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. By continuing the dialog about the design, implementation, and measurement of general education courses, educators across the nation have aided in the continual refinement of the CLS.

We invite you to learn more about the Classification of Learning Skills with our web-based learning object: www.pcrest.com/CLS

Pacific Crest
The Leader for Process Education™
www.pcrest.com
**Cognitive Domain**

**Processing Information**

- **Collecting Data** *(from a disorganized source)*
  - Observing, Listening, Skimming, Memorizing, Recording, Measuring
- **Generating Data** *(to fill a void)*
  - Predicting, Estimating, Experimenting, Brainstorming
- **Organizing Data** *(for future use)*
  - Filtering, Outlining, Categorizing, Systematizing
- **Retrieving Data** *(from an organized source)*
  - Recognizing patterns, Searching, Recalling, Inventorying
- **Validating Information** *(for value)*
  - Testing perceptions, Validating sources, Controlling errors, Identifying inconsistency, Ensuring sufficiency

**Constructing Understanding**

- **Analyzing** *(characterizing individual parts)*
  - Identifying similarities, Identifying differences, Identifying assumptions, Inquiring, Exploring context
- **Synthesizing** *(creating from parts)*
  - Joining, Integrating, Summarizing, Contextualizing
- **Reasoning** *(revealing meaning)*
  - Interpreting, Inferring, Deducing, Inducing, Abstracting
- **Validating Understanding** *(for reliability)*
  - Ensuring compatibility, Thinking skeptically, Validating completeness, Bounding

**Applying Knowledge**

- **Performing with Knowledge** *(in real context)*
  - Clarifying expectations, Strategizing, Using prior knowledge, Transferring
- **Modeling** *(in abstract context)*
  - Analogizing, Exemplifying, Simplifying, Generalizing, Quantifying, Diagramming
- **Being Creative** *(in new contexts)*
  - Challenging assumptions, Envisioning, Linear thinking, Divergent thinking, Transforming images, Lateral thinking
- **Validating Results** *(for appropriateness)*
  - Complying, Benchmarking, Validating

**Solving Problems**

- **Identifying the Problem** *(to establish focus)*
  - Recognizing the problem, Defining the problem, Identifying stakeholders, Identifying issues, Identifying constraints
- **Structuring the Problem** *(to direct action)*
  - Categorizing issues, Establishing requirements, Subdividing, Selecting tools
- **Creating Solutions** *(for quality results)*
  - Reusing solutions, Implementing, Choosing alternatives, Harmonizing solutions
- **Improving Solutions** *(for greater impact)*
  - Generalizing solutions, Ensuring robustness, Analyzing risks, Ensuring value

**Conducting Research**

- **Formulating Research Questions** *(to guide inquiry)*
  - Locating relevant literature, Identifying missing knowledge, Stating research questions, Estimating research significance, Writing measurable outcomes
- **Obtaining Evidence** *(to support research)*
  - Designing experiments, Selecting methods, Extracting results, Replicating results
- **Discovering** *(to expand knowledge)*
  - Testing hypotheses, Reasoning with theory, Constructing theory, Creating tools
- **Validating Scholarship** *(for meaningful contribution)*
  - Defending scholarship, Responding to review, Confirming prior work, Judging scholarship
SOCIAL DOMAIN

Communicating

Receiving a Message
Attending, Reading body language, Responding, Checking perceptions

Preparing a Message
Defining purpose, Knowing the audience, Organizing a message, Selecting word usage, Formatting a message, Illustrating

Delivering a Message
Selecting a venue, Generating presence, Sharing knowledge, Persuading, Storytelling, Managing transitions

Relating with Others

Inviting Interaction
Taking an interest in others, Initiating interaction, Hosting, Expressing positive nonverbal signals, Assisting others, Being non-judgmental

Relating for Meaning
Belonging, Befriending, Empathizing, Collaborating, Parenting, Mentoring

Performing in a Team
Goal setting, Achieving consensus, Planning, Cooperating, Compromising

Performing in an Organization
Accepting responsibility, Being assertive, Making proposals, Documenting, Influencing decisions

Relating Culturally

Accepting Constraints
Obeying laws, Inhibiting impulses, Noticing social cues, Recognizing conventions

Living in Society
Sharing traditions, Supporting institutions, Valuing communities, Reacting to history, Being a citizen

Demonstrating Cultural Competence
Clarifying stereotypes, Appreciating cultural differences, Generalizing appropriately, Using culture-specific expertise

Managing

Managing People
Building consensus, Motivating, Modeling performance, Assessing performance, Evaluating performance

Building and Maintaining Teams
Defining team roles, Setting rules, Delegating authority, Confronting poor performance, Recruiting, Mediating

Managing Communication
Connecting with stakeholders, Networking, Marketing, Sustaining change

Managing Resources
Negotiating, Politicking, Securing resources, Creating productive environments

Leading

Envisioning
Projecting the future, Seeing implications, Balancing perspectives, Responding to change

Building a Following
Inspiring, Sharing a vision, Generating commitment, Maintaining integrity

Maintaining Commitment
Meeting individual needs, Taking meaningful stands, Thinking opportunistically, Being charismatic

Empowering
Giving credit, Encouraging ownership, Grooming subordinates, Being a servant leader

KEY

Process
Skill Cluster
Listing of Specific Skills
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

Stages of Learning Skill Development

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Level 5</td>
<td>Transformed Use</td>
</tr>
<tr>
<td>Level 4</td>
<td>Self-reflective Use</td>
</tr>
<tr>
<td>Level 3</td>
<td>Consistent Performance</td>
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<tr>
<td>Level 2</td>
<td>Conscious Use</td>
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<tr>
<td>Level 1</td>
<td>Non-conscious Use</td>
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</tbody>
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