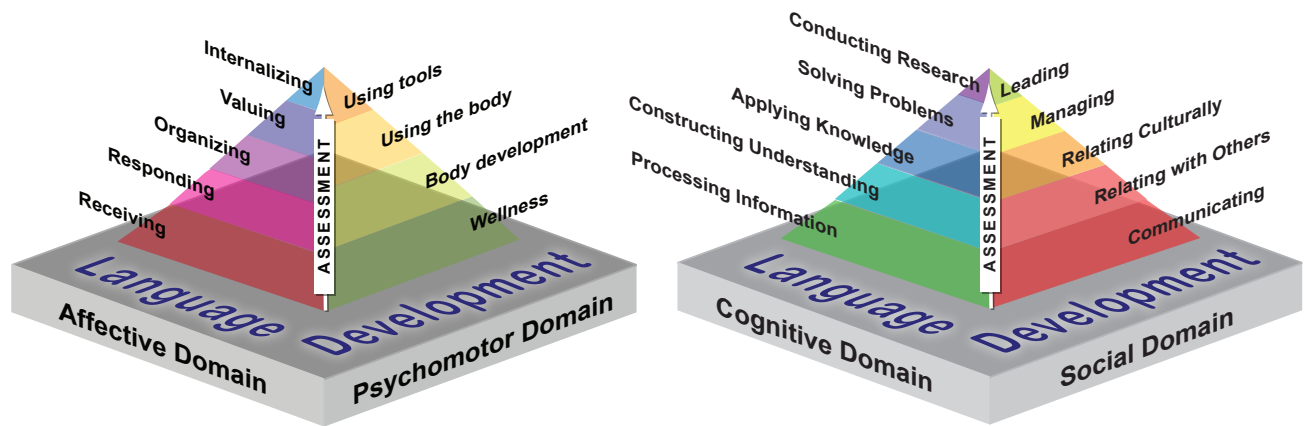


# The Classification of Learning Skills

## for Educational Enrichment and Assessment



The Classification of Learning Skills for Educational Enrichment and Assessment (CLS) represents a 15-year research effort by a team of process educators who created this resource to assist with the holistic development of their students. Used by both faculty and students, the CLS is a valuable tool which helps to identify key processes and skills fundamental to learning. It also provides the framework for making quality assessments of performance and serves as a guide for improving assessment and self-assessment skills.

Faculty who teach using active learning formats will find this resource especially useful when measuring, assessing, and improving student performance. Students can use the CLS to identify the most important skills required to perform at the level of a skilled practitioner in various content areas.

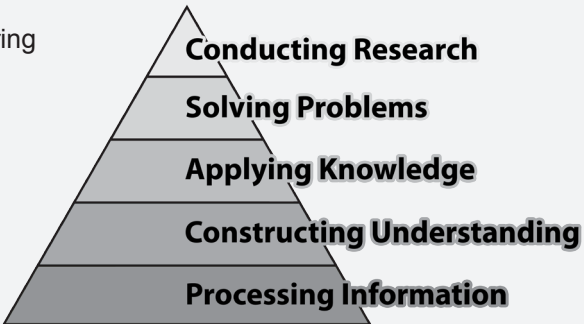
### What is a Learning Skill?

Learning skills are discrete entities that are embedded in everyday behavior and operate in conjunction with specialized knowledge. They can be consciously improved and refined. Once they are, the rate and effectiveness of overall learning increases. They can be identified at an early stage of a learner's development. No matter what the person's age or experience, learning skills can be improved to higher levels of performance through self-assessment, self-discipline, or guidance by a mentor. This growth in learning skill development is usually triggered by a learning challenge of some kind and is facilitated by actions built on a shared language between mentor and mentee.

### Development of the Classification

Initial work on The Classification of Learning Skills focused on the cognitive domain, looking primarily at critical thinking and problem solving skills. Benjamin Bloom's Taxonomy of Educational Objectives served as a resource during the construction of the cognitive domain. Efforts to build the social domain coincided with research projects such as the SCANS Report (*Secretary's Commission on Achieving Necessary Skills*), which pointed out the need to help students develop communication, teamwork, and management skills. Daniel Goleman's seminal work on emotional intelligence profoundly informed the work on the affective domain learning skills. The CLS was further expanded when levels for learner performance were identified and terms such as "enhanced learner" and "self-grower" were introduced.

# Cognitive Domain

Processing Information	
<p><b>Collecting Data</b> (from a disorganized source) Observing, Listening, Skimming, Memorizing, Recording Measuring</p> <p><b>Generating Data</b> (to fill a void) Predicting, Estimating, Experimenting, Brainstorming</p> <p><b>Organizing Data</b> (for future use) Filtering, Outlining, Categorizing, Systematizing</p> <p><b>Retrieving Data</b> (from an organized source) Recognizing patterns, Searching, Recalling, Inventorying</p> <p><b>Validating Information</b> (for value) Testing perceptions, Validating sources, Controlling errors, Identifying inconsistency, Ensuring sufficiency</p>	
Constructing Understanding	
<p><b>Analyzing</b> (characterizing individual parts) Identifying similarities, Identifying differences, Identifying assumptions, Inquiring, Exploring context</p> <p><b>Synthesizing</b> (creating from parts) Joining, Integrating, Summarizing, Contextualizing</p> <p><b>Reasoning</b> (revealing meaning) Interpreting, Inferring, Deducing, Inducing, Abstracting</p> <p><b>Validating Understanding</b> (for reliability) Ensuring compatibility, Thinking skeptically, Validating completeness, Bounding</p>	
Applying Knowledge	
<p><b>Performing with Knowledge</b> (in real context) Clarifying expectations, Strategizing, Using prior knowledge, Transferring</p> <p><b>Modeling</b> (in abstract context) Analogizing, Exemplifying, Simplifying, Generalizing, Quantifying, Diagramming</p> <p><b>Being Creative</b> (in new contexts) Challenging assumptions, Envisioning, Linear thinking, Divergent thinking, Transforming images, Lateral thinking</p> <p><b>Validating Results</b> (for appropriateness) Complying, Benchmarking, Validating</p>	
Solving Problems	
<p><b>Identifying the Problem</b> (to establish focus) Recognizing the problem, Defining the problem, Identifying stakeholders, Identifying issues, Identifying constraints</p> <p><b>Structuring the Problem</b> (to direct action) Categorizing issues, Establishing requirements, Subdividing, Selecting tools</p> <p><b>Creating Solutions</b> (for quality results) Reusing solutions, Implementing, Choosing alternatives, Harmonizing solutions</p> <p><b>Improving Solutions</b> (for greater impact) Generalizing solutions, Ensuring robustness, Analyzing risks, Ensuring value</p>	
Conducting Research	
<p><b>Formulating Research Questions</b> (to guide inquiry) Locating relevant literature, Identifying missing knowledge, Stating research questions, Estimating research significance, Writing measurable outcomes</p> <p><b>Obtaining Evidence</b> (to support research) Designing experiments, Selecting methods, Extracting results, Replicating results</p> <p><b>Discovering</b> (to expand knowledge) Testing hypotheses, Reasoning with theory, Constructing theory, Creating tools</p> <p><b>Validating Scholarship</b> (for meaningful contribution) Defending scholarship, Responding to review, Confirming prior work, Judging scholarship</p>	

## Social Domain

<b>Communicating</b>
<p><b>Receiving a Message</b> Attending, Reading body language, Responding, Checking perceptions</p> <p><b>Preparing a Message</b> Defining purpose, Knowing the audience, Organizing a message, Selecting word usage, Formatting a message, Illustrating</p> <p><b>Delivering a Message</b> Selecting a venue, Generating presence, Sharing knowledge, Persuading, Storytelling, Managing transitions</p>
<b>Relating with Others</b>
<p><b>Inviting Interaction</b> Taking an interest in others, Initiating interaction, Hosting, Expressing positive nonverbal signals, Assisting others, Being non-judgmental</p> <p><b>Relating for Meaning</b> Belonging, Befriending, Empathizing, Collaborating, Parenting, Mentoring</p> <p><b>Performing in a Team</b> Goal setting, Achieving consensus, Planning, Cooperating, Compromising</p> <p><b>Performing in an Organization</b> Accepting responsibility, Being assertive, Making proposals, Documenting, Influencing decisions</p>
<b>Relating Culturally</b>
<p><b>Accepting Constraints</b> Obeying laws, Inhibiting impulses, Noticing social cues, Recognizing conventions</p> <p><b>Living in Society</b> Sharing traditions, Supporting institutions, Valuing communities, Reacting to history, Being a citizen</p> <p><b>Demonstrating Cultural Competence</b> Clarifying stereotypes, Appreciating cultural differences, Generalizing appropriately, Using culture-specific expertise</p>
<b>Managing</b>
<p><b>Managing People</b> Building consensus, Motivating, Modeling performance, Assessing performance, Evaluating performance</p> <p><b>Building and Maintaining Teams</b> Defining team roles, Setting rules, Delegating authority, Confronting poor performance, Recruiting, Mediating</p> <p><b>Managing Communication</b> Connecting with stakeholders, Networking, Marketing, Sustaining change</p> <p><b>Managing Resources</b> Negotiating, Politicking, Securing resources, Creating productive environments</p>
<b>Leading</b>
<p><b>Envisioning</b> Projecting the future, Seeing implications, Balancing perspectives, Responding to change</p> <p><b>Building a Following</b> Inspiring, Sharing a vision, Generating commitment, Maintaining integrity</p> <p><b>Maintaining Commitment</b> Meeting individual needs, Taking meaningful stands, Thinking opportunistically, Being charismatic</p> <p><b>Empowering</b> Giving credit, Encouraging ownership, Grooming subordinates, Being a servant leader</p>



# Affective Domain

## Receiving (Being Open to Experience)

### Exploring Self

Observing self, Listening to self, Perceiving reactions, Body awareness, Identifying emotions

### Exploring Surroundings

Being curious, Being open, Being positive, Being playful, Being active

### Experiencing Emotions

Feeling loved, Grieving, Feeling joyful, Laughing, Responding to aesthetics, Feeling secure

## Responding (Engaging in Life)

### Emoting

Loving, Caring, Respecting, Giving, Comforting

### Addressing Life's Changes

Coping, Persisting, Accepting help, Believing in oneself, Responding to failure, Appreciating evaluation

### Leveraging Life's Successes

Responding to success, Being humble, Seeking assessment, Celebrating, Acknowledging others

## Organizing (Managing Oneself)

### Regulating Self

Responding to requests, Recognizing dissonance, Managing dissonance, Managing resources, Prioritizing, Being self-disciplined

### Managing Performance

Being decisive, Committing to the future, Preparing, Rehearsing, Challenging standards, Being self-efficacious, Orchestrating emotions

### Managing Emotions

Modulating emotions, Recognizing emotional contexts, Preparing for future emotions, Modeling emotions

## Valuing/Cultivating Values

### Valuing Self

Building identity, Evolving a personal philosophy, Trusting self, Caring for self, Reflecting

### Valuing Natural Laws

Appreciating diversity, Valuing nature, Valuing family/significant others, Being spiritual

### Refining Personal Values

Identifying values, Exploring beliefs, Clarifying one's value system, Validating values, Aligning with social values, Accepting ownership

## Internalizing

### Synergizing Feelings

Associating feelings, Interpreting feelings, Analyzing feelings, Predicting feelings, Objectifying emotions, Exploring emotions

### Facilitating Personal Development

Recognizing personal potential, Seeking assessment, Seeking mentoring, Being patient

### Challenging Self

Exploring potential, Expanding identity, Being courageous, Being proactive, Growing culturally, Being empathic

### Committing Beyond Self

Committing to caring, Accepting outcomes, Acting on beliefs, Enhancing self-esteem, Maturing, Self-actualizing

