

## Critical Thinking & Problem Solving

Critical thinking is a mode of reasoning, about any subject, content or problem in which the thinker improves the quality of his / her thinking by skilfully analysing, assessing and reconstructing it. Critical thinking is self-directed self-monitored and self-corrective thinking.

Problem Solving: Committing to an action or judgement after evaluating the facts, data *or possible learning* from a situation, to develop alternative courses of action that are based on logical assumptions and factual information and that take into consideration resources, constraints, and familiarity with situations

Knowledge	Skills	Attitude	Behaviour
<p>Recognise fundamental elements of a situation to clarify a situation</p> <p>Distinguish various types of reasoning (inductive, deductive, etc.) as appropriate to the situation</p> <p>Can bring experience to recognise a need to solve technical problems &amp; Identify needs and technological responses</p> <p>Identify competence gaps</p> <p>Know on how to make decisions with limited data and information</p> <p>Determine relevant devices or mediums to identify technical problems and find solutions</p>	<p>Examine the facts and make assumptions, attentive to the subject matter or goal at all times (possibly a young person)</p> <p>Evaluate, interpret and integrate information</p> <p>Interpret information and draw conclusions based on the best analysis</p> <p>Reflect critically on learning experiences and processes</p> <p>Use questioning techniques to clarify points of view and lead to better solutions</p> <p>Negotiate, compromise and find balance in order to derive decisions</p> <p>Demonstrate own expertise to coach others, ability to reflect, evaluate and test in order to find a solution.</p> <p>Organised, Attention to Detail</p> <p>Appraise technical problems and resolve using appropriate solutions</p>	<p>Solve different kinds of non-familiar problems in both conventional and innovative ways</p> <p>Maintain a curious, critical mindset</p> <p>Unbiased and fair, acknowledges change and strives for a solution</p> <p>Value sharing of information</p> <p>Prepare to make best decision possible based on available info / data</p> <p>Confident in own knowledge, so as to contribute</p> <p>Take the stance of “the beginner mindset” in order to ask questions and understand issues at hand, in order to identify hidden needs that should be addressed</p> <p>Follows through and competes tasks fully</p> <p>Think in a reflective way with self improvement in mind for progression</p>	<p>Prepare tasks, solution focused.</p> <p>Use technology as a tool for efficient and effective problem solving</p> <p>Reason in a way that is Consistent, reflective, balanced and supportive</p> <p>Willing to make a decision despite having limited data / information available</p> <p>Willing to be wrong in order to learn</p> <p>Can be conventional and unconventional as well as innovative in seeking ways to solve problems</p> <p>Anticipate and present change positively</p> <p>Upholds a resilient manner continuing to make efforts to achieve best outcomes</p> <p>Makes solid attempts to be on track for the subject matter.</p> <p>Creatively use digital technologies,</p>