



# SKILLS PROGRESSIONS

COLLABORATION | COMMUNICATION | CRITICAL THINKING



Carnegie Foundation  
for the Advancement of Teaching



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**This work draws on decades of evidence from the social and developmental sciences, refined through feedback from educators, postsecondary education leaders, and employer partners. It reflects a commitment to building what the Carnegie Foundation calls ‘a new architecture for high school’**

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### Understanding the Skills Progressions

The gap between what young people need to thrive and what high school currently delivers has never been more apparent. As Artificial Intelligence reshapes work and civic life, the capabilities that distinguish human contribution—collaboration, clear communication and critical thinking—have become essential, not optional. To be clear, young people must study mathematics, humanities and science, and must read and write with fluency and depth. They must also hone essential skills. Both are key for success in school, work and life. Yet our education systems struggle to define, develop and credential these skills with the same rigor that we apply to academic content.

States have started to respond. Across the country, more than half of states have adopted Portraits of a Graduate that articulate an expanded vision for what students should know and be able to do by commencement. At their best, these portraits are a vision that encompasses both disciplinary knowledge and the durable skills proven by research to predict long-term success. But articulating a vision is only a first step. To ensure that essential skills are effectively integrated into core academic subjects, and translate into meaningful credentials that postsecondary education institutions and employers recognize and value, we need shared, science-based definitions: What do these skills look like as they develop? What conditions support their growth? How do we know when a student has reached proficiency?





### That is the purpose of these Progressions.

The Skills Progressions, developed by the Carnegie Foundation for the Advancement of Teaching and ETS, offer research-grounded definitions of three capabilities essential for success in school and career:



- **Collaboration** explores how students move from basic participation in group work toward the ability to integrate diverse perspectives, navigate conflict constructively, and build the trust that allows teams to accomplish more than individuals can alone.



- **Communication** traces growth from foundational message-making toward more sophisticated adaptation across audiences, contexts and modalities, including the active listening and comprehension that make genuine exchange possible.



- **Critical Thinking** maps the development of students' capacity to seek and evaluate information, construct evidence-based arguments, reason logically and reach well-founded conclusions even in the face of complexity or ambiguity.

Each Progression describes how a skill develops in sophistication over time, moving through four levels—**Exploring, Analyzing, Integrating** and **Extending**—with subskills and indicators that offer increasingly specific descriptions of what students know, understand and can demonstrate.

This work draws on decades of evidence from the social, developmental and cognitive sciences, refined through feedback from educators, postsecondary education leaders and employer partners. It reflects a commitment to building what the Carnegie Foundation calls “A New Education Architecture for High School”—one grounded in broader goals for student success, learning experiences rooted in the science of how young people develop, and signaling systems that provide meaningful, actionable information to students, families and educators.



These Progressions describe the knowledge, abilities and behaviors associated with each skill holistically. They do not prescribe a single pathway or narrow set of observable behaviors. Evidence of student growth may take many forms across contexts, modalities and communication styles.

Carnegie and ETS recognize that these capabilities go by different names, depending on place and purpose—durable skills, employability skills, soft skills. Aligning on shared nomenclature for the headline categories is not the goal of this work. Indeed, different communities understandably call the headline categories different things (e.g., some communities use the language of persistence, others use work ethic). Our goal is to define the underlying components that constitute the core skills.

**Further, you will note that many of the components appear across multiple skills. This is intentional, and it builds coherence: A well-defined subskill can inform the development and assessment of collaboration, communication and critical thinking. For example, active listening is represented in multiple Progressions because it is an important aspect of both communication and collaboration.**

Importantly, the Progressions articulate a working theory of how these skills tend to develop over time. They are intentionally designed to support assessment design, instructional planning, curriculum development and professional learning at a systems level. We recognize that teachers and other educators may need to build from these Progressions to create more detailed, contextually grounded tools for classroom instruction and assessment, translating the broader developmental patterns described here into practices that make sense for particular learners, settings and purposes.

As validation work continues, these Progressions will evolve based on empirical evidence and practical application. In that sense, they are a foundation for exploration, not a finished product.

DEFINITION:  
COLLABORATION  
IS THE ABILITY TO  
WORK TOWARDS  
SHARED GOALS  
THROUGH ENGAGING  
IN EFFECTIVE  
COMMUNICATION,  
COORDINATING  
GROUP EFFORT TO  
INTERPERSONAL  
RELATIONSHIPS.  
IT INVOLVES  
EXCHANGING IDEAS  
OPENLY, REGULATING  
GROUP ACTIVITIES,  
AND PRIORITIZING  
BUILDING TRUST  
AND RESPECT TO  
ENABLE GROUPS TO  
LEVERAGE INDIVIDUAL  
STRENGTHS WHILE  
MAINTAINING FOCUS  
ON COLLECTIVE  
SUCCESS.

## SKILLS PROGRESSION 1

# COLLABORATION



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## SKILLS PROGRESSION 1 | COLLABORATION

### Definition:

**Collaboration** is the ability to work toward shared goals through engaging in effective communication, coordinating group efforts to integrate diverse perspectives while fostering interpersonal relationships. It involves exchanging ideas openly, regulating group activities, and prioritizing building trust and respect to enable groups to leverage individual strengths while maintaining focus on collective success.

Skill Level Descriptor	Exploring	Analyzing	Integrating	Extending
<b>Subskill 1: Engage with ideas through intentional communication in service of shared goals</b>				
<b>Indicator 1.1: Develop comprehension or confirm understanding in multidimensional ways</b>				
<b>Indicator 1.1A</b>	Asks questions to better understand a topic, group task or shared goal.	Asks questions to better understand group members' ideas.	Asks questions to understand diverse ideas and perspectives, both in what group members think and why they hold certain views.	Asks questions that help the group understand and use diverse ideas and perspectives, including those from personal or cultural experiences (e.g., to create a combination of the group's ideas).
<b>Indicator 1.1B</b>	Acknowledges what group members have shared to ensure accurate understanding (e.g., restates information shared by group members to show basic understanding).	Considers group members' ideas in group discussions.	Considers others' ideas and shares suggestions to help the group move forward (e.g., uses ideas from other group members to show how contributions support the group work).	Uses suggestions from the group to show how different ideas can be part of the group's final product (e.g., combines group members' ideas to create a new answer/solution for a next step or final product or to strengthen/refine existing work).
<b>Indicator 1.2: Embrace, respect and elevate diverse perspectives and ideas</b>				
<b>Indicator 1.2A</b>	Acknowledges others' ideas (e.g., by restating). [Note intentional overlap with 1.1B and 1.2B.]	Listens intentionally by giving group members space to share their ideas without interruption, even when ideas are different.	Adds group members' ideas to improve their own ideas, especially when their ideas are different.	Compares and combines different ideas by showing how they are similar, different or strong in different ways.
<b>Indicator 1.2B</b>	Contributes own unique ideas and perspectives to the task without referencing what others have said.	Contributes ideas and resources to help group members work on different parts of the task.	Connects their ideas with group members' ideas to help the group complete the task.	Creates new ideas and solutions by combining different parts of group members' contributions.
<b>Indicator 1.2C</b>	Discusses ideas with the group.	Uses intentional discussions to explore and understand different ideas without judgment.	Engages in debates/conflicts constructively and considers different viewpoints in an open discussion with group members.	Engages in debates/conflicts constructively and works with group members to include different viewpoints in group solutions, and expresses vulnerability about their own viewpoints (e.g., recognizes flaws in their own views).







## SKILLS PROGRESSION 1 | COLLABORATION

Subskill 2: Effectively engage in and facilitate group activities and decision-making towards shared goal				
Indicator 2.1: Flexibly establish and contribute to group ideas and team norms [note overlap with key ideas of 1.2]				
<b>Indicator 2.1A</b>	Discusses and understands the purpose of the group (e.g., participates in early discussions about specific group goals, acknowledges the reasons a group has formed/come together).	Contributes to developing group goals.	Helps explain group goals to make them clear and easy for everyone to understand (e.g., to confirm group understanding).	Develops group goals and explains how they connect to everyone's strengths and abilities (e.g., takes part in discussion/analysis of connections between group goals and individuals' strengths).
<b>Indicator 2.1B</b>	Helps create roles, responsibilities, and group norms for the group.	Takes on assigned roles and responsibilities by completing tasks on time and helping others meet their commitments (e.g., takes on roles that reflect individual experiences and cultural strengths).	Contributes flexibly to support group goals, adopting roles in ways that reflect individual experiences, goals and cultural strengths.	Facilitates group conversations to reflect and consider/ reconsider whether roles are effectively contributing to group goals.
<b>Indicator 2.1C</b>	Shows respect by participating.	Shows respect by letting others talk one at a time.	Shows respect by valuing others' ideas (e.g., addressing or using others' ideas) or giving helpful feedback.	Shows respect by actively listening, trying to understand and use different perspectives, to advance group goals.
Indicator 2.2: Check in and circle back with group progress				
<b>Indicator 2.2A</b>	Independently keeps track of personal work.	Shares updates on personal work when asked.	Discusses with others about whether the group is meeting its goals and shares ideas for improvement.	Checks on the group's progress (e.g., by meeting regularly with the group) and suggests changes to goals or tools when needed.
<b>Indicator 2.2B</b>	Checks how personal work contributes to the group goals to ensure progress.	Uses feedback to help the group identify and solve problems.	Helps the group reflect on its overall progress toward its goals and identify areas for improvement.	Identifies areas for improvement and facilitates the group to reflect on progress toward goals and any needed next steps.



## SKILLS PROGRESSION 1 | COLLABORATION

Indicator 2.3: Adjust team processes and timeline				
<b>Indicator 2.3A</b>	Identifies challenges that disrupt task completion.	Makes changes to personal tasks when challenges arise.	Discusses with group members how the group can adapt in response to challenges (e.g., when current assignments present challenges).	Collaborates with team members to adjust next steps (e.g., adjust task assignments, create new timelines) to make progress toward group's goals.
<b>Indicator 2.3B</b>	Identifies when there is a need for assistance to facilitate individual or group progress.	Asks for assistance as needed to make progress toward group's goals.	Suggests ways to adjust working style or schedules to help group make progress toward group's goals.	Suggests and uses new tools and strategies to make progress toward group's goals.
Subskill 3: Emphasize interpersonal relationships				
Indicator 3.1: Build Trust				
<b>Indicator 3.1A</b>	Builds trust by knowing one's own strengths and using voice to choose a role according to their strengths.	Builds trust by keeping commitments to the group and completing tasks in a way that helps the group meet their commitments.	Builds trust by being open to feedback and adjusting tasks to help the group work.	Builds trust by making sure everyone feels valued and respected, even if they disagree (e.g., via discussions).
<b>Indicator 3.1B</b>	Uses language with the intent of building shared understanding.	Shows appreciation and respect for group members' efforts and contributions.	Uses positive, respectful, and kind language to create a supportive team environment.	Gives helpful feedback and shows appreciation for others' efforts to foster a flexible team environment where members feel safe to express disagreements, ask hard questions, and engage in honest dialogues even when the discussion is challenging.
Indicator 3.2: Support Team Dynamics				
<b>Indicator 3.2A</b>	Understands their own communication preferences.	Considers communication preferences of others in the group.	Adjusts to group members' communication preferences and/or styles.	Demonstrates commitment (e.g., through interactions) to varied means of communication to create an inclusive environment.
<b>Indicator 3.2B</b>	Respectfully contributes to the group.	Contributes to a flexible group environment by being dependable and respectful to the group.	Helps keep a flexible group environment by being reliable and respectful, even when things are tough.	Shows dependability and respect to others by solving problems and helping maintain a flexible group environment.
<b>Indicator 3.2C</b>	Joins discussions to keep the group going.	Participates actively and shares ideas to keep the group going.	Listens to and adds on to ideas of others' to keep the group working.	Provides helpful contributions to keep the group focused and productive, even if other group members are not productively contributing.

DEFINITION:  
COMMUNICATION  
SKILL IS THE  
ABILITY TO SHARE  
AND INTERPRET  
MESSAGES THAT  
CONVEY IDEAS,  
THOUGHTS,  
OPINIONS,  
KNOWLEDGE,  
DATA, AND  
AND INFORMATION  
USING VARIOUS  
MODALITIES  
SUCH AS VERBAL,  
NON-VERBAL  
(INCLUDING  
GESTURES AND  
BODY LANGUAGE),  
WRITTEN, VISUAL,  
AND LISTENING,  
WHILE ADAPTING  
TO DIVERSE  
CONTEXTS AND  
AUDIENCES.

## SKILLS PROGRESSION 2

# COMMUNICATION



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## SKILLS PROGRESSION 2 | COMMUNICATION

### Definition:

**Communication** skill is the ability to share and interpret messages that convey ideas, thoughts, opinions, knowledge and data with clarity and purpose using various modalities such as verbal, nonverbal (including gestures and body language), written, visual and listening, while adapting to diverse contexts and audiences.

Skill Level Descriptor	Exploring	Analyzing	Integrating	Extending
<b>Subskill 1: Use multimodal forms of communication to effectively convey ideas (e.g., spoken, written, listening, visual, artistic, etc.).</b>				
<b>Indicator 1.1: Refine messages to make ideas clearer</b>				
<b>Indicator 1.1A</b>	Notifies when a message might be unclear in some situations (e.g., by asking a question, stating that it is unclear, asking for information to be repeated when needed).	Identifies specific features of a message that are unclear.	Identifies how to improve unclear messages and explains rationale and strategies.	Analyzes messages for clarity across formats and explains strategies to improve them for diverse audiences.
<b>Indicator 1.1B</b>	Edits simple messages to express ideas more clearly.	Edits messages to make ideas clear and easy to understand.	Reviews and edits messages to make them clear, even involving creative ways of expression (e.g., literary devices).	Applies revision strategies to clarify complex ideas and communicates them effectively across multiple modalities.
<b>Indicator 1.1C</b>	Recognizes the importance of reducing unnecessary details in longer or complex messages (e.g., essays, presentations).	Applies strategies to improve clarity in longer or more complex messages (e.g., essays, presentations, videos, audio recordings).	Explains strategies to improve messages across multiple types of longer or more complex messages (e.g., essays, presentations, videos, audio recordings).	Explains strategies to improve messages across multiple types of longer or more complex messages (e.g., essays, presentations, videos, audio recordings), accounting for a range of audience and purposes.
<b>Indicator 1.2: Share the same idea in different ways</b>				
<b>Indicator 1.2A</b>	Recognizes that the same idea can be expressed in at least two different ways.	Identifies multiple ways to express the same idea.	Explains multiple clear ways to express an idea, considering the audience and context.	Demonstrates and models multiple effective ways to frame ideas across disciplines and contexts.
<b>Indicator 1.2B</b>	Notifies that others perceive ideas differently and begins adapting explanations.	Adjusts explanations to align with different perspectives to improve understanding.	Explains how to tailor messages for multiple audience perspectives to ensure greater clarity.	Supports others in adapting ideas for different audiences and evaluates effectiveness of those adaptations.
<b>Indicator 1.2C</b>	Selects a reasonable way to share ideas based on the audience and context.	Selects a reasonable way to share an idea from several options after considering the audience and context.	Evaluates features of the idea, audience, and context to choose a reasonable way to share an idea.	Leads others in analyzing and choosing effective communication approaches across shifting contexts.



## SKILLS PROGRESSION 2 | COMMUNICATION

Indicator 1.3: Use multimodal communication to keep others interested				
<b>Indicator 1.3A</b>	Notifies how others react to a message.	Observes reactions and adjusts manner of expression.	Adapts manner of expression to sustain engagement in diverse contexts.	Facilitates engaging communication environments and mentors others in reading and responding to audience dynamics.
<b>Indicator 1.3B</b>	Uses features of expression (e.g., gestures, modulation).	Uses expressive features (e.g., gestures, modulation) to connect with audiences and make presentations interesting.	Combines expressive features (e.g., gestures, modulation) to create presentations that are captivating for specific audiences.	Combines expressive features (e.g., gestures, modulation) to create presentations that are captivating for various and diverse audiences.
Indicator 1.4: Use different tools to communicate				
<b>Indicator 1.4A</b>	Uses some tools (e.g., text editing, presentation slides, social media, forums, messaging apps, translation tools, video/audio software, assistive technologies) to share ideas.	Uses a variety of tools (e.g., text editing, presentation slides, social media, forums, messaging apps, translation tools, video/audio software, assistive technologies) to share ideas clearly.	Explains the rationale behind tool choices (e.g., text editing, presentation slides, social media, forums, messaging apps, translation tools, video/audio software, assistive technologies) across diverse communication tasks and audiences.	Uses a wide variety of tools (e.g., text editing, presentation slides, social media, forums, messaging apps, translation tools, video/audio software, assistive technologies) to make ideas clear and engaging while retaining their voice.
<b>Indicator 1.4B</b>	Notifies that others prefer different tools for receiving information.	Selects tools that align with audience preferences in certain contexts.	Evaluates the message, audience and context to select effective tools to convey a message in their own voice.	Evaluates the message, audience and context to select the most effective tools to convey a message in their own voice across a range of contexts and purposes.
Subskill 2: Adapt communication styles based on diverse audiences and contexts while conveying a message in one's true voice				
Indicator 2.1: Present ideas in a variety of settings and for a variety of purposes				
<b>Indicator 2.1A</b>	Notifies that some presentations may have specific goals.	Tailors content to fit different goals and settings (e.g., explaining, persuading).	Evaluates and refines content to meet nuanced goals in varied settings (e.g., persuasion, inquiry, storytelling).	Demonstrates an understanding of the purpose of presentations and chooses specific ways to adjust content to match the nuanced goals of different settings or events (e.g., to explain, inform, persuade, or entertain).
<b>Indicator 2.1B</b>	Recognizes the importance of preparing before sharing ideas (e.g., preparing notes, practicing the presentations or key skills relevant for the presentation).	Prepares before sharing ideas (e.g., has prepared notes, practices the presentation or key skills relevant for the presentation, rehearses delivery).	Shares ideas effectively (e.g., has prepared notes, practices the presentation or key skills relevant for the presentation, rehearses delivery) without referring or relying on notes.	Designs and executes personalized preparation strategies to support clarity and audience connection.







## SKILLS PROGRESSION 2 | COMMUNICATION

<b>Indicator 2.1C</b>	Presents ideas in certain familiar settings (e.g., class discussions, group projects, extracurricular activities).	Presents ideas clearly in multiple settings, including somewhat new or unfamiliar settings.	Presents ideas clearly and naturally in various settings, including very new and unfamiliar settings (e.g., classes, group work or extracurricular events).	Presents ideas clearly and naturally in various settings, including very new and unfamiliar, formal and informal, and cross-context settings and scenarios (e.g., classes, group work or extracurricular events).
<b>Indicator 2.2: Identify the audience and context to adapt communication</b>				
<b>Indicator 2.2A</b>	Recognizes the importance of making a message more interesting and relatable for certain audiences.	Identifies ways to make a message clear and engaging for a given audience.	Analyzes the audience within context and explains how specific communication strategies make a message better for different types of audiences.	Anticipates subtle or unspoken needs of different audiences and adapts accordingly.
<b>Indicator 2.2B</b>	Recognizes that the delivery of a message can be adjusted for an audience (e.g., modulation, use of examples).	Adjusts the delivery of a message to suit audience needs using relevant strategies (e.g., modulation, use of examples).	Adjusts the delivery of a message to suit the complex needs of different types of audience members (e.g., modulation, use of examples) while encouraging the audience to be receptive to the message.	Synthesizes contextual and audience cues to shape effective delivery of a message across varied scenarios.
<b>Indicator 2.3: Demonstrate presentation skills</b>				
<b>Indicator 2.3A</b>	Recognizes the importance of planning and organizing presentations to make a message clear.	Plans and organizes presentations so the audience can follow and understand key points.	Plans, organizes and explains strategies for giving presentations that the audience may easily understand and follow.	Adapts structure mid-presentation as needed to ensure coherence and responsiveness to audience feedback.
<b>Indicator 2.3B</b>	Demonstrates effort to remain confident while communicating with others.	Remains confident while communicating with others.	Remains confident and may use language devices (e.g., humor) to relieve tension or better connect with an audience.	Demonstrates presence and emotional intelligence in both planned and spontaneous presentations.
<b>Indicator 2.3C</b>	Uses multimodal features of expression (e.g., gestures, modulation).	Combines multimodal features of expression (e.g., gestures, modulation) to enhance portions of the presentation.	Integrates multimodal features of expression (e.g., gestures, modulation) in an authentic manner to enhance portions of presentations while making them more engaging and personable.	Synthesizes multimodal elements across settings, developing a compelling personal presentation style.



<b>Subskill 3: Demonstrate active listening or comprehension</b>				
<b>Indicator 3.1: Listen to others for deeper meaning while valuing others' perspectives</b>				
<b>Indicator 3.1A</b>	Notifies that people may need additional time or support to express themselves.	Allows others to express themselves (e.g., pausing for breaks before speaking).	Elevates others' efforts to express themselves while showing care or concern (e.g., pausing for breaks before speaking, asking for clarification).	Anticipates and responds to others' needs during conversation, using timing, and presence to support thoughtful expression.
<b>Indicator 3.1B</b>	Demonstrates focus during some parts of an interaction, for example, by using non-verbal features of expression (e.g., reasonable facial expressions, gestures, body language).	Conveys interest to others during interactions with minimal distraction for example, by using features of expression that are verbal (e.g., words or sounds to encourage the listener to continue) or non-verbal (e.g., reasonable facial expressions, gestures, body language).	Conveys sustained interest to others during interactions using features of expression that are verbal (e.g., words or sounds to encourage the listener to continue) or non-verbal (e.g., reasonable facial expressions, gestures, body language) to affirm identity, experience, and emotion.	Adjusts listening approach in real time to remain fully engaged across diverse conversational styles or emotional dynamics whether verbal (e.g., words or sounds to encourage the listener to continue) or non-verbal (e.g., reasonable facial expressions, gestures, body language) to affirm identity, experience, and emotion.
<b>Indicator 3.1C</b>	Recognizes and values differences in a speaker's manner of expression, which might seem unfamiliar (e.g., due to differences in accent, dialect, words, or phrases).	Recognizes and values differences in a speaker's manner of expression and further identifies the essential content of a message.	Recognizes and values differences in a speaker's manner of expression to further understand and relate to the message.	Integrates understanding of communication differences to build stronger cross-cultural and interpersonal connections.
<b>Indicator 3.2: Identify and comprehend key information that has been conveyed by others</b>				
<b>Indicator 3.2A</b>	Recognizes that verbal and non-verbal cues can convey meaning in an interaction (e.g., nodding or gestures).	Understands meaning conveyed by verbal and non-verbal cues (e.g., gestures such as nodding).	Understands meaning conveyed by combinations of verbal and non-verbal cues (e.g., gestures such as nodding).	Understands meaning conveyed by combinations of verbal and non-verbal cues (e.g., gestures such as nodding) across a range of contexts/scenarios.
<b>Indicator 3.2B</b>	Records notes reflecting some key information during conversations or discussions.	Records notes and summarizes key information during conversations or discussions.	Records detailed and organized notes during longer discussions and synthesizes key information during extended conversations or discussions.	Records detailed and organized notes during longer discussions and synthesizes key information during extended conversations or discussions, including points of synergy or discrepancy in discussion, and across both verbal and non-verbal communication repertoires used.

## SKILLS PROGRESSION 2 | COMMUNICATION

<b>Indicator 3.2C</b>	Identifies most key ideas from conversations or discussions.	Identifies main ideas in a conversation or discussion and can separate them from less important details.	Identifies and explains main ideas and supporting details during extended conversations or discussions.	Identifies and explains main ideas and supporting details during extended conversations or discussions across a wide range of speakers and perspectives.
<b>Indicator 3.3: Seek clarification from others to resolve ambiguity or uncertainty</b>				
<b>Indicator 3.3A</b>	Notices when a message is not understood.	Notices when a message is not understood and identifies parts that are likely sources of confusion.	Notices when clarity is needed in an interaction with others and works to resolve confusion by restating or asking clarifying questions.	Notices when clarity is needed in an interaction with others and works to resolve confusion by restating or asking clarifying questions, inviting others to raise questions and confirming shared understanding.
<b>Indicator 3.3B</b>	Generates questions that could help clear up confusion or provide more information.	Formulates specific and clear questions likely to help resolve any ambiguities or uncertainties.	Formulates questions to help resolve specific ambiguities or uncertainties to attain a deeper understanding of the message.	Formulates questions to guide group inquiry related to ambiguities or uncertainties, and elevates collective insight of the message or issues contributing to the uncertainties.
<b>Indicator 3.3C</b>	Demonstrates effort to ask questions during conversations or discussions.	Asks questions during conversations or discussions.	Asks thoughtful questions during conversations or discussions, even in challenging or fast-paced situations.	Adapts tone, timing and phrasing to ask thoughtful questions in response to complex or sensitive points in challenging discussions.
<b>Indicator 3.4: Demonstrate understanding of a message beyond what is directly stated</b>				
<b>Indicator 3.4A</b>	Recognizes that information can be implied in a message without being directly stated.	Identifies some implied information in a message.	Identifies implied information and explains how it changes the interpretation of the deeper meaning of the message.	Evaluates how implied meaning varies across audiences and contexts, adjusting the interpretation of a message accordingly.
<b>Indicator 3.4B</b>	Notices when a message may include hidden or indirect meaning.	Identifies both the direct and plausible implied meanings.	Analyzes the message for both direct and implied meanings and reflects on how the overarching meaning may vary across contexts or audiences.	Analyzes the message across a range of contexts and scenarios for both direct and implied meanings and reflects on how the overarching meaning may vary across contexts or audiences.
<b>Indicator 3.4C</b>	Recognizes that the context of a conversation can shape how a message should be interpreted.	Observes features of the context that affect the plausible interpretation of a message.	Identifies and describes features of the context that affect a plausible interpretation of a message and its deeper meaning.	Synthesizes personal and cultural perspectives to interpret meaning with empathy and precision.







<b>Subskill 4: Understand and leverage the social, emotional and ethical dimensions of communication</b>				
<b>Indicator 4.1: Maintain a respectful and inclusive environment for understanding and resolving conflict</b>				
<b>Indicator 4.1A</b>	Regulates responses during disagreements and engages respectfully with others.	Maintains composure, demonstrates self-awareness, acknowledges personal bias and actively supports respectful dialogue to resolve conflicts.	Maintains composure, demonstrates self-awareness, acknowledges personal bias and encourages others to share views during disagreements, promoting civility and resolution.	Anticipates moments of tension and guides group dialogue toward respectful and inclusive resolution.
<b>Indicator 4.1B</b>	Recognizes that disagreements often have different sides.	Demonstrates understanding of the different sides in disagreements.	Considers and explains multiple sides of a disagreement.	Considers diverse perspectives contributing to a disagreement and explains how different perspectives may arise, acknowledging differences in lived experience, values and ideas.
<b>Indicator 4.1C</b>	Recognizes the importance of figuring out the root causes of conflicts.	Identifies root causes and uses strategies (e.g., seeking shared understanding) to resolve conflicts.	Identifies root causes, applies strategies to resolve conflicts without clear solutions or resolutions (e.g., identifying and navigating trade-offs), adapting resolution strategies based on contextual features (e.g., group dynamics, history, complexity).	Identifies root causes, applies strategies to resolve complex conflicts, and helps others avoid similar issues in the future.
<b>Indicator 4.2: Understand others' emotions during conversations</b>				
<b>Indicator 4.2A</b>	Notices that others may convey emotions during conversations.	Recognizes specific types of emotions during conversations and tries to understand others' feelings.	Recognizes emotions, even when not clearly expressed (e.g., sarcasm, hidden feelings).	Recognizes emotional shifts in conversation, reads multiple layers of emotion in real-time, and adapts accordingly.
<b>Indicator 4.2B</b>	Notices nonverbal cues are likely to convey others' emotions (e.g., facial expressions, body language, sentiment cues in digital communication).	Identifies specific nonverbal cues that convey emotions (e.g., facial expressions, body language, sentiment cues in digital communication).	Explains how nonverbal cues convey emotions (e.g., facial expressions, body language, sentiment cues in digital communication) in a given context.	Models emotional reflection to nonverbal cues (e.g., facial expressions, body language, sentiment cues in digital communication) by naming and validating others' experiences in ways that deepen relational trust.
<b>Indicator 4.2C</b>	Recognizes the importance of responding respectfully (e.g., avoiding sarcasm or dismissive behavior).	Responds to others in a manner that demonstrates empathy (e.g., by relating one's experience to that of others).	Demonstrates understanding of others' emotions by responding in ways that are empathetic and culturally appropriate.	Models empathetic responses in emotionally complex interactions, showing an understanding of how communication that conveys care may vary across individuals and contexts.

## SKILLS PROGRESSION 2 | COMMUNICATION

Indicator 4.3: Express emotions intentionally and empathetically				
<b>Indicator 4.3A</b>	Recognizes and names their emotions (positive or negative) when communicating with others.	Explains their emotions to help others understand their feelings.	Explains their emotions and why they feel that way to build better understanding with others.	Demonstrates emotional self-awareness by communicating with clarity, vulnerability and relational intentionality.
<b>Indicator 4.3B</b>	Recognizes that their emotions affect how they interact with others.	Recognizes how they usually share emotions and demonstrates effort to control their reactions in a constructive manner.	Anticipates emotional impact and adapts expression to support respectful and effective dialogue while authentically communicating their personal feelings.	Adjusts how they express emotions to improve conversations and explains strategies for empathetic communication.
<b>Indicator 4.3C</b>	Expresses simple emotions reasonably during conversations (e.g., facial expressions such as smiling, verbally conveying sentiment).	Expresses emotions and adjusts their manner of expression if they think their emotions are misunderstood.	Expresses emotions in a way that others can understand and clarifies if emotions are misunderstood, showing care not to dismiss others.	Adapts expression across different settings, cultures and communication styles. Models emotional awareness by validating others' feelings while being honest about their own.
Indicator 4.4: Adapt communication with awareness of how different language, cultural norms and communication styles shape meaning				
<b>Indicator 4.4A</b>	Recognizes that respect and civility are important for communication in a variety of contexts, particularly cross-cultural contexts.	Identifies behaviors that are seen as respectful in cross-cultural contexts and acts accordingly.	Relates familiar behaviors with new ones relevant to cross-cultural contexts and explains to others how to behave and communicate accordingly.	Navigates behavior across diverse cultural settings with curiosity and care, even when norms are unfamiliar.
<b>Indicator 4.4B</b>	Understands that cultural practices (e.g., language, traditions) affect how people communicate (e.g., accents, terms, gestures).	Adapts communication style to align with cultural norms and practices.	Adapts communication style in response to specific cultural norms while recognizing that some situations may involve complex cultural practices.	Evaluates and adjusts communication strategies to build understanding in complex or layered cultural contexts.
<b>Indicator 4.4C</b>	Demonstrates awareness of a lack of knowledge about cultural differences in how people communicate (e.g., reasonably expressing confusion).	Demonstrates curiosity about cultural differences in social and historical influences on how people communicate (e.g., by asking reasonable questions).	Applies and continues to learn new knowledge of the social, cultural and historical influences on language to improve communication and build stronger relationships with others.	Supports peers in understanding and navigating cultural or linguistic differences in communication.

DEFINITION:  
CRITICAL THINKING  
INVOLVES THE SKILL AND  
DISPOSITION TO ACTIVELY  
SEEK AND EVALUATE  
INFORMATION AND  
CONSTRUCT EVIDENCE-  
BASED ARGUMENTS TO  
REACH WELL-FOUNDED  
CONCLUSIONS OR  
INFORMED DECISIONS.  
IT INCLUDES THE ABILITY  
AND A WILLINGNESS TO  
LOGICALLY ANALYZE IT.  
CRITICAL THINKING  
PLAYS AN IMPORTANT  
ROLE IN LEARNING  
ACTIVITIES, SUCH AS  
EVALUATING MULTIPLE  
SOURCES, IDENTIFYING  
ASSUMPTIONS AND  
REASONING FLAWS,  
AND MAKING SOUND  
ARGUMENTS. DEVELOPING  
STRONG CRITICAL  
THINKING SKILLS ENABLES  
STUDENTS TO TACKLE  
COMPLEX CHALLENGES  
MORE EFFECTIVELY  
AND ACHIEVE GREATER  
LEARNING OUTCOMES.

## SKILLS PROGRESSION 3

# CRITICAL THINKING



Carnegie Foundation  
for the Advancement of Teaching





## SKILLS PROGRESSION 3 | CRITICAL THINKING

### Definition:

**Critical Thinking** involves the skill and disposition to actively seek and evaluate information and construct evidence-based arguments to reach well-founded conclusions or informed decisions, including recognizing and applying sound logical reasoning. It plays an important role in learning activities, such as evaluating multiple sources, identifying assumptions and reasoning flaws, and making sound arguments. Developing strong critical thinking skills enables students to tackle complex challenges more effectively and achieve greater learning outcomes.

Skill Level Descriptor	Exploring	Analyzing	Integrating	Extending
Subskill 1: Information Seeking				
Indicator 1.1: Formulate relevant questions to address gaps in information ("ask the right questions")				
Indicator 1.1A	Identifies when more information is needed and asks questions with coaching.	Ask questions to clarify or confirm pre-existing information.	Asks questions to explore gaps in information or to gather new relevant information on a topic.	Asks thought-provoking questions that guide the gathering of relevant information, support conclusions and inform further exploration or questioning in novel ways.
Indicator 1.1B		Asks questions related to the basic elements of a topic.	Asks questions about details beyond the basic elements of a topic.	Asks questions related to gaps in information that have not been answered by experts or other knowledgeable sources.
Indicator 1.2: Pursue multiple, credible, relevant sources of information				
Indicator 1.2A	Seeks out sources of information.	Uses basic search terms to locate a relevant source.	Uses various search terms to locate multiple relevant sources, some of which are credible.	Uses various search terms to locate multiple relevant sources, most or all of which are credible as evaluated by their content.
Indicator 1.2B	Uses one familiar and/or commonly used source to obtain information.	Uses only familiar and/or commonly used sources to obtain relevant information.	Uses a combination of familiar and unfamiliar sources to obtain relevant information.	Uses credible unfamiliar sources to expand upon relevant information from credible sources.
Indicator 1.3: Fact-check claims and ideas				
Indicator 1.3A	Fact-checks information randomly.	Fact-checks claims and ideas only when information is missing.	Fact-checks claims and ideas that are only supported by arguments and/or unscientific or informal evidence (e.g., anecdotal).	Fact-checks claims and ideas even if they are supported by formal, scientific, technical and/or statistical evidence.
Indicator 1.3B		Fact-checks claims and ideas only when the source appears less credible or more biased.	Selectively fact-checks claims and ideas, regardless of whether the source appears less credible or more biased.	Efficiently and accurately fact-checks claims and ideas even when the source appears credible and unbiased.







## SKILLS PROGRESSION 3 | CRITICAL THINKING

Subskill 2: Information Analysis				
Indicator 2.1: Effectively synthesize multiple pieces of information				
Indicator 2.1A	Summarizes key or main ideas from one source.	Summarizes information from multiple sources.	Integrates information from multiple sources to identify relationships and patterns.	Integrates information from multiple sources of information to form a comprehensive understanding of a topic, leading to deeper (possibly unique) insights and connections.
Indicator 2.1B	Identifies basic features of a source (e.g., source, date, author).	Categorizes information from multiple sources based on foundational and/or surface-level elements (e.g., source, date).	Integrates information from multiple sources to compare and construct different viewpoints.	Integrates information from multiple sources in a way that generates new questions, applications and/or implications.
Indicator 2.2: Evaluate the strength of evidence used to form a conclusion				
Indicator 2.2A	Identifies evidence used to support a conclusion.	Recognizes when evidence is relevant to a conclusion.	Distinguishes between weaker and stronger evidence used to form a conclusion.	Distinguishes between weaker and stronger evidence used to form a conclusion and can articulate specific and defensible explanations for their evaluation.
Indicator 2.2B		Articulates whether evidence is relevant or irrelevant to a conclusion.	Accurately articulates whether evidence is relevant or irrelevant to a conclusion.	Articulates whether evidence is relevant or irrelevant to a conclusion and provides an accurate explanation for their evaluation.
Subskill 3: Argument Generation				
Indicator 3.1: Effectively address counterarguments				
Indicator 3.1A	Identifies basic opposing viewpoints or counterarguments.	Explains opposing viewpoints or counterarguments.	Identifies different perspectives and potential counterarguments and develops responses to the opposing view.	Evaluates counterarguments, refuting them when appropriate or considering them when they are reasonable; integrates multiple relevant perspectives into a coherent and reasonable argument (recognizing the value in diverse viewpoints).
Indicator 3.1B		Differentiates between arguments that oppose or support their argument.	Recognizes when counterarguments are not relevant to their own argument.	Recognizes when counterarguments are not relevant to their own argument and articulates why.
Indicator 3.2: Rely on evidence, data and/or facts over opinions				
Indicator 3.2A	Differentiates between a fact and an opinion in authentic materials.	Understands the difference between a fact and an opinion when developing arguments.	Prioritizes facts over opinions when developing arguments, drawing conclusions or suggesting course of action.	Constructs a coherent argument that prioritizes facts over opinions and integrates source citations in the argument (e.g., in-text citations, sources of evidence, data or facts).



Subskill 4: Logical Reasoning				
Indicator 4.1: Draw specific conclusions from general statements (i.e., apply deductive reasoning)				
Indicator 4.1A	Applies simple deductive reasoning with support.	Independently applies deductive reasoning (i.e., draws a specific conclusion from a general statement) to analyze simple and straightforward relationships/arguments (e.g., in familiar contexts).	Uses valid assumptions (e.g., factually correct claims) to apply deductive reasoning in novel or complex contexts (i.e., draw a specific conclusion from a general statement to analyze complex relationships/arguments).	Uses valid assumptions to apply deductive reasoning to analyze complex relationships/arguments and articulate the relationships/arguments accurately (e.g., assumptions, evidence, claims).
Indicator 4.1B		Recognizes when others are using deductive reasoning in simple, straightforward or familiar contexts.	Recognizes when others are using valid assumptions to support deductive reasoning.	Recognizes when others use valid assumptions to apply deductive reasoning to analyze complex relationships/arguments, and articulate the relationships/arguments accurately (e.g., assumptions, evidence, claims).
Indicator 4.2: Recognize and avoid logical fallacies				
Indicator 4.2A	Recognizes examples of logical fallacies.	Recognizes common logical fallacies in others' arguments.	Recognizes most logical fallacies in others' arguments.	Recognizes most or all logical fallacies in others' arguments, including articulating the nature of these fallacies (e.g., causation fallacy, false equivalency).
Indicator 4.2B		Avoids common logical fallacies when generating arguments.	Avoids most logical fallacies when generating arguments.	Avoids most or all logical fallacies when generating arguments, including articulating the nature of these fallacies (e.g., causation fallacy, false equivalency).

### Looking Ahead

These Skills Progressions are one component of a larger effort to transform the American high school for the demands of this century.

Moving beyond seat-time credentialing requires new infrastructure, such as shared definitions, valid assessments, and signaling systems that communicate what students actually know and can do. The Carnegie Foundation's [Research and Development Agenda](#) lays out priorities for building that infrastructure, with comprehensive goals for student learning that integrate both disciplinary knowledge and the essential skills young people need to thrive in an evolving world.

These Skills Progressions offer a conceptual foundation and shared language to support that work. They can inform how educators design instruction, how developers build tools, how institutions interpret student work, and how families and postsecondary partners understand growth.

The next phase of work requires broad application. As practitioners, developers, designers and researchers use these progressions in real settings, new evidence will emerge to refine and strengthen them. The Carnegie Foundation is building an R&D network to support this cycle—adapting the frameworks to diverse learning environments while deepening their rigor through real-world use.

Additional Progressions will follow. In collaboration with partners across the field and ETS, the Carnegie Foundation will develop a coherent set of science-based standards that connect the aspirations in Portraits of a Graduate to the daily work of teaching and learning, and that generate credentials of meaning and value to young people, postsecondary institutions and employers.

Most important, this work of transforming high school cannot happen in isolation. We invite educators, assessment designers, curriculum developers, product builders and system leaders to engage with these resources, discuss them with their teams, and join us in shaping the future of high school.



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# SKILLS PROGRESSIONS



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