**Advanced Communication Skills Standard:** Learners will engage in diverse and authentic learning experiences which will allow them to develop and apply innovative oral, written, visual, and nonverbal communication skills across disciplines.

Advanced Communication Skills (ACS) Elements	K	1	2	3	4	5	6	7	8	9	10	11	12
1. Selects appropriate method(s) of communication considering purpose, audience, format, and content.		1	Ι	D	D	D	D	Р	Р	Р	Α	Α	Α
2. Utilizes technology to collaborate and create products which inform, entertain, or persuade others.	ı	1	ı	D	D	D	Р	Р	Р	Α	Α	Α	Α
3. Makes connections across disciplines to generate original and complex ideas and products.				ı	ı	D	D	D	Р	Р	Α	Α	Α
4. Listens to, consider, and evaluate multiple perspectives in order to form and defend a sound stance, restructuring the stance as more information becomes available.				1	ı	ı	D	D	D	Р	Р	Р	Α
5. Communicates orally with focus, energy, and passion in various formats (speeches, debates, interviews, etc.) in order to engage and influence the audience.	I	1	I	D	D	D	Р	Р	Р	Α	Α	Α	Α
6. Communicates effectively in writing by taking into consideration purpose and audience to persuade or defend an argument.			I	Ι	ı	ı	D	D	Р	Р	Р	Α	Α
7. Communicates through visual products and performances which are creative and innovative and engage the audience with consideration to aesthetics and purpose.			ı	1	ı	D	D	D	Р	Р	Р	Α	Α
8. Develops community and global awareness which promotes empathy and initiates social action, while advancing collaboration, leadership, and problem solving skills.			ı	ı	ı	ı	D	D	D	Р	Р	Р	Α
9. Formulates and poses questions to engage others in meaningful discussion and reflection.		1	I	1	D	D	D	Р	Р	Р	Р	Α	Α

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I: indicates when a skill is <u>introduced</u> by the facilitator as part of the content taught in the classroom. Learners are <u>novices</u> and require direct instruction with guided practice. Frequent and specific feedback is given by the facilitator.

**D**: indicates when learners will <u>develop</u> the skill using age appropriate content. Learners are <u>apprentices</u> who practice skills in cooperative learning groups. The learners share in the development of criteria for which they are assessed, have opportunities to self reflect, and self assess.

**P**: indicates when learners should achieve <u>proficiency</u> and are able to use the skill(s) in a variety of situations across disciplines. Learners are <u>practitioners</u> and should be working independently or cooperatively to use skills and build generalizations about the content with little prompting from the facilitator. Learners use the skills in complex projects and have opportunities for authentic feedback.

**Advanced Research Skills Standard:** Learners will gather, decipher, and determine credibility of information from a variety of sources and integrate information thorough analysis of content.

Advanced Research Skills (ARS) Elements	K	1	2	3	4	5	6	7	8	9	10	11	12
1. Gathers, analyzes, and synthesizes information from a variety of sources, both print and digital.	I	I	I	D	D	D	Р	Р	Α	Α	Α	Α	Α
2. Formulates original and appropriate questions to test the limits of an existing body of knowledge.	I	I	I	_	D	D	D	Р	Р	Р	Α	Α	Α
3. Explores in depth a topic or issue of choice across disciplines to develop valid hypotheses, thesis statements, or alternative interpretations of data.	I	I	I	ı	I	D	D	Р	Р	Р	Α	Α	Α
4. Selects appropriate research tools and methodologies (e.g., historical, descriptive, developmental, case, field, co relational, action, survey, interview) to conduct scientific investigations.	I	I	I	ı	D	D	D	Р	Р	Р	Α	Α	Α
5. Gathers, organizes, analyzes, and synthesizes data from multiple sources to support or disprove a hypothesis or create an argument.	I	I	I	D	D	D	Р	Р	Р	Α	Α	Α	Α
6. Evaluates research methodologies and data to detect validity, bias, reliability, and applicability to real-world problems and/or solutions.	I	I	I	ı	D	D	D	Р	Р	Р	Α	Α	Α
7. Uses APA or MLA style to document/cite references, resources, quotations, notes, and bibliographies.				I	I	I	D	D	D	Р	Р	Α	Α
8. Creates a written and alternative product to support research findings.				I	I	I	D	D	D	Р	Р	Р	А
9. Creates a reflection of the process, articulates and shares experiences (self awareness & solution)	Ι	Ι	Ι	D	D	D	Р	Р	Р	Р	Α	Α	Α

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Creative Thinking & Problem Solving Standard: Learners will insightfully evaluate a variety of problems and arrive at innovative conclusions.

Creative Thinking & Problem Solving (CPS) Elements	K	1	2	3	4	5	6	7	8	9	10	11	12
1. Critiques environment and uses evidence as basis to identify a problem.	I	I	I	D	D	D	D	Р	Р	Р	Α	Α	Α
2. Uses multiple sources including knowledge, personal conjectures, and assumptions to begin collecting data. Develop generalizations.			_	Ι	I	D	D	D	Р	Р	Р	Α	Α
3. Incorporates brainstorming and other idea-generating techniques (synaptic, SCAMPER, etc.) to solve problems or create new products.	I	I	I	I	D	D	D	D	Р	Р	Р	Α	Α
4. Formulates a problem statement by disaggregating the data. Narrow the scope.			ı	I	ı	D	D	D	Р	Р	Р	Α	Α
5. Develops ideas using independent conjecture and novel concepts without concerns for accuracy.	I	I	-	_	D	D	D	Р	Р	Α	Α	Α	Α
6. Generates questions and answers which demonstrate careful listening and consideration of alternative points-of-view.	ı	ı	I	D	D	D	Р	Р	Р	Α	Α	Α	Α
7. Uses analogies, metaphors, and/or models to explain complex concepts.		I	I	Ι	I	D	D	D	D	Р	Р	Α	Α
8. Tolerates ambiguity when solving problems.		Ι	_	Ι	ı	D	D	D	Р	Р	Р	Α	Α
9. Posses the ability to synthesize ideas with the ability to enhance preexisting ideas and concepts by rearranging, revising, and reconstructing.				I	I	I	I	D	D	D	Р	Р	Α

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**Higher Order and Critical Thinking Skills Standard:** Learners will analytically critique a system or set of complex ideas, utilizing logic and reasoning skills in novel ways, to create and/or modify knowledge.

Higher Order & Critical Thinking Skills (HOTS) Elements	K	1	2	3	4	5	6	7	8	9	10	11	12
1. Asks probing, insightful, and relevant questions. Models thinking skills, examples of applied thinking, and adaptive response.	I	I	-	-	D	D	D	Р	Р	Р	Α	Α	Α
2. Examines the process and application of HOTS and the condition under which they develop.	I	I	-	_	I	D	D	D	Р	Р	Р	Α	Α
3. Identifies, creates, and engages in learning- linked to prior knowledge or experience-which extends lower order skills- discriminations, application, and analysis.				I	I	ı	D	D	D	Р	Р	Р	Α
4. Develops learning strategies with rehearsal, elaboration, organization, and metacognition.	I	I	Ι	I	D	D	D	Р	Р	Р	Α	Α	Α
5. Refines decisions, performances, and products within the context of available knowledge and experience.	I	I	I	ı	D	D	D	D	Р	Р	Р	Α	Α
6. Exercises and extends critical, logical, reflective, and creative thinking when encountering increasingly complex questions, uncertainties, or dilemmas.				_	I	I	D	D	D	Р	Р	Α	Α
7. Strives for clarity of communication in order to reduce ambiguity and to improve the applied value of verbal analogies, logical thinking, and inductive/deductive reasoning.	I	I	Ι	Ι	D	D	D	Р	Р	Р	Α	Α	Α
8. Engages in peer discussions and cooperative learning while accepting challenging tasks and critical feedback from peers.	I	I	I	I	D	D	D	Р	Р	Р	Α	Α	Α
9. Accesses multiple data sources which allow collaboration with students in other locations to develop and respond to student generated questions, dilemmas, novel problems, responses, and perspectives.	ı	ı	ı	-	D	D	D	Р	Р	Р	Р	Α	Α
10. Draws conclusions based upon relevant information while discarding irrelevant information.			I	I	I	I	D	D	D	Р	Р	Р	Α
11. Evaluates conclusions based upon relevance, depth, breadth, logic, and fairness.				1	1	1	D	D	D	Р	Р	Α	Α

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