

# Higher Order Thinking Skill (HOTS)

# GLOSSARY

## Modules 1-6



S. No.	Term	Definition
1.	Abilities	The skills or capabilities needed to perform tasks or solve problems.
2.	Adapt	To adjust or change in response to new conditions or challenges.
3.	Adaptability	Adjusting teaching to meet student needs.
4.	Analysing	Breaking down complex information into smaller parts to understand and interpret it more clearly.
5.	Artful Thinking	Using creative strategies to solve problems in class.
6.	Assessment of Learning	The evaluation process used to measure understanding and application of concepts introduced in a learning module.
7.	Assumptions	Beliefs or ideas accepted without proof, which can limit thinking if not questioned.
8.	Augmented Reality	Adding digital images to real lessons.
9.	Authorities	Individuals who hold a position of power or expertise, often viewed as credible sources of information.
10.	Autonomy	The ability to make independent decisions or choices without external influence.
11.	Bare Land	Land without plants, useful for geography lessons.
12.	Brain Sketching	A technique where students quickly sketch out their ideas or thoughts to visualize a concept or problem, helping to organize and clarify their thinking.
13.	Brain Teasers	Short, challenging problems or puzzles that require creative thinking and problem-solving to find the solution. These often encourage lateral thinking.
14.	Break Down Complex Ideas	The skill of simplifying complicated concepts into understandable parts for clarity and communication.
15.	Cause-and-Effect Activities	Exercises that help students understand relationships between actions and outcomes, promoting logical reasoning.
16.	Collaboration	Working together as a team to achieve common goals and solve problems.
17.	Collaborative Group Work	A learning strategy where students work together, sharing ideas and reasoning to solve problems or complete tasks.
18.	Collaborative Learning	A teaching approach where students work together in groups to solve problems, complete tasks, or learn from each other's experiences.
19.	Collaborative Problem-Solving	A group activity where individuals work together to address a challenge, combining ideas and strategies.
20.	Cognitive Abilities	Mental processes related to acquiring knowledge and understanding.
21.	Cognitive Process	Mental activities involved in acquiring, understanding, and applying knowledge.
22.	Complexity	The state of having many parts or elements, requiring deep analysis to understand.
23.	Conditions	Circumstances or factors upon which a statement or action depends.

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24.	Conclusions	The final decision or judgment reached after considering all the facts, evidence, and reasoning.
25.	Conceptual Thinking	The ability to understand and apply abstract ideas and concepts.
26.	Consequences	The results or effects of an action or decision. In the context of learning, consequences are what happen as a result of certain behaviors or choices, helping students understand cause-and-effect relationships.
27.	Concept Map	A visual representation of relationships between concepts. It shows how different ideas or pieces of information are connected and can help students understand complex topics.
28.	Counter-Examples	Examples that contradict a general statement, showing exceptions to a rule.
29.	Creativity	The use of imagination and innovation to develop original ideas and solutions.
30.	Creativity and Innovation in Learning	Using imaginative approaches and new ideas to enhance understanding and problem-solving.
31.	Creative Habits	Regular practices like brainstorming and experimenting that encourage creative thinking.
32.	Creative Potential	A student's ability to think in unique ways.
33.	Critical Component	A key part of a lesson or project.
34.	Critical Thinking	The process of evaluating evidence, analyzing assumptions, and considering alternative perspectives to make informed decisions.
35.	Critical Thinking Models	Frameworks or methods, such as Bloom's Taxonomy or Socratic questioning, designed to structure and improve thought processes.
36.	Curiosity	A strong desire to learn or know something new.
37.	Curiosity Corner	A classroom activity that uses open-ended questions to spark students' curiosity and encourage diverse perspectives.
38.	Deduction	A logical process in which a conclusion follows necessarily from the given premises.
39.	Deep Thinking	A thoughtful and comprehensive approach to exploring and understanding complex issues or concepts.
40.	Decision-Making	The process of choosing the best course of action from different options.
41.	Design Complex Projects	Creating challenging activities for students to solve.
42.	Design Thinking	A creative problem-solving process that involves understanding the needs of others, defining the problem, brainstorming ideas, creating a prototype, and testing solutions to refine them.
43.	Different Viewpoints	Perspectives or opinions that may differ from one's own, encouraging the exploration of diverse ideas and fostering open-mindedness.
44.	Divide and Conquer	Breaking a large, complex problem into smaller, manageable parts and solving each part individually.

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45.	Empowered	Enabling or giving someone the tools, confidence, or authority to take action.
46.	Empowerment Through Critical Thinking	The process of equipping individuals with skills to make informed, reasoned decisions and solve problems independently.
47.	Engaging Session	A productive and interactive learning experience characterized by active participation and openness to new ideas.
48.	Environmental Awareness	Understanding the interconnection between human activities and the environment, promoting sustainable practices.
49.	Ethical Responsibility	Teachers doing what's fair and right for students.
50.	Evidence	Information or data used to support or refute a claim or argument.
51.	Evidence-Based Decisions	Making decisions that are supported by facts, data, or research.
52.	Explanation of Reasoning	The ability to articulate the thought process behind a decision or answer, showcasing critical analysis.
53.	Experiential Learning	A teaching method where students learn through hands-on experiences rather than just listening to lectures or reading. It involves active participation and reflection on experiences.
54.	Exploring	Different viewpoints or approaches to gain a broader understanding of a situation or problem.
55.	Factual Recall	The ability to remember and retrieve information exactly as it was learned, without critical analysis.
56.	Fake News	False or misleading information presented as news, requiring critical thinking to evaluate its authenticity.
57.	Feedback Mechanisms	Ways to give and receive feedback in class.
58.	Financial Literacy	The knowledge and skills required to manage financial resources effectively, such as budgeting and prioritizing needs.
59.	Flip Classrooms	A teaching method where students learn content at home (usually through videos or reading) and use class time to engage in activities, discussions, and problem-solving, shifting the focus from teaching to active learning.
60.	Flow Charts	Diagrams that represent a process or sequence of steps, showing the flow of information or actions in a clear, step-by-step format.
61.	Follow-Up Questions	Questions asked after a student answers to help them explain more or give more details.
62.	Fostering	Encouraging or promoting the development of a skill or behavior.
63.	Gamification	The use of game-like elements, such as points, rewards, and challenges, in a non-game context (like the classroom) to make learning more engaging and motivating.

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64.	Graphic Organizers	Visual tools used to represent information, concepts, or ideas in an organized and structured way. Examples include charts, diagrams, and Venn diagrams.
65.	Ground Floor Perspective	A metaphorical concept referring to starting with the basics or a simpler level to understand larger, more complex ideas.
66.	Hands-On Exploration	Learning through direct interaction with objects, materials, or environments. This type of learning allows students to physically engage with the content and use their senses to explore new ideas.
67.	Higher-Order Thinking	Advanced cognitive processes such as analysis, evaluation, and creation, that go beyond basic understanding.
68.	Higher-Order Thinking Skills (HOTS)	Advanced cognitive processes such as analysis, evaluation, and creation, that go beyond basic understanding.
69.	Hypotheses	Proposed explanations or predictions that can be tested through reasoning or experimentation.
70.	Independent Learning	The ability to learn on one's own without constant guidance, often through self-directed study or exploration.
71.	Independent Thinking	The ability to analyze, reason, and form opinions or decisions without undue influence from others.
72.	Inquiry-Based Learning	A learning approach where students ask questions and find answers by exploring and investigating on their own.
73.	Integrate	To combine different pieces of information or knowledge to form a complete picture or understanding. In education, it refers to combining various skills or concepts into one cohesive learning experience.
74.	Intellect	The ability to think clearly, make sense of things, and solve problems by understanding and breaking them down into smaller parts.
75.	Interdisciplinary Projects	Combining subjects like math and science in class projects.
76.	Internalize	Fully understanding a concept and applying it.
77.	Interactive Learning	Students learning by actively doing tasks.
78.	Interactive Learning Tools	Tools like apps or games that make lessons fun.
79.	Innovative Solutions	Creative and effective answers to problems that challenge traditional approaches.
80.	Inference	A conclusion drawn from evidence or reasoning rather than explicit statements.
81.	Jigsaw Techniques	A collaborative learning strategy where students are assigned different sections of a topic or task. They work in expert groups to learn about their section, then regroup to share and combine their knowledge with others.
82.	Justify Opinions	The process of providing logical reasons or evidence to support one's viewpoints or decisions.

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83.	Justification	The reasoning or evidence provided to support a claim or belief.
84.	Key Takeaways	The most important points or lessons learned from a session, activity, or experience that you should remember and apply in the future.
85.	Lifelong Learners	Individuals who continue to seek knowledge and skills throughout their lives, outside of formal education settings.
86.	Logical Conclusions	Conclusions that are drawn based on sound reasoning and facts. These conclusions follow logically from the information provided
87.	Logical Reasoning	The ability to think in a clear and systematic way to make sense of things and solve problems. It involves following a sequence of steps to arrive at a conclusion.
88.	Logical Fallacies	Mistakes in thinking or arguments students should avoid.
89.	Mind Mapping	A way to visually organize ideas around a central topic, showing connections and relationships between them.
90.	Misconception	A wrong idea that needs correction in class.
91.	Model Critical Thinking	Demonstrating the process of logical reasoning by thinking aloud, enabling students to understand and replicate the approach.
92.	Motivation	The underlying reason or purpose behind an action or thought.
93.	Multidisciplinary Approaches	Combining knowledge and methods from different subjects to provide a broader perspective.
94.	Multiple Perspectives	Considering different opinions, experiences, or ways of thinking about a problem or situation, rather than just one viewpoint. It helps to understand the bigger picture by seeing things from various angles.
95.	Mindfulness	Paying attention to what is happening in the present moment, including your thoughts and feelings, without rushing or reacting quickly.
96.	Open-Ended Questions	Questions that do not have one correct answer, allowing students to explore different ideas and think critically.
97.	Open Questioning Mindset (OQM)	A listening approach that seeks understanding without bias, encouraging open dialogue and thoughtful inquiry.
98.	Online Discussion Forum	A digital platform where participants share ideas, engage in discussions, and collaborate on various topics.
99.	Patterns/Trends	Repeated behaviors or regularities that can help us understand and predict what might happen next.
100.	Peer Evaluation	Receiving feedback from classmates or colleagues to improve work quality.
101.	Perception	How we understand and make sense of what we see, hear, touch, taste, or smell. It's how our brain interprets the information from our senses.
102.	Perspective Shift	Changing one's viewpoint or approach to understand problems or situations differently.
103.	Perspective-Taking	Viewing a situation or concept from someone else's point of view to enhance understanding and empathy.

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104.	Potential Outcomes	Possible results of classroom activities.
105.	Preconceived Ideas	Opinions formed beforehand, often without adequate evidence or critical examination.
106.	Problem-Solving	A cognitive process involving the identification of challenges and the application of strategies to resolve them.
107.	Promoting Innovation	Encouraging students to think of new ideas.
108.	Pros and Cons	The advantages and disadvantages of a particular idea, decision, or course of action.
109.	Questioning Assumptions	The act of challenging and examining beliefs that are taken for granted to uncover hidden biases or errors.
110.	Questioning Techniques	Strategies used by educators to stimulate critical thinking, discussion, and exploration of concepts.
111.	Rating Scale	A system of measurement, often numerical, used to evaluate or assess performance, frequency, or quality.
112.	Real-Life Applications	Using classroom knowledge and skills to solve problems or make decisions in real-world situations outside of school.
113.	Real-World Problems	Issues from everyday life used in lessons.
114.	Reasoning	The way we think to make decisions or figure things out. It helps us connect ideas and solve problems by using logic and facts.
115.	Recycling	Reusing materials to teach sustainability.
116.	Reflect	To think carefully about something, like your teaching practices, in order to understand it better and improve it.
117.	Reflection	The process of thinking about past actions, decisions, or learning experiences to improve future outcomes.
118.	Reflection in Education	Encouraging students to think about their learning experiences to improve understanding and foster growth.
119.	Reflect on Learning Process	A practice where students analyze their own learning methods, progress, and outcomes to foster self-awareness and improvement.
120.	Reflective Journals	Writing about classroom experiences to learn from them.
121.	Reflective Practice	Thinking about lessons to make them better.
122.	Reflective Practitioners	Teachers who improve by thinking about their teaching
123.	Role Model	Someone whose behaviour or actions serve as an example for others to emulate.
124.	Role-Playing	An activity where students assume the roles of others to explore perspectives and deepen understanding of concepts or situations.
125.	Rubric	A set of rules or guidelines used to assess or grade student work or performance.
126.	Scaffold	Step-by-step support to help students learn.

S. No.	Term	Definition
127.	Self-Assessment	A reflective process to evaluate one's own skills, understanding, and areas for growth.
128.	Self-Assessment Checklist	A tool used to reflect on one's practices and identify strengths and areas for improvement, often employing a rating scale.
129.	Self-Directed	Students managing their own learning.
130.	Self-Evaluation	Reflecting on and assessing one's own work to identify strengths and areas for improvement.
131.	Self-Talk	Encouraging yourself to stay positive as a teacher or student.
132.	Simulation	A practice activity where students pretend to be in real-life situations to practice making decisions and solving problems.
133.	Skepticism	An attitude of questioning and doubting information until it is verified.
134.	Slogan	A short and catchy phrase to share an idea.
135.	Socratic Questioning	A technique of asking deep and thought-provoking questions to stimulate critical thinking.
136.	Spin A Pinwheel	Turning a small windmill for fun or science experiments.
137.	Spectators vs. Players	A distinction between those observing an event and those actively participating, highlighting roles and boundaries in a given context.
138.	Spirit of Curiosity	An attitude of inquisitiveness and a desire to explore and learn new ideas.
139.	STEAM	An approach to learning that integrates Science, Technology, Engineering, Arts, and Math to solve real-world challenges.
140.	Step-by-Step Instructions	Detailed and sequential guidelines provided to perform a specific task or solve a problem.
141.	Strengths and Weaknesses	Positive and negative aspects of an idea, argument, or solution that are evaluated to make a balanced judgment.
142.	Strategies	Methods or techniques employed to cultivate critical thinking, such as questioning, brainstorming, and problem-solving activities.
143.	Synthesize	Bringing ideas together to create new knowledge.
144.	Theoretical Concepts	Important ideas or theories students learn about.
145.	Think Outside the Box	Finding creative solutions in teaching or learning.
146.	Thought-Provoking Questions	Questions designed to challenge conventional thinking, encourage deeper analysis, and stimulate meaningful discussions.
147.	Trial and Error	A problem-solving method where different solutions are tried and mistakes are used to learn and adjust the approach.
148.	Unconventional Thinking	Approaching problems or challenges in innovative or non-traditional ways to discover creative solutions.
149.	Value Judgments	Assessments that determine the worth, importance, or correctness of something based on personal or societal values.

S. No.	Term	Definition
150.	Venn Diagram	A graphic organizer that helps compare and contrast by showing overlaps and differences between sets of items or ideas.
151.	Virtual Reality	Using computer-made worlds to teach subjects.
152.	Visual Tools	Graphical aids such as charts, diagrams, and story maps that help students organize thoughts, identify patterns, and understand connections.
153.	Way Forward	A plan or strategy for continuous improvement and skill development after the completion of a module or learning activity.
154.	What-If Scenarios	Hypothetical questions designed to stimulate imaginative and speculative thinking.
155.	Wind Energy	Using wind power to teach about renewable energy.
156.	Word Storm	A brainstorming activity where students write down all the words or ideas that come to mind about a certain topic, helping them activate prior knowledge and develop a deeper understanding.
157.	Working Backwards	A problem-solving strategy where you start from the desired outcome and work in reverse to identify the steps needed to reach that outcome.