



The Diploma Plus Competencies

What are the Diploma Plus Competencies?

Diploma Plus uses a competency-based and standards-aligned approach to shape curriculum, instruction, and assessment. Diploma Plus Competencies are designed to help facilitate rigorous and relevant understanding in your classroom. Competencies highlight what is most essential in a discipline and, when used to their full potential, support students in mastering the standards and provide a framework for teachers to authentically assess student work. A set of DP Competencies has been identified for: English language arts, mathematics, social studies, science, health and fitness, foreign language, language acquisition, visual and performing arts, technology, career and technical education, and personal skills.

The Diploma Plus Competencies emphasize the critical thinking skills that students need to use and master as they develop knowledge in different areas. When learning happens within a meaningful context where it can be applied, rather than in a vacuum of dates, formulas, and facts, the learner sees value in what s/he is working on and becomes invested in the outcomes. As teachers, we recognize and value this. Our work often reflects this as we try to facilitate deep understanding for our students. However, traditional methods don't always support what we instinctively know is good teaching. Competencies are designed to do just that.

How do the Diploma Plus Competencies help my students?

By designing units and lessons driven by the Diploma Plus Competencies you are emphasizing essential critical thinking skills that students need to use and master as they develop knowledge in different areas. Students continue to develop their abilities using the same competencies throughout their years at a Diploma Plus school. The competencies don't change because what is essential to the discipline remains constant. However, in competency-based and standards-aligned curriculum, instruction, and assessment, the content standards are taught through the lens of the competencies. As students progress through a DP school, they encounter increasingly sophisticated content yet interact with this content using the same familiar and meaningful competencies.

For example, whether they are learning biology, chemistry or earth science, students are employing the DP Competencies of Scientific Investigation, Scientific Tools, Scientific Systems, etc. to "get at" the content. Additionally, when students have the opportunity to engage in schoolwork that utilizes the DP Competencies and the Prioritized Standards, they are placed at the center of their learning rather than being passive recipients of packaged content and skills. The DP Competencies enable classrooms to become creative spaces where students learn the Prioritized Standards through lessons that are creatively designed opportunities that allow students to engage in the content as scientists, mathematicians, and historians would.

How do the Diploma Plus Competencies help me?

Traditionally, students receive one grade for each assignment, project or subject area. In a Diploma Plus school, products and performances are created to demonstrate knowledge of the content standards and are measured using rubrics for the competencies. Through the ongoing assessment of the competencies, students are receiving detailed feedback concerning strengths and areas in need of improvement. Rather than an A or a 95% on a thematic essay, the student is assessed on a number of English Language Arts competencies that were addressed in the essay, such as: Comprehension, Language Analysis, Idea

Development, Organization, etc. This breakdown of the processes and skills involved in writing the paper allows you and your students to know exactly where improvement has been gained and where it is needed.

How were the rubrics developed?

The rubrics for each of the Diploma Plus Competencies were developed by Diploma Plus teachers and the Commonwealth Corporation and are updated annually from Diploma Plus network feedback. The framework for the rubrics is based on a revised version of Bloom's Taxonomy¹. In the 1950's, Benjamin Bloom created *The Taxonomy of Educational Objectives* as a means of expressing qualitatively different kinds of thinking. As shown in the table below, the revised Bloom's Taxonomy identifies and classifies different levels of thinking about a concept or skill from "Remembering" through "Creating and Evaluating". The rubrics for the Diploma Plus Competencies are based on these different stages. For example, the rubrics describe a student that demonstrates an "emerging" level of work as showing an ability to choose, describe or label while using the targeted DP Competency, while a student at the Advanced level is able to compose, hypothesize, or synthesize while using the same DP Competency.

Competencies	Absence of Evidence	Emerging (Remember) 1	Capable (Understand) 2	Bridging (Apply) 3	Proficient (Analyze) 4	Advanced (Create/Evaluate) 5
		Choose Define Describe Identify Label List Locate Memorize Recognize Select	Classify Confirm Differentiate Discuss Explain Give example Infer Interpret Match Predict Prepare Show Summarize	Assumptions Categorize Compare Demonstrate Dramatize Examine Investigate Order Relate Solve Survey Use	Appraise Compare Consider Debate Defend Inspect Judge Question Recommend Weigh Evidence	Assess Generalize Combine Compose Construct Create Critique Design Develop Formulate Hypothesize Originate Synthesize

How do I use the Diploma Plus Competencies in Planning and Instruction?

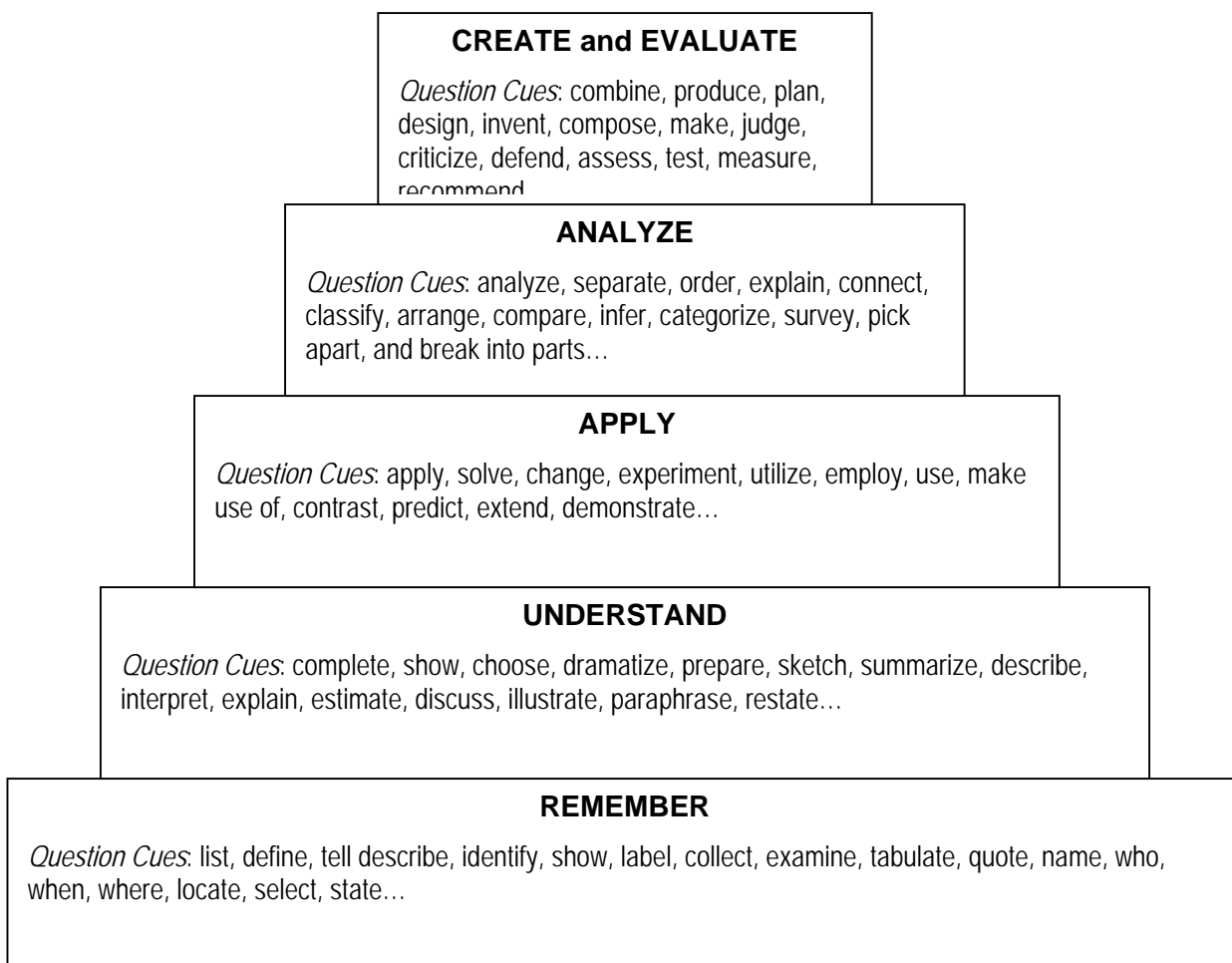
To use the Diploma Plus Competencies and rubrics in the classroom, you first need to provide opportunities for your students to develop, discuss, and apply the DP Competencies. This means that you need to find, modify, or develop assignments and activities that are not only rooted in the standards, but also encourage the use of the different DP Competencies that are at the heart of your discipline. There are many wonderful resources already available that are competency-based and standards-aligned. Generally, curricula and assessments that are student-centered, rigorous, and inquiry- or project-based will be sources that are rich with competencies and standards. Furthermore, once you have identified appropriate resources that will support you in competency-based instruction and assessment, you will typically find that these resources will be designed to encourage students to develop and demonstrate the range of thinking shown in the rubrics for the different competencies. This is important since students will be expected to demonstrate their abilities in the different DP Competencies at the higher levels of Bloom's Taxonomy, so as their teacher you will need to provide them with opportunities for this to occur. Additionally, students in every phase of their

¹ Anderson, L.W., & Krathwohl (Eds.). (2001). *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. New York: Longman.

Diploma Plus School should be engaged in work that allows them to utilize all levels of Bloom's Taxonomy. Assessments and classroom experiences for students in the Foundation through the Plus Phase should include opportunities for students to interact with the intended content and skills using the words from the above table as well as the "Question Cue Pyramid" below to prompt these different levels of thinking from the students.

For example, suppose you are teaching an algebra class and are deciding how to teach and evaluate your students' understanding of linear equations. Many traditional textbooks will be filled with pages of problem sets that will ask a student to practice rote calculations and procedures, yet provide them with few opportunities to develop or demonstrate their abilities to Reason and Prove, Represent, or Communicate Mathematically. However, by looking for texts, supplemental resources, activities, and/or authentic assessments that encourage these DP Math Competencies, you will find that students will understand linear equations at a much deeper level, and that such resources will promote the different levels of Bloom's Taxonomy as identified in the rubrics.

Question Cue Pyramid²



² Heather Rowlings, a Diploma Plus teacher at the Champion Charter Public School in Brockton, MA inspired this particular diagram.

How are Competencies Applied Across the DP Phases?

Students in every DP phase should be applying the same DP Competencies, using the same rubrics to evaluate their work, and be held to the same level of high expectations on the rubrics. What changes from Foundation to Presentation to Plus Phase is the content and skills (as identified by the Prioritized Standards) to be learned by the students. In other words, whether a student is taking Introductory Spanish in Foundation Phase, or Advanced Spanish in Plus Phase, he or she will be asked to demonstrate the same DP Competencies of Interpretive Communication, Expressive Communication, and Comparisons and to do so at least at the capable level of the rubrics. The content becomes more complex but the subject-specific competencies remain constant. Furthermore, it is important that students from Foundation to Plus Phase all have the opportunity to practice and demonstrate their abilities in the DP Competencies at the higher levels of Bloom's taxonomy by applying them to phase-appropriate concepts and skills.

How do I use the Competencies for Grading?

At Diploma Plus schools, every formal assessment is graded using the DP Competencies. This means that as a teacher you will need to find or develop assessments that allow students to demonstrate their ability in the relevant Prioritized Standards by applying at least one content and one personal DP Competency. Once you have assessments that encourage students to use the competencies, you should share with your students the DP Competencies and the associated rubrics they will be expected to demonstrate. This is vital, since students need to have the opportunity to craft their responses to the assignment based on the competencies and rubrics you will be grading them on. When grading your students' submitted work, you will grade each identified competency separately using the associated rubric to determine how well a student demonstrated each of the identified competencies.

Students' final term grades are also based on the competencies at DP schools. For this reason, it is important to provide students will multiple opportunities to demonstrate and develop their ability to use the different competencies throughout the term. After a student has been graded a number of times on a particular competency, the trend of the student's work is used to determine his or her grade in that competency for his or her report card. There is a procedure built into DP.Net that makes a suggestion for the report card grade for each competency assessed at least five times during the term by examining the trend in the students' work (based on the Power Law) while applying the competency. Additionally, DP.Net takes each of the competency grades on the student's report card for a given class and calculates a traditional "letter" grade by weighting the content competencies as 75% of the grade and the personal competencies as the remaining 25%, determining an average, and scaling this score.

How do Competencies Connect to Promotion and Graduation Criteria?

Competencies are present in two key areas of the DP schools' promotion and graduation structure. First, students' report card grades, which are explicitly based on the DP Competencies, are one element of promotion criteria. For a student to "pass" a class, his or her report card grades on the class' content competencies and personal competencies, after being converted into a traditional letter grade using the algorithm within DP.Net, must be at least a C. Since one of the requirements for a student to be promoted to the next phase is successful completion of the courses in that phase, the DP Competency grades on the report cards are integral to this process. Secondly, a student's Gateway portfolio and its presentation should demonstrate a deep understanding of the Prioritized Standards by applying the subject area competencies.



ELA

- E01. Develop Meaning: Apply a wide range of strategies to comprehend, summarize, interpret, evaluate, and appreciate texts.
- E02. Bias/Author Voice: Recognize that readers and writers are influenced by individual, social, cultural, political and historical contexts.
- E03. Reaction to Text: Explore responses to literature to build understanding of self, society, and the world.
- E04. Language Analysis: Identify an author's use of language and literary devices appropriate to purpose, audience and task.
- E05. Genre Analysis: Identify an author's use of genre appropriate to audience and task.
- E06. Writing Process: Employ a wide range of writing strategies and processes to generate and edit written and oral communication.
- E07. Idea Development: Write about, support, and elaborate on ideas using specific and relevant evidence.
- E08. Organization: Communicate using direction, shape, and coherence.
- E09. Language Choice: Use style and language appropriate to purpose, audience and task.
- E10. Conventions: Apply knowledge of language structure and conventions (grammar, spelling and punctuation).
- E11. Oral Communication: Communicate with others in formal and informal presentations and discussions.
- E12. Research Skills: Locate, evaluate, and cite information to support a research question.



Math

- M01. Problem Solving: Solve mathematical problems.
- M02. Reasoning and Proof: Reason about mathematical or real world patterns; make and prove related conjectures.
- M03. Quantitative Reasoning: Produce, use, and comprehend quantitative information in real-world situations.
- M04. Mathematical Representations: Represent mathematical concepts and relationships in different forms in order to solve problems and communicate mathematical ideas.
- M05. Communication: Communicate mathematical ideas verbally and in writing using diagrams, tables, graphs, symbols, mathematical vocabulary, etc.
- M06. Mathematical Connections: Connect mathematical ideas to other mathematical concepts, other disciplines, or real-world situations.



Social Studies

- SS01. Historical Context: Develop a sense of time and the meaning, implications, and importance of historical events, people, ideas, or artifacts.
- SS02. Change, Cause, and Effect: Understand change, cause and effect.
- SS03. Perspective: Understand events from more than one perspective.
- SS04. Research-based Arguments: Construct and present arguments based on research and interpretation.
- SS05. Representation of Information and Ideas: Read, record, create, and analyze data and information in the form of graphic organizers, lists, charts, and maps.
- SS06. Impact of Geography and Environment: Explain how geography and environment has influenced and has been influenced by cultures, economic or political systems, and historical events.
- SS07. Impact of Culture: Understand how culture and belief systems shape history.
- SS08. Impact of Economics: Understand fundamental economic principles and how they influence political systems and historical events.
- SS09. Power, Justice, and Human Rights: Analyze systems of power and oppression.



Science

- S01. Scientific Investigation: Complete projects that demonstrate understanding of different kinds of scientific investigation, controlled experiment, fieldwork, experimental design, and secondary research.
- S02. Scientific Tools: Demonstrate appropriate use of tools and techniques to gather, analyze and, interpret data.
- S03. Fact vs. Opinion: Distinguish between fact and opinion.
- S04. Scientific Communication: Demonstrate effective scientific communication.
- S05. Impact of Technology: Investigate the nature and impact of technology on natural systems.
- S06. Scientific Theory: Recognize that the development of a scientific theory is an ongoing process involving modeling and making changes in response to data.
- S07. Scientific Systems: Understand key scientific systems in order to interpret phenomenon.



Health and Fitness

- HF01. Physical Health: Recognize decisions that all individuals make with respect to their bodies in daily living and identify the relationships among actions, conduct, and wellness.
- HF02. Social and Emotional Health: Develop skills needed in daily life by learning about identity and how to manage interactions with others.
- HF03. Safety and Prevention: Examine how decisions are made and weigh the probable consequences of actions.
- HF04. Personal and Community Health: Develop a clearer understanding of personal, social, and civic responsibilities by acting on accurate information to improve community health.
- HF05. Resource Management: Understand and manage personal and community resources to support the health of the individual and the community.
- HF06. Movement: Understand and develop the fundamentals of motor skills and movement patterns.
- HF07. Physical Fitness: Understand the benefits of lifelong personal fitness programs.
- HF08. Sports and Recreational Activity: Understand and demonstrate skills to participate in sports and recreational activities.



Technology

- T01. Creativity and Innovation: Demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
- T02. Communication and Collaboration: Use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
- T03. Research and Information Fluency: Apply digital tools to gather, evaluate, and use information.
- T04. Critical Thinking, Problem-Solving & Decision-Making: Use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.
- T05. Digital Citizenship: Understand cultural, and societal issues related to technology and practice legal and ethical behavior.
- T06. Technology Operations and Concepts: Demonstrate a sound understanding of technology concepts, systems and operations.



Language Acquisition

- LA01. Interpretive Communication: Understand written and spoken ideas and information in the English language.
- LA02. Expressive Communication: Present information, concepts, and ideas on a variety of topics in spoken and written form in the English language.
- LA03. Clarify Meaning: Rephrase ideas and thoughts spoken and written form to clarify meaning in social and academic interactions.
- LA04. Decoding/ Encoding: Apply letter-sound patterns or phonogram knowledge to connect meaning with printed word.
- LA05. Fluency: Demonstrate comprehension and efficient reading rate in a variety of texts.



Visual and Performing Arts

- VPA01. Creation: Produce or make art through individual elaboration, flexibility, fluency, knowledge, experience, originality, and/or personality.
- VPA02. Aesthetic Capability: Establish and develop aesthetic capability.
- VPA03. Appreciation: Analyze work to reveal its critical attributes.
- VPA04. Culture and Style: Formulate stylistic and cultural judgments about a work.
- VPA05. Vision: Develop a sense of observation, perspective, interpretation, and insight.
- VPA06. Evaluation: Judge one's own work and working process and the work of others in relation to standards of the field.



Foreign Language

- FL01. Interpretive Communication: Understand written and spoken ideas and information in the target language.
- FL02. Expressive Communication: Present information, concepts, and ideas on a variety of topics in spoken and written form in the target language.
- FL03. Cultures: Understand cultures that speak the target language.
- FL04. Comparisons: Develop insight into the nature of language and culture by comparing primary language and culture with another.
- FL05. Communities: Participate in communities at home and around the world that speak the target language.



Career and Technical Education

- CTE01. Academics: Understand the academic content required for entry into postsecondary education and employment in the chosen sector.
- CTE02. Communications: Understand the principles of effective oral, written, and multimedia communication in a variety of formats and contexts.
- CTE03. Career Planning and Management: Understand how to make effective decisions, use career information, and manage career plans.
- CTE04. Technology: Use contemporary and emerging technological resources in diverse and changing personal, community, and workplace environments.
- CTE05. Problem Solving and Critical Thinking: Develop alternative solutions by using critical and creative thinking skills, such as logical reasoning, analytical thinking, and problem-solving techniques.
- CTE06. Health and Safety: Understand health and safety policies, procedures, regulations, and practices, including the use of equipment and handling of hazardous materials.
- CTE07. Responsibility and Flexibility: Demonstrate responsibility and flexibility in personal, workplace, and community settings.
- CTE08. Ethics and Legal Responsibilities: Understand professional, ethical, and legal behavior consistent with applicable laws, regulations, and organizational norms.
- CTE09. Leadership and Teamwork: Understand effective leadership styles, key concepts of group dynamics, team and individual decision-making, the benefits of workplace diversity, and conflict resolution.
- CTE10. Technical Knowledge and Skills: Understand the essential knowledge and skills common to all pathways in the industry sector.
- CTE11. Demonstration and Application: Demonstrate and apply the concepts contained in the pathway standards.



Personal

- P01. Self-management: Take responsibility for changing personal behaviors or acquiring skills that lead to both social and academic success.
- P02. Planning and Responsibility: Demonstrate ability to create and execute effective plan and take responsibility for outcomes.
- P03. Problem Solving and Decision Making: Demonstrate problem solving and decision making techniques.
- P04. Integrity: Act on convictions and stand up for beliefs.
- P05. Reflection and Evaluation: Assess current knowledge and progress and effectiveness of process and actions.
- P06. Cooperation: Interact with others in ways that are responsive, effective, and demonstrate respect for others' ideas, opinions, and contributions.
- P07. Conflict Resolution and Negotiation: Apply conflict resolution and negotiation strategies.
- P08. Cultural Competence: Demonstrate a global perspective that includes knowledge of and comfort with all dimensions of culture.