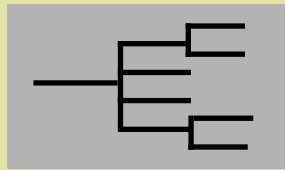

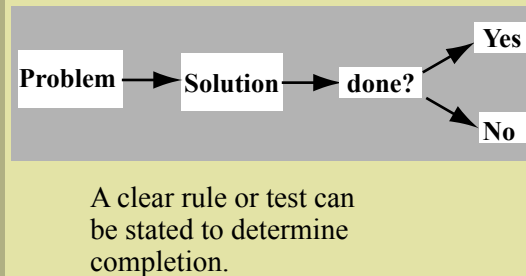
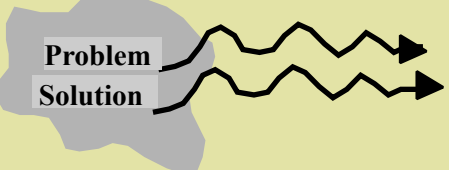


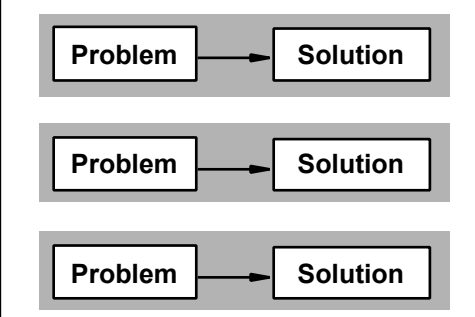
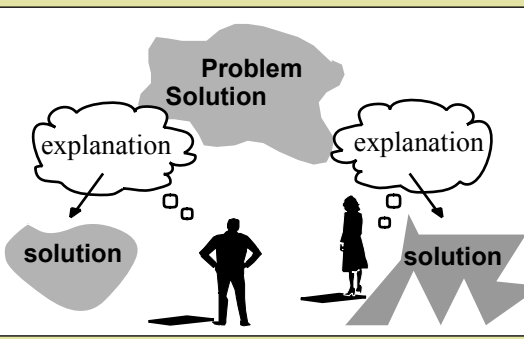
Comparing Ill-Structured and "Tame" Problems

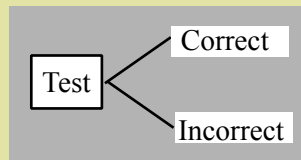
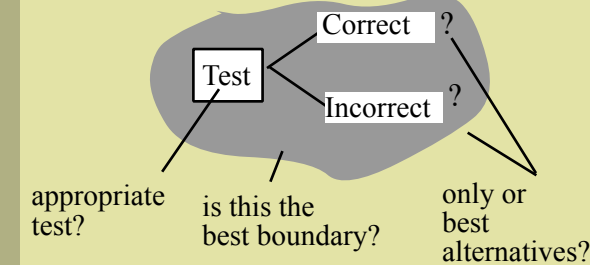
Comparing Ill-Structured and "Tame" Problems

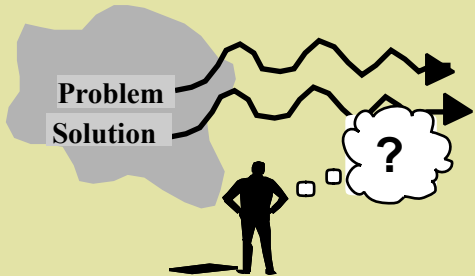
Comparing Ill-Structured and "Tame" Problems

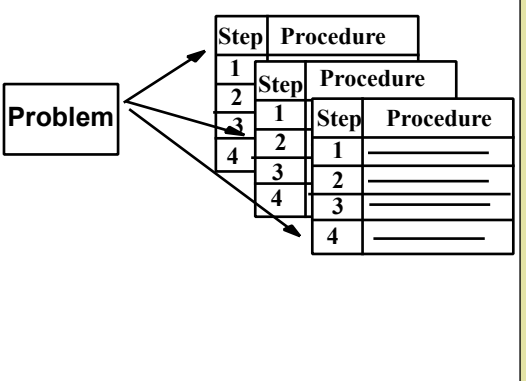
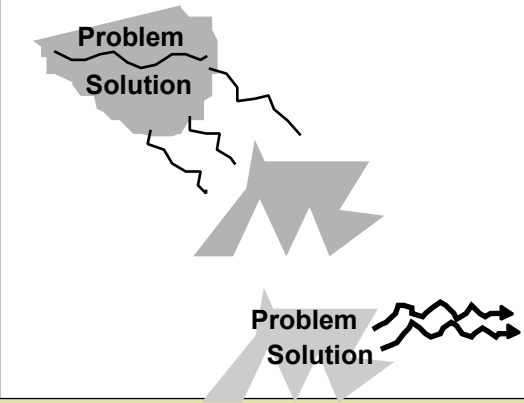
Characteristics	Tame Problems	Ill-Structured Problems
Ability to formulate the problem	<p>Can be formulated exhaustively and written down definitively.</p> 	<p>No definitive formulation</p> 

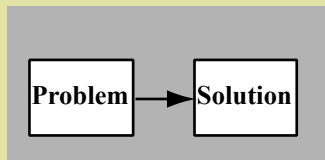

Characteristics	Tame Problems	Ill-Structured Problems
Ability to determine whether problem has been solved	<p>Have a clear ending point and a determinable solution.</p> 	<p>No stopping criteria...the problem may be ongoing and continuously changing, so there is no way of determining completion.</p> 

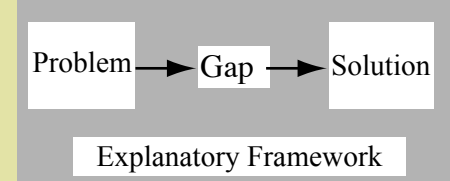
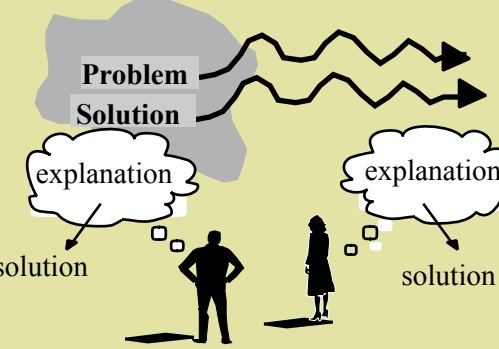
Characteristics	Tame Problems	Ill-Structured Problems
Uniqueness or reproducibility of problem	<p>Problems can be abstracted from the real world and similar solutions can be found.</p> 	<p>Each problem and each solution is unique.</p> 

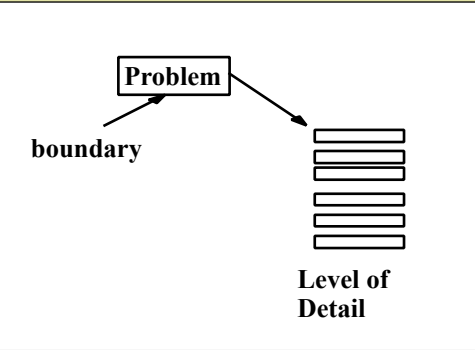
Ability to devise and conduct definitive tests	Tame Problems	Ill-Structured Problems
	<p>Can be tested. Mistakes and errors can be identified.</p> 	<p>No single criterion to determine correctness. Difficult to determine when a solution is a solution or even whether a test is applicable.</p> 

Tractability	Tame Problems	Ill-Structured Problems										
	<p>Exhaustive list of operations used to solve problem exists.</p> <table border="1"> <thead> <tr> <th>Step</th> <th>Procedure</th> </tr> </thead> <tbody> <tr><td>1</td><td>_____</td></tr> <tr><td>2</td><td>_____</td></tr> <tr><td>3</td><td>_____</td></tr> <tr><td>4</td><td>_____</td></tr> </tbody> </table>	Step	Procedure	1	_____	2	_____	3	_____	4	_____	<p>No list of operations exists for solving ill-structured problems.</p> 
Step	Procedure											
1	_____											
2	_____											
3	_____											
4	_____											

Repeatability of solutions	Tame Problems	Ill-Structured Problems
	<p>Attempts to solve can be made repeatedly until one works.</p> 	<p>You cannot undo what you have tried, so that each solution is unique and changes the nature of the problem.</p> 

Relationship between problem and solution	Tame Problems	Ill-Structured Problems
	<p>Problems can be formulated separately from solutions.</p> 	<p>Solving the problem is synonymous with understanding it in the first place.</p>  <p>Each formulation of an ill-structured problem contains a definition of the solution.</p>

Relationship between explanation and solution	Tame Problems	Ill-Structured Problems
	<p>Can be stated as a discrepancy between what is and what could or ought to be, and an explanation exists for every gap.</p> 	<p>Many possible explanations and each one "contains" or "implies" a different solution.</p>  <p>More on this table on the next page</p>

Level of analysis	Tame Problems	Ill-Structured Problems
	<p>Identifiable, "natural" form with high degree of certainty...level of detail for solving the problem can be found...and boundaries for the problem are reasonably easy to agree upon.</p> 	<p>No identifiable causes...every "symptom" is a problem and vice versa...level of detail and approach are not easy to define...little agreement on setting boundaries of the problem.</p> 