III. Thinking & Innovation: *Integrates expertise in technical knowledge and skills with thinking and reasoning strategies to create, innovate, and devise solutions.*

Measurement Criteria and Core Actions		Level One Novice	Level Two Approaching Proficiency	Level Three Proficiency	Level Four Expert/Leader
III.A. DEFINES A PROBLEM IN THE WORKPLACE.	III.A.-.a. Describes	III.A.1.a. **Recognizes a problem while it occurs.**	III.A.2.a. **Provides a general description of the problem.**	III.A.3.a. **Articulates the problem or opportunity with specificity, taking all factors into account.**	III.A.4.a. **Persuades others that problem is described accurately.**
	III.A.-.b. Diagnoses	III.A.1.b. **Detects non-routine incidents or situations.**	III.A.2.b. **Explores potential causes of incident or situation,** e.g., runs tests to collect more data, reviews operational manuals.	III.A.3.b. **Analyzes evidence to determine cause of incident or situation,** e.g., connects similar situations to issue, recognizes anomalies in the data.	III.A.4.b. **Intuits (expert deduction) cause of incident or situation,** e.g., diagnoses problem when system says it is fine; does not rely on automation.
	III.A.-.c. Uses resources to define a problem	III.A.1.c. **Uses available technology, tools, and approaches to collect data.**	III.A.2.c. **Searches for new technology, tools, and approaches to collect and process data.**	III.A.3.c. **Applies new technology, tools, and approaches with conventional wisdom synthesized from multiple resources to define a workplace problem.**	III.A.4.c. **Creates new technology, tools, approaches to collect and synthesize data.**
III.B. PRACTICES INQUIRY AND REFLECTION (I/R) TO TAKE ACTION IN THE WORKPLACE.	III.B.-.a. Maintains attitude of openness	III.B.1.a. **Expresses curiosity about the entire work environment,** e.g., asks questions about workplace practices, the field/industry, and the work at hand.	III.B.2.a. **Seeks multiple viewpoints for processing one's work,** e.g., learns from novices as well as experts, reads industry articles, asks for explanation of opposing opinions.	III.B.3.a. **Requests constructive criticism of one's work,** i.e., accepts challenges to one's own understanding, knowledge; considers improvements for next iteration of a project or product.	III.B.4.a. **Interacts with others to improve workplace I/R practices and procedures.**
	III.B.1.b. Explores for deeper understanding	III.B.2.b. **Inquires into specific aspects of workplace practices, the field/industry, and the work at hand.**	III.B.3.b. **Seeks rationale behind workplace practices and policies,** i.e., the reason things are done in one way rather than another.	III.B.3.b. **Adjusts work behaviors to demonstrate deeper understanding of workplace practices and policies.**	III.B.4.b. **Evaluates workplace practices in light of impact on the organization,** e.g., relates to policies and procedures.

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Measurement Criteria and Core Actions		Level One Novice	Level Two Approaching Proficiency	Level Three Proficiency	Level Four Expert/Leader
III.B. PRACTICES INQUIRY AND REFLECTION (I/R) TO TAKE ACTION IN THE WORKPLACE (CONTINUED).	III.B.-.c. Uses resources for I/R	III.B.1.c. **Identifies resources for I/R,** e.g., industry events and organizations (trade shows, roundtable discussions, sensitivity training); industry-related articles; industry technology trends.	III.B.2.c. **Selects resources for I/R,** e.g., seeks continuing education opportunities; reads divergent & unrelated materials (to one's field) to make intellectual connections.	III.B.3.c. **Integrates resources into ongoing I/R practices,** e.g. relates new learning to workplace events and current work; incorporates informal learning into job, such as coffee breaks, lunch.	III.B.4.c. **Ensures I/R resources are available to others in the workplace,** e.g., reports, newsletters, workshops.
	III.B.-.d. Evaluates self	III.B.1.d. **Describes activities performed to meet job expectations,** e.g., states what was done to meet timelines.	III.B.2.d. **Conducts self-assessment,** e.g., gathers input on work performance from supervisor and customers; identifies gaps in personal skills.	III.B.3.d. **Implements a self-improvement plan.**	III.B.4.d. **Incorporates practices for continuous improvement.**
III.C. TAKES ACTION SUPPORTED BY EVIDENCE AND REASONING TO EXPLAIN CONCLUSIONS AND ACCOMPLISH WORK.	III.C.-.a. Composes a plan	III.C.1.a. **Clarifies the problem or opportunity that requires a course of action.**	III.C.2.a. **Proposes possible courses of action to address the problem or opportunity, taking into account existing solutions**.	III.C.3.a. **Selects a course of action after assessing potential alternatives.**	III.C.4.a. **Establishes a process for planning in the workplace,** e.g., template, procedure, process map.
	III.C.-.b. Constructs a model (visual, symbolic, or linguistic)	III.C.1.b. **Identifies factors/patterns related to the problem or opportunity in the work environment,** e.g., a chef is missing one ingredient but has extra of another; a retail sales person is overwhelmed with customers and needs a quick solution; an auto tech's diagnostic equipment is not working.	III.C.2.b. **Provides a model (visual, symbolic, or linguistic representation) of the key factors/patterns in the problem or opportunity,** e.g., creates a diagram, flow chart, map, software program, outlines a recipe, SWAT team diagrams a situation.	III.C.3.b. **Uses the model to propose solutions to the problem or opportunity,** e.g., changing the recipe, developing a new software, adjusting pattern of work flow.	III.C.4.b. **Transfers model to other applications in the workplace.**

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Measurement Criteria and Core Actions		Level One Novice	Level Two Approaching Proficiency	Level Three Proficiency	Level Four Expert/Leader
III.C. TAKES ACTION SUPPORTED BY EVIDENCE AND REASONING TO EXPLAIN CONCLUSIONS AND ACCOMPLISH WORK (CONTINUED).	III.C.-.c. Makes decisions	III.C.1.c. **Responds only to information in the immediate environment when taking action,** i.e., takes the problem or opportunity at face value.	III.C.2.c. **Considers multiple sources of information before taking action,** e.g., reviews company policies, consults resources on hand, calculates time-on-task required, compares similar problems /opportunities.	III.C.3.c. **Acts in a timely manner after evaluating sufficiency and relevance of information and potential consequences.**	III.C.4.c. **Evaluates consequences of decision on the organization,** e.g., checks against policies and procedures.
	III.C.-.d. Uses tools strategically	III.C.1.d. **Uses tools designated for workplace tasks.**	III.C.2.d. **Develops knowledge of the strengths and weaknesses of various approaches, tools, and strategies for analyzing problems and opportunities in the workplace,** e.g., divergent/convergent thinking exercises, computational modeling, visual mapping.	III.C.3.d. **Matches approaches, tools, and strategies to workplace problems and opportunities to optimize productivity.**	III.C.4.d. **Creates tools, approaches, and strategies to accomplish work.**
	III.C.-.e. Argues a case	III.C.1.e. **Documents data, patterns, and research needed to support an argument.**	III.C.2.e. **Analyzes information and context to construct an argument.**	III.C.3.e. **Makes a well-reasoned case: drawing upon evidence, knowledge of patterns, research, understanding of audience, and connections made to prior experience,** e.g., report, presentation.	III.C.4.e. **Anticipates challenges to an argument.**
III.D. TRANSFERS KNOWLEDGE AND SKILLS FROM ONE WORK SITUATION TO ANOTHER.	III.D.-. Builds capacity to transfer skills	III.D.1. **Recognizes skills and knowledge required in a new work situation.**	III.D.2. **Compares repertoire of skills and knowledge used in current work situation to the requirements of a new work situation.**	III.D.3. **Applies skills and knowledge to a new work situation.**	III.D.4. **Analyzes commonalities (patterns) in skills required for different work situation.**

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III.E. CREATES/INNOVATES TO IMPROVE WORKPLACE PRODUCTIVITY.	III.E.-. Builds capacity to create/innovate	III.E.1. **Selects familiar approaches to address workplace challenges.**	III.E.2. **Proposes multiple approaches to address workplace challenges,** e.g., uses a variety of creative processes.	III.E.3. **Generates alternative solutions and ideas to address workplace challenges,** e.g. looks past established boundaries/patterns.	III.E.4. **Builds a culture for innovation in the workplace.**