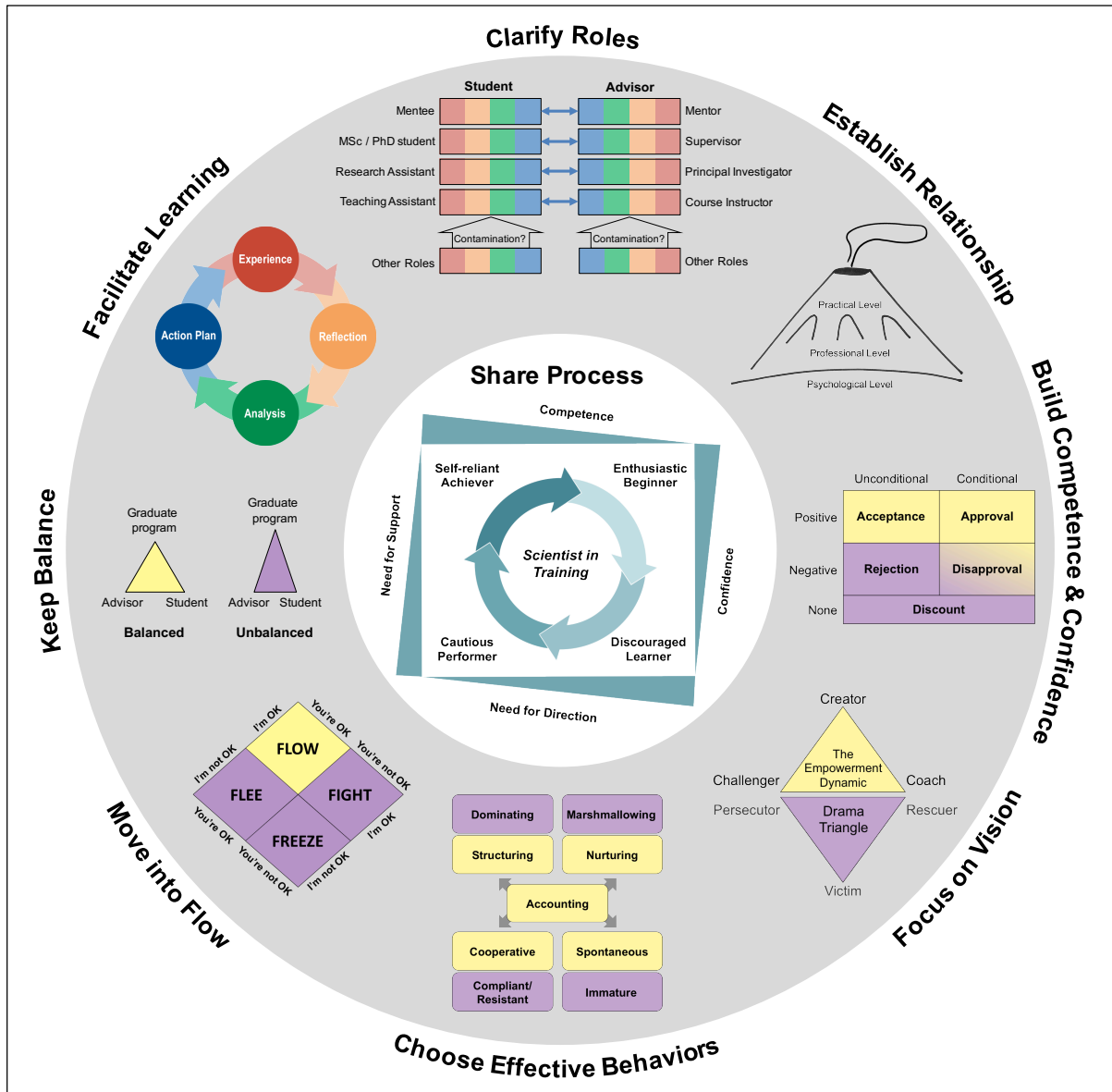
## Worksheet F: Shifting to a Creator Orientation

When you are experiencing a challenging situation related to your work or your working relationship, you can use the questions below, on your own or with a person that you trust, to consider a conscious shift from a Victim orientation to a Creator orientation (see Figure 4) and refocus your energy on what you want to experience or achieve: you have a choice in how you think about your situation!

Where is your focus in the present situation?	
<i>Victim orientation:</i>	<i>Creator Orientation:</i>
I consider what others did to make me feel bad or to react _____	I consider what I did to contribute to the situation
I think about my problems _____	I think about my goals
I know what I don't want _____	I know what I want
I feel anxious _____	I feel passionate
I'm suffering _____	I have the capacity to act
.....	.....

1. In the figure above, select the line that best represents your thoughts or feelings about the present situation: what is your focus, where is your energy concentrated? You may use the last line to add your own description, and its counterpart.
2. On the selected line, is your focus on the left side (Victim orientation) or on the right side (Creator orientation)? Use a small object to represent you, and place it on the line to indicate your position.
3. If your focus is on the left side, consider moving it to the right. What does this entail? Elaborate what the description on the right side means for you in your specific situation.
4. Move the object that is representing you further to the right. What feelings does this invoke in you? How far are you ready to move at this time? Can you identify a 'stepping stone' that would enable you to shift part of the way?
5. If you don't feel ready to move toward the Creator orientation on the right, consider using the second column of Worksheet C (companion paper) to identify what might be keeping you stuck.
6. If you feel ready to move to the Creator orientation, focus on your vision and desired outcomes:
  - a. What do you want to experience in your professional relationship, and what do you want to achieve in your work?
  - b. Compared to your desired outcomes, what is your current reality?
  - c. What are the next small steps you can take to start creating your desired outcomes?

# Worksheet G: Pulling it all Together



The figure presents a mind map of key concepts from the two-part series on graduate advising, organized around the central theme of learning to become an independent scientist. Follow the steps below to analyze a challenging situation and to identify what you can do to enhance your working relationship.

1. Consider a challenging situation. This may be a current situation, or a past situation that worked out well. What is/was the problem?
2. Use the mind map above to analyze the situation. What aspects are/were involved?
3. What is/was at the root of the problem?
4. Is/was the problem important for you and needs/needed to be addressed? Why?
5. Consider the concepts and tools presented in this series. Which ones apply to the situation?
6. What concrete steps could/did you take to improve the situation?
7. How will/did you know that it worked?