

Find a problem	Analyse Problem	Choose Solving Style	Generate Ideas	Select and Implement Solution	Barriers and Communication
<p>Problem form co-op</p> <p>Technical Problem</p> <p>Problem caused by high cost</p> <p>From newspaper, articles or FACTIVA.</p>	<p>Gather Data</p> <p>Determine causes</p> <p>Determine problem owners &amp; stakeholders</p> <p>Identify and manage risks</p> <p>Draw FISHBONE diagram.</p>	<p>Base on deadline, budget, and team composition, choose one of the below</p> <p>Convergent:</p> <ul style="list-style-type: none"> <li>- Low risk, low - medium cost, direct, effective, but lack of creativity and not comprehensive.</li> </ul> <p>Divergent:</p> <ul style="list-style-type: none"> <li>- Requires a lot of time and attempts, expensive as well, but comprehensive, creative and potentially very effective.</li> </ul>	<p>Individual and group Brainstorm</p> <p>Mind maps</p> <p>Relax &amp; Play!</p> <p>Visual Thinking</p> <p>The Disney Creative Strategy</p> <p>TRIZ</p> <p>(For the last 2, visit <a href="https://learn.uwaterloo.ca/content/enforced/195353-PD6_082_cel_1155/lecture-content/unit-05/unit-05-instructor-presentation/index.htm?ou=195353">https://learn.uwaterloo.ca/content/enforced/195353-PD6_082_cel_1155/lecture-content/unit-05/unit-05-instructor-presentation/index.htm?ou=195353</a>)</p>	<p>Use the Weight Matrix Comparison method to compare possible solutions</p> <p>Break down the best solution into 3 or more steps, fill in each step with clear instructions. State the timelines, resources, people , and costs needed.</p> <p>(Example, visit <a href="https://learn.uwaterloo.ca/content/enforced/195353-PD6_082_cel_1155/lecture-content/unit-06/unit-06-instructor-presentation/index.htm?ou=195353">https://learn.uwaterloo.ca/content/enforced/195353-PD6_082_cel_1155/lecture-content/unit-06/unit-06-instructor-presentation/index.htm?ou=195353</a>)</p> <p>Choose a back-up solution.</p>	<p>Avoid:</p> <ul style="list-style-type: none"> <li>- Making assumptions</li> <li>- emotional</li> <li>- egocentric thinking</li> <li>- poor communication</li> </ul> <p>Understand:</p> <ul style="list-style-type: none"> <li>- Individual culture</li> <li>- Workplace culture</li> </ul> <p>Report:</p> <ul style="list-style-type: none"> <li>- Social and physical Barriers</li> <li>- Management style</li> <li>- Distractions</li> <li>- Lack of Resources</li> </ul> <p>A difficult conversation is needed: download the <u><a href="#">Managing Difficult Conversations Worksheet</a></u> (RTF) from <a href="https://learn.uwaterloo.ca/d2l/le/content/195353/viewContent/1181366/View">https://learn.uwaterloo.ca/d2l/le/content/195353/viewContent/1181366/View</a></p>

PD6 provides students with the skills and knowledge needed to effectively solve problems. Students identify who they are as problem solvers and develop their problem-solving skills through personal reflection and case studies. Before taking PD6, I approached problems without analyzing it comprehensively, coming up of one or two possible solutions, and rarely have a detailed plan of how to implement the solution. This course has improved my problem-solving skills through a series of instructional videos. These videos provide an introduction to different problem solving tools, such as the Fishbone Diagram, Weight-Matrix Comparison, The Disney Creative Strategy, and Step-by-Step Implementation Plan. Upon successful completion of this course, I have developed a new and improved problem-solving action plan. This plan has several steps:

- identify and research exceptional problems;
- analyze a problem by identifying the causes, stakeholders, and risks associated with the problem;
- use either divergent or convergent problem solving style;
- generate creative solutions to a problem;
- apply decision-making tools(weight-matrix comparison) to possible solutions in order to identify the best solution;
- monitor and revise a solution;
- create an implementation plan;
- identify and minimize the impact of potential barriers to problem solving;
- and plan for a difficult conversation.