



Differentiation Strategies and Examples: Grades 6–12

A.C.C.E.S.S.: All Children Challenged and
Equipped for Success in School

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Portions derived from the following sources:

Tomlinson C.A. (2014). *The Differentiated Classroom: Responding to the Needs of All Learners*. (2nd ed). Alexandria, VA: ASCD.

Doubet, K.J., & Hockett, J.A. (2017). *Differentiation in Elementary Schools: Strategies to Engage and Equip All Learners*. Alexandria, VA: ASCD.

Tomlinson, C.A., & Sousa, D. (2011). *Differentiation and the Brain: How Neuroscience Supports the Learner-Friendly Classroom*. Solution Tree.

Introduction

This handbook was designed by the Tennessee Department of Education to accompany professional learning on differentiated instruction. It features content and strategies from face-to-face workshops, as well as additional content designed to extend teacher understanding and support teachers as they design differentiated lessons and tasks in their own classrooms.

Differentiation is *not* new. Effective teachers have always taught in ways that acknowledge and respond to their students' shared and individual needs. At the same time, research reveals that differentiation is not well-understood or consistently and thoughtfully applied, regardless of grade level, subject area, or teaching context. In other words, many teachers recognize the need for differentiation; fewer teachers feel equipped with a clear understanding of how to do it well.

With that in mind, this handbook strives to balance clarifying what differentiation is—and is not—with building teachers' skills in planning for and implementing differentiation. The first pages are dedicated to defining differentiation using a model developed by Dr. Carol Ann Tomlinson, who is widely regarded as the international expert in differentiated instruction. The remaining pages provide explicit guidance for how to design differentiated lessons and tasks, beginning with clear learning goals derived from standards and extending to specific adjustments that teachers can make to content, process, and product for student readiness, interest, and learning profile. This handbook makes several assumptions that are important for teachers and leaders to note:

- **Differentiation** is a journey for the teaching life. Most teachers practice some form of differentiation as proactive planning for students' varied needs. At the same time, fully realized, differentiation is a complex endeavor that requires a range of sophisticated skills that are developed over time and with practice. This handbook provides teachers at all levels of expertise with insights and tools for their own professional growth.
- **Examples are instructive and illustrative.** The examples provided in this handbook represent a range of content areas and grade levels, are aligned with standards, and take the developmental needs of various groups of learners into account. However, teachers are expected and encouraged to adapt these examples to best fit their purposes. No example of differentiation is an optimal fit for every context, every teacher, every classroom, and every learner. There are many other strategies and applications that teachers can use to respond to learner needs. Also, examples assume that not all students read independently and that tasks will often be delivered orally or with other supports.
- **Collaboration and feedback aid are critical to teacher growth.** Although this handbook can be used by individual teachers, the content, strategies, and examples are best leveraged in professional learning and other school-based context where teachers are collaborating with colleagues to develop, refine, and receive feedback on their ideas.

What is differentiation?

Misconceptions and Truths

There is a wide range of definitions of and beliefs about differentiation, including misconceptions about what it is and is not. The table below shows some of these misconceptions, alongside corrective truths.

Portions adapted from Tomlinson (2014), Tomlinson, Narvaez, & Brimijoin (2008), and Doubet & Hockett (2015; 2017)

Misconception	Truth
Differentiation is new, or the latest educational fad.	Differentiation is as old as the craft of teaching and will never go out of style.
Differentiation is a set of strategies, tools, or teaching tricks.	Differentiation is a philosophy of and model for effective teaching and learning that goes beyond strategies.
Differentiation should happen every day, or differentiation should only happen once in a while.	Differentiation is a potential response to regular and ongoing analysis of students' characteristics and students' learning.
Differentiation requires writing individualized lesson plans for every student.	Differentiation calls for instructional adjustments that responds to <i>patterns</i> in student needs.
Differentiation doesn't allow for whole-class instruction.	Differentiation incorporates a range of instructional strategies, including whole-class instruction.
Differentiation relies on leveling students through ability grouping.	Differentiation relies on <i>flexible</i> grouping for a variety of community-building and instructional purposes.
Differentiation is giving some students low-level tasks and other students high-level tasks.	Differentiation calls for respectful tasks that respond to students' readiness, interest, and learning preferences.
Differentiation is better for (or easier in) some grade levels or subjects than others.	Differentiation is for all grade levels and subjects. Each subject and grade level presents unique opportunities for and challenges to planning for differentiation.
Differentiation lets some students out of standards.	Differentiation is the means by which all students make progress toward and beyond standards.
Differentiation is primarily an approach to teaching certain groups of students (e.g., students with individualized education programs (IEPs), English language learners, gifted students) or to teaching in special programs or settings.	Differentiation is necessary for teaching all students in all kinds of settings, including the general education classroom.
Differentiation is just another name for good teaching.	Differentiation is rooted in good teaching, but good teaching is not always differentiated.

The Philosophy, Practices, and Principles of Differentiation

Differentiation is both a philosophy and a principle- and practice-driven model for effective teaching and learning. Understanding the big picture of differentiation as well as the key components is critical to implementing it in today's classrooms.

The Philosophy of Differentiation (Tomlinson, 2014)

Most of what teachers do in their classrooms is guided by their own philosophy of teaching and learning. Differentiation works best in classrooms where certain beliefs motivate why, what, and how teachers approach planning for and responding to student differences (Tomlinson, 2014). Four tenets about the capabilities and potential of all students, and about the role and responsibility of all teachers, represent assumptions of the teacher of a differentiated classroom.

1. *Diversity is normal and valuable.*

The teacher of a differentiated classroom understands and embraces the reality that students represent a rich range of diverse experiences and characteristics. Differences are something to celebrate, rather than something to ignore or to fix; they are assets, not liabilities, to the classroom community. The teacher honors who students are as individuals *and* as a group, based on shared and unique traits.

2. *Every child has hidden and extensive capacity to learn.*

The teacher of a differentiated classroom knows that traditional measures of ability such as standardized test scores and grades, do not tell the whole story of who a student is or what a student can do. The teacher assumes that every student can learn and that a student's greatest strengths may be under the surface and require the teacher to dig deep to uncover what will help that student learn and grow.

3. *It is the teacher's responsibility to be the engineer of student success.*

The teacher of a differentiated classroom defines student success as growth toward and beyond goals, as well as growth relative to oneself (e.g., where you started compared to where you ended up). This growth does not happen by accident; it is the result of the teacher taking ownership of and intentionally planning for all students' learning. Such teachers do not dismiss or minimize a student's chances for success based on (for example) student's English language skills, IEP, or home life. They commit to doing what they can with the time they have to make sure every child grows.

4. *Educators should be the champions of every student who enters the schoolhouse doors.*

The teacher of a differentiated classroom believes that educators are champions for all students and is an advocate of every child in his/her charge. This includes children who are easy to miss and those who are hard to ignore; children who are academically far

behind and those far ahead; and children who have many advantages and those who have very few advantages.

These four beliefs lay a philosophical groundwork for differentiation to take root. It is easy to picture differentiation being implemented in the classroom of a teacher who holds these convictions. It is hard, by contrast, to picture differentiation being implemented in the classroom of a teacher who believes that diversity is undesirable or a nuisance; that some children can learn but others cannot; that student success is determined by factors beyond the teacher's control; or that some children are not reachable or teachable.

Teachers of differentiated classrooms understand that their role has limits, but they are convinced that they have the power and responsibility to effect growth in all children in diverse classrooms.

The Practices and Principles of Differentiation

Differentiating instruction involves making proactive adjustments to *what* students learn (i.e., content), *how* they learn it (i.e., process), and how they *show* what they learn (i.e., product), according to students' individual and shared characteristics. The [Model for Differentiation of Instruction](#) on the next page is adapted from Carol Tomlinson's Model for Differentiation of Instruction. This model is comprised of practices and principles that, read together, provide a definition of differentiation:

*When teachers differentiate, they make proactive adjustments to **content, process, and product**, according to patterns in student readiness, interest, or learning profile, using instructional strategies, informed by standards-aligned learning goals; pre- and formative assessment; and interest/preference surveys and inventories, implemented through varied instructional groupings, flexible classroom routines, and efficient management tools and techniques in the context of supportive, growth-oriented, community-centered classrooms.*

Model for Differentiation of Instruction

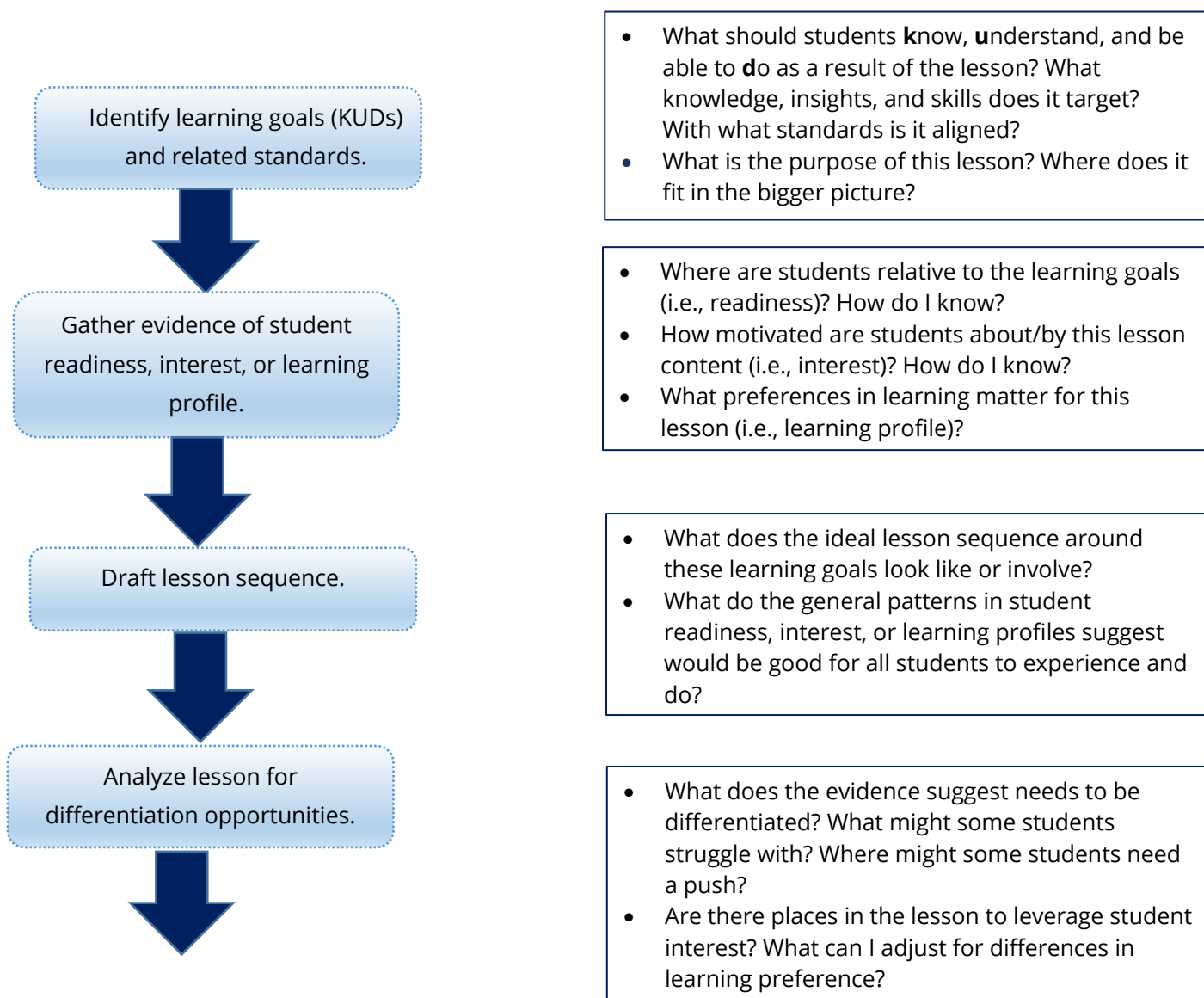
Based on Tomlinson (2014)

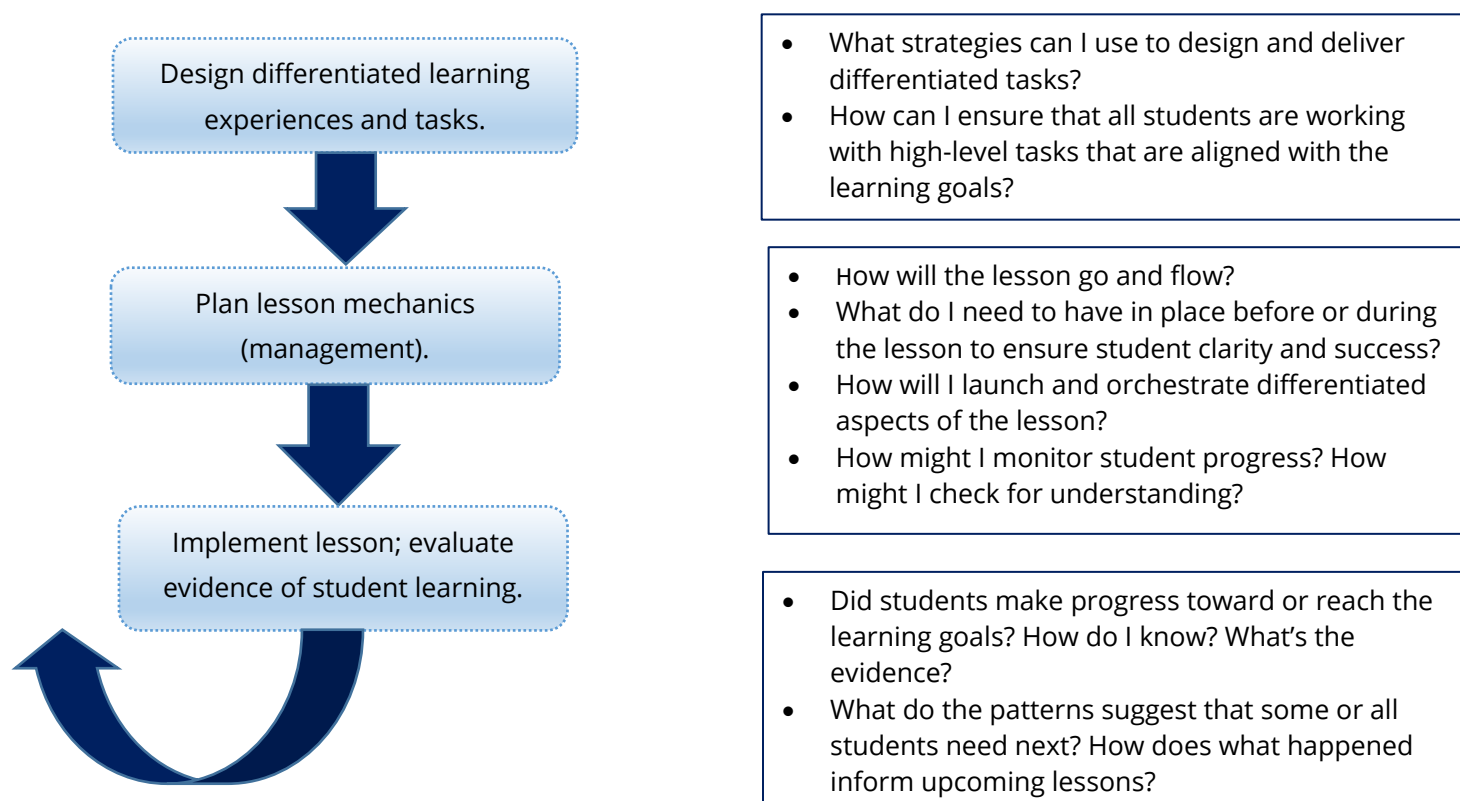
When teachers differentiate, they make proactive adjustments to		
Content	Process	Product
The information, ideas, and skills that students will take in or grapple with in order to reach the learning goals.	The activities through which students take in and make sense of key ideas in the content using essential knowledge and skills.	How students demonstrate and extend what they know, understand, and can do as a result of a unit or series of lessons.
according to patterns in student		
Readiness	Interests	Learning Profile
The student's proximity to specified learning goals.	The student's personal and situational passions, affinities, and kinships that motivate learning.	The student's preferred approaches to learning, as influenced by thinking style, intelligence preference, cultural background, or gender.
using instructional strategies such as		
Graphic Organizers Tiered Tasks ThinkDots Learning Stations Contracts and Agendas Role Cards Small-Group Instruction	Jigsaw RAFTs Choice Grids Learning Menus Interest Centers	Entry Points Tri-Mind Thinking Caps VAK Tasks (Expression Options) MI (Multiple Intelligences)
informed by		
Standards-aligned learning goals (KUDs) Pre-assessment and formative assessment Interest and preference surveys and inventories		
and implemented through		
Varied instructional groupings Flexible classroom routines Efficient management techniques and tools		
in the context of		
Supportive, growth-oriented, community-centered classroom environments.		

A Process for Planning and Implementing Differentiated Lessons

There is no single process or recipe for planning and implementing differentiated lessons. In reality, a differentiated lesson involves the same elements of any quality lesson: clear learning goals, well-designed instruction, high-level questions, rich tasks, opportunities for formative assessment, strong management, etc. When a lesson is differentiated, this means that, at some point, students will be working toward the same learning goals (KUDs), but in different ways.

Although instructional planning is an iterative process, designing differentiated lessons can be viewed as a general sequence of actions, guided by key questions. This process is outlined in the graphic below. Teachers can change or add to this visual to better reflect or capture their own thinking.





[The Differentiation Lesson-Planning Menu](#) in the Appendix aligns with the model outlined above and further scaffolds the process of planning differentiated lessons. Not all applications of differentiation are best thought of as lessons, and not all lessons need to be differentiated. The menu identifies possible components of lessons and prompts the lesson-designer to consider how a lesson might evolve, including what strategies for differentiation in this handbook might be applied. It can be used for individual or collaborative planning. The intent is to show how differentiation is connected to lesson planning in general—not to suggest that all lessons (differentiated or otherwise) should be planned with this menu.

Standards and KUDs: Beginning with the End in Mind

The [Tennessee Academic Standards](#) outline expectations for what students will know and be able to do at the end of a grade for each subject area (e.g., English language arts (ELA), mathematics, science, social studies, etc.). They provide a framework for designing curricular units and lessons, as well as clarity for teachers about what students should be working toward (or beyond), at minimum, as the year progresses.

When teachers plan units and lessons with student needs in mind, the standards are a starting point for more fully articulating what students should **know (K), understand (U), and be able to do (D)** as a result of teaching and learning (Tomlinson, 2004). This “K-U-D” approach is a way to translate standards

into lesson and unit learning goals that should be the focus of classroom assessment, instruction, and differentiation.

K: What Students Should KNOW

A **know goal** is the *knowledge* that students should acquire in a lesson or unit of study. This includes information that can be acquired through memorization, such as facts or categories of facts, dates, names of people or places, names and details of important events, definitions of terms or concepts, academic vocabulary, steps in a process, or rules. Additional examples derived from the Tennessee Academic Standards in grades 3–12 follow:

Know Goal Examples

Mathematics

- The *absolute value* of a rational number is its distance from 0 on a number line. (Grade 6)
- Rules for multiplying signed (+/-) numbers (Grade 7)
- A *function* is a rule that assigns to each input exactly one output. (Grade 8)
- Parts of an *expression*: terms, factors, coefficients (Algebra I)
- Definitions of *angle*, *circle*, *perpendicular line*, *parallel line*, and *line segment* (Geometry)
- $i^2 = -1$ (Algebra II)

Social Studies

- Time designations and abbreviations: *B.C.*, *B.C.E.*, *A.D.*, *C.E.*, *circa* (*c.* or *ca.*), *decades*, *centuries*, *prehistoric*, *historic* (Grade 6)
- Main ideas of *Martin Luther*, *John Calvin*, *Desiderius Erasmus*, and *William Tyndale* in the context of the Reformation (Grade 7)
- The Indian Removal Act of 1830 (Grade 8)
- Major turning points of World War I (U.S. History & Geography: Post-Reconstruction to Present)
- Principles of the *Magna Carta* (1215), the *English Bill of Rights* (1689), *American Declaration of Independence* (1776), and the *French Declaration of the Rights of Man & the Citizen* (1789) (World History & Geography)

Science

- Types of competitive, symbiotic, and predatory interactions in an ecosystem (Grade 6)
- The structure and function of major cell organelles (Grade 7)
- The change in an object's motion depends on the sum of the forces on the object and the mass of the object. (Grade 8)
- Characteristics of objects in the solar system, including planets, satellites, comets, and asteroids (Earth & Space Science)
- $F = \Delta p / \Delta t$ (Physics)

English Language Arts/Literature

- The functions of pronouns: case, intensive pronouns, pronoun-antecedent agreement (Grade 6)
- Types of *irony*: dramatic, situations, verbal (Grade 8)

- Characteristics and purpose of *satire* (Grades 11-12)
- Models of argumentation (e.g., Aristotelian, Rogerian, Toulmin) (High School)
- In writing, *voice* is the quality that makes an author's writing unique and which conveys an author's attitude, personality, and character. (All)
- A word's *connotation* is the subtext or emotional value of the word; a word's *denotation* is its technical or literal meaning. (All)

The kind of information in a know goal is easy for students to forget if it is not attached to bigger ideas and understand goals.

U: What Students Should UNDERSTAND

An **understand goal** is an insight, truth, or “a-ha” that students should gain as a result of acquiring content and skills. An understand goal represents an idea that will last beyond a single lesson or unit—it has staying power. An understand goal often makes a statement about or connects concepts. A concept is a broad abstract idea, typically one to two words, under which various topics and facts can fit (Erickson, 2002). They can be general or discipline-specific. Examples include *needs and wants*, *change*, *system*, *pattern*, and *narrative*. Direct or implied concepts are underlined in the understand goal examples that follow, which are derived from the Tennessee Academic Standards:

Understand Goal Examples

Mathematics

- Positive and negative numbers are used together to describe quantities having opposite directions or values. (Grade 6)
- Random sampling tends to produce representative samples and support valid inferences. (Grade 7)
- Frequencies can show patterns of association in bivariate data. (Grade 8)
- Correlation is related to but distinct from causation. (Algebra I)
- Objects can be described in terms of geometric shape, measurement, and properties. (Geometry)
- Two events are independent if the probability of the events occurring together is the product of their probabilities. (Algebra II)

Social Studies

- Civilizations are defined by their geography, economy, hierarchy, systems, culture, and technology. (Grade 6)
- European exploration was motivated by religion, political rivalry, and economic gain. (Grade 7)
- Westward Expansion resulted in social, political, and economic transformation. (Grade 8)
- The Civil Rights movement compelled social, cultural, and legislative change through leadership, public protest, and government intervention. (U.S. History & Geography Post-Reconstruction)

- The Industrial Revolution resulted in massive social, economic, and demographic changes in the United States and around the world. (World History)

Science

- Energy, found in multiple systems and scales, drives ecosystems. (Grade 6)
- Small changes in one part of a system (e.g., a cell, the body) might cause large changes in another part of the system. (Grade 7)
- Specific phenotypes within a population can increase the probability of survival of that species and lead to adaptation. (Grade 8)
- Technological advances (e.g., deep space research instrumentation) yield new understandings of Earth's place in the universe. (Earth & Space Science)
- Changes in environmental conditions lead to speciation and extinction. (Environmental Science)
- Science is both a body of content knowledge consisting of theories that explain data as well as a set of practices that use analysis & argumentation to establish, extend, and refine knowledge. (High school)

English Language Arts/Literature

- Authors make choices about what point of view to establish, develop, and sustain over the course of a text. (Grade 6)
- Close listeners evaluate a speaker's argument for sound reasoning and relevant, sufficient evidence. (Grade 7)
- Conflict can compel change and inspire individuals to act or think differently. (Thematic, varied grade levels)
- A writer's conventions are influenced by his/her purpose, context, tone, and style. (High school)
- Through discussion, participants examine, construct, and extend ideas related to specific topics, texts, and issues. (All)

Understanding is distinct from knowledge in that a teacher can't be certain that a student grasps an understanding simply because the student says it. Understanding needs to be unpacked. Students do this by using what they **know** and can **do** to show what they **understand**. For example, if students really understand that civilizations are defined by their geography, economy, hierarchy, systems, culture, and technology, then they can give examples of ancient and contemporary societies that were/are more and less civilized; describe how the characteristics of a civilization are connected; compare the structures of different civilizations, etc.

D: What Students Should DO

A **do goal** articulates skills that students should master. These can be thinking skills, organizational skills, habits of mind, procedural skills, or skills associated with a discipline (e.g., science, cartography, mathematics). Despite their name, do goals do *not* describe activities that students will do or complete

(e.g., do a worksheet on characters, do addition problems, complete a learning menu). Instead, a do goal focuses on a transferable action that takes place first in the learner's *mind*. For example, *decoding grade-level text* or *analyzing and interpreting data from observations* are both do goals. Neither of these skills refers to a specific activity, and different activities could be used to exercise or carry out these skills. Example do goals from the Tennessee Academic Standards follow:

Do Goal Examples

Mathematics

- Fluently divide multi-digit numbers using the standard algorithm. (Grade 6)
- Solve problems involving scale drawings of geometric figures. (Grade 7)
- Analyze and solve pairs of simultaneous linear equations. (Grade 8)
- Compare properties of two functions each represented in a different way. (Algebra I)
- Prove theorems about lines and angles. (Geometry)
- Use data from a sample survey to estimate a population mean or proportion. (Algebra II)

Social Studies

- Compare and contrast life in Athens and Sparta. (Grade 6)
- Describe the economic and social effects of the spread of the Bubonic Plague. (Grade 7)
- Analyze the major issues debated at the Constitutional Convention. (Grade 8)
- Evaluate the impact of Great Society programs. (U.S. History & Geography Post-Reconstruction)
- Explain the origins, significance, and effect of the establishment of the State of Israel. (World History)
- Cite textual evidence from primary source documents to support conclusions about historical events and figures. (All)

Science

- Design and test different solutions that impact energy transfer. (Grade 6)
- Develop a model to depict the cycling of matter. (Grade 7)
- Evaluate the role that eaves play in different communication systems. (Grade 8)
- Analyze surface features of Earth and identify & explain the geologic processes responsible for their formation. (Earth & Space Science)
- Algebraically solve problems involving constant velocity and constant acceleration in one-dimension. (Physics)
- Construct evidence-based arguments based on information gathered from reliable sources. (All)

English Language Arts/Literature

- Organize an event sequence in narrative writing that unfolds naturally and logically. (Grades 6-8)
- Support an interpretation of a text by citing relevant textual evidence. (Grade 8)
- Analyze how point of view and/or author purpose shapes the content and style of diverse texts. (Grades 9-10)
- Use advanced searches effectively, assessing the credibility and effectiveness of sources in answering a research question. (Grades 11-12)

- Use context as a clue to the meaning of a word or phrase. (All)

State Standards and KUDs

Although the Tennessee Academic Standards are not written specifically as know, understand, and do goals, teachers can derive KUDs from the standards. An example using Tennessee Academic Standards for a high school Contemporary Issues course illustrates this well.

Contemporary Issues (Standards CI.22-CI.26)

- CI.22. Integrate information from diverse sources to write an expository piece that analyzes the rights and responsibilities of a citizen in the United States today.
- CI.23. Analyze the roles of the individual and the government in promoting the general welfare of the community under the Constitution.
- CI.24. Describe the protections offered by the First Amendment and define civil disobedience.
- CI.25. Cite specific textual evidence to compare and contrast American civil liberties with those of citizens in other nations.
- CI.26. Examine an election and analyze its results.

These standards are written as **do (skill) goals**; each one begins with a thinking verb and can be demonstrated in more than one way and applied to content and situations across time and place.

There are also numerous **know goals** embedded within each standard—among them key terms and concepts that need to be explicitly taught and retained in a way that students can connect with and grasp. This means that the teacher has to decide how to define and contextualize this knowledge.

Understand goals are not explicit in these standards but can be teased out. This might begin with identifying the most important concept(s) that cut across the standards and can be used to organize ideas in the standards. *Rights, liberties, and responsibilities* stand out, as do *the individual, government, and community*. *Citizenship*—and what it means to be a good citizen is an implied concept. *The Constitution, First Amendment, and elections* are topics that fit under one or more concepts (e.g., rights & responsibilities, government, liberties). Though not explicitly stated, the concepts of *conflict* and *power* also come to mind, when considering the relationship between individuals and government. Bringing these concepts and topics together in various statements that can logically complete the stem students will understand that... results in potential understand goals.

Below is a set of KUD learning goals for a study of Citizens' Rights and Responsibilities within a Contemporary Issues class. This set is only one possibility. Teachers may generate a set of KUDs that is different from this example, depending on content focus, in their own efforts to translate the standards.

KUD Learning Goals for Citizens' Rights and Responsibilities

Derived from the Tennessee Academic Standards

Know Goals

- A *citizen* is a native or naturalized member of a state or nation who owes allegiance to its government and has certain protections under its laws.
- *Rights and responsibilities* of U.S. citizens under the *Constitution/Bill of Rights* (e.g., bearing arms, voting)
- Differences between rights of legal U.S. citizens and rights of non-citizens
- Specific protections for citizens under the First Amendment (e.g., right to free speech), including parameters for/limits of those protections
- *Civil disobedience* is refusal to comply with certain laws, as a form of peaceful political protest.
- Examples of American civil liberties that citizens of other countries do and do not have

Understand Goals

In the United States...

- Individuals and government share responsibility for promoting the general welfare of the community.
- The power, liberties, and rights and responsibilities of individuals and government have limits.
- Not all individuals in a country have the same liberties/rights under the law.

Do Goals

- Integrate information from diverse sources to write an expository piece that analyzes the rights and responsibilities of a citizen in the United States today (CI.22)
- Analyze the roles of the individual and the government in promoting the general welfare of the community under the Constitution. (CI.23)
- Describe the protections offered by the First Amendment (CI.24)
- Cite specific textual evidence to compare and contrast American civil liberties with those of citizens in other nations. (CI.25)
- Examine an election and analyze its results. (CI.26)

KUDs and Differentiation

What do KUDs have to do with differentiation? One way of thinking about differentiation is providing different routes to the same destination. In planning differentiated lessons and tasks, teachers must focus all learning experiences on the same goals. Otherwise, students are likely to be engaged with work that is *different*, but not *differentiated*. KUDs provide a clear direction for the teacher as he or she considers various pathways to common goals that students might take. In other words, KUDs are the starting point for planning tasks that are differentiated for readiness, interest, and learning profile.

Many examples featured in the next sections of this handbook show KUD goals aligned to differentiated tasks.

Differentiating for Student Readiness

Uncovering Student Readiness

What is readiness?

Readiness is a student's proximity to the learning goals at a specific point in time (Tomlinson, 2014); it is where the student is relative to where the learning goals say the student should be.

A student's readiness can vary from lesson to lesson, skill to skill, and concept to concept. Readiness is not the same thing as *ability*. Ability implies something more fixed that is used to talk about a student's overall capacity as a learner or in a subject; whereas, readiness is more fluid and progress oriented. Readiness is also more consistent with research on the relationship between a person's beliefs about the nature of intelligence and his/her motivation to learn and persist in the face of challenge. Teachers (and students) who believe that intelligence is subject to change and development are more likely to have a growth mindset than those who do not (Dweck, 2006).

Readiness is one of three sets of student characteristics for which teachers can differentiate content, process, and/or product. The other two—interest and learning profile—are addressed in other parts of this handbook. However, a student's interest and learning profile can influence his or her readiness. That is, when tasks have been differentiated for interest or learning profile, a student may seem more ready than he or she would otherwise.

How do teachers gauge student readiness?

There are several sources that teachers can use to gauge student readiness:

- **Classroom-based informative assessments.** These are assessments that teachers give at the classroom level to inform instructional planning and decision making. They are aligned with current or upcoming learning goals and require oral, written, or performance-based responses from students. The teacher knows what the assessment items are and is able to see and make sense of how students responded. Such assessments can be designed by the classroom teacher or can come from other sources (e.g., district curricula). Specifically, **pre-assessments** (given before a unit of study or series of lessons around a specific topic, concept, or set of skills begins) and **formative assessments** (given during the instructional cycle, to check whether students are grasping the learning goals) are a teacher's most powerful tools for tapping into students' understanding, knowledge, and skill if assessment items are goal-aligned and thoughtfully designed. **Summative assessments** (given at or toward the end of period of study to judge or certify what the student has learned) also yield evidence of student readiness that can be used to inform planning in subsequent lessons or units. These informative assessments are described in further detail with specific strategies and examples in the following sections of this handbook.

- **Results from standardized assessments.** Standardized assessments such as state-level tests and universal screening tools can also provide evidence of student readiness. In Tennessee, the state standardized assessments, called TNReady, are fully aligned to the academic standards. Students and their families receive detailed individualized reports that show students' strengths, opportunities for growth, and suggested next steps. Teachers receive class roster reports that identify areas where their students exceeded, met, or were below expectations when compared to other students in Tennessee. Teachers also receive standards analysis reports that outline how their students performed on each tested standard. The results from these standardized assessments can give teachers a starting point for discerning student readiness and help them determine what they should informatively assess at the classroom level. You can learn more at [TNReady.gov](https://tnready.gov).
- **Prior performance.** A student's performance in a prior grade level, on a prior classroom assessment, or even in a prior unit of study *can* be an indicator of student readiness, but like standardized assessment results and IEP/504 Plans, they should point the teacher toward using pre- and formative assessment to uncover *where* the student is relative to learning goals *now*. Because development can follow a bumpy, uneven trajectory (versus a straight and predictable line), prior performance should be interpreted cautiously as evidence of a student's current readiness.
- **IEPs and 504 plans.** IEPs and 504 plans outline instructional accommodations and/or curricular modifications that a teacher makes in response to specific student needs that have implications for how or what the student learns. IEP and 504 plans provide general guidance for responding to specific aspects of student readiness, but they are not a substitute for informatively assessing students against actual lesson and unit learning goals. A student having an IEP or 504 plan does not mean that he or she will necessarily have high or low readiness with certain content or skills.
- **Other student characteristics.** Characteristics such as a student's proficiency with the English language, stability of home life, cultural background, and ability to sustain attention may influence his or her readiness—or how the teacher interprets his or her readiness—but should not be used to characterize or make assumptions about student readiness in the absence of assessment evidence.

Pre-assessment: Gauging Readiness Before Instruction

Summary

Pre-assessment is the process of gathering evidence of students' readiness and interests *prior to* beginning a unit or series of related lessons and then using that evidence to plan instruction that will better meet learners' needs (Doubet & Hockett, 2015). Pre-assessment gives teachers both a big picture view of where a group of students is relative to goals as well as insights about individual student's thinking, skills, and preferences.

Differentiation Connection

Pre-assessment results can reveal what all students have or have not yet learned or grasped, and point the teacher to which area of the pool is best for students to jump in (Tomlinson & Moon, 2013)—which may be in the same place or in different places. The results of a pre-assessment can also give teachers a sense of what lessons in the unit might need to be differentiated for readiness, interest, or learning preference. Pre-assessment should *not* be used to put students into static readiness groups for the duration of a unit or course. As a unit progresses, teachers should use formative assessment to inform instructional decisions, including whether and how to differentiate.

Design Guidelines

- 1. Identify the learning goals for the unit or series of lessons.** What should students understand, know, and be able to do? Also, consider pre-requisite goals that students at the grade level *should* already know, understand, and be able to do, but might not.
- 2. Select goals for pre-assessment.** Select unit learning goals or prerequisite goals for which there is little existing or recent evidence of student readiness. Avoid trying to pre-assess every goal in the unit.
- 3. Design pre-assessment items that align with the selected goals.** Use open-ended prompts that aim to capture what students *do* know, understand, and can do (versus what they do not). Use natural, grade-appropriate language and aim for quality over quantity. The idea is not to scare students about upcoming content—or to make them feel badly about not knowing something. Rather, the best items invite students to connect with the content and skills and give them a taste of what they will be learning. Strategies such as those described on the pages that follow can also be helpful in deciding how to frame pre-assessment prompts or questions.
- 4. Optional:** Pre-assess interest and learning preference. In addition to items that gauge readiness, pre-assessment can also include items that gauge student interest or learning preferences. Asking students about previous experience with a topic or skill, asking students to rate their interest in particular topics in an upcoming unit, or asking students to express a preference for how they might like to learn unit content are examples of potential items that could be included on a pre-assessment. When students are surveyed *only* for their interest and/or learning preferences, the term survey or inventory is a better descriptor than pre-assessment.
- 5. Articulate desired and/or expected responses.** With all assessments, pre-assessment included, be clear and specific about what the correct responses are, as well as what responses are predictable, given the age and characteristics of the students.
- 6. Choose delivery, response, and documentation formats.** Pre-assessment can be delivered orally or by reading or displaying prompts, alone or in combination with images and pictures, on paper, with physical materials/manipulatives, or via technology. Delivery can be whole group, small group, or individual. Students can respond by speaking, drawing, completing a task, performing, selecting from a set of choices, writing, or using cards, clickers, or other signals. The teacher can

gather and document responses using sticky notes, audio-recording responses, taking pictures, or saving responses electronically.

Implementation Guidelines

- **When to give a pre-assessment.** Pre-assessment is most useful when administered in time to analyze the results and make up-front adjustments to unit or lesson plans. Usually, this means at least several days before a unit begins. It is also possible that results from a previous unit's summative assessment can be used as pre-assessment for an upcoming unit.
- **What to tell students.** Getting a physical at the doctor or taking a swim test before being permitted to swim in the deep end of pool are relatable situations for many adolescents. Consider using these or similar analogies when first engaging students in pre-assessment, with an emphasis on trying to find out as much as possible about what students have already learned and experienced so that you can be a better teacher. Having students revisit and rethink their pre-assessment responses is also a way to frame the process around students' growth, versus on their performance.
- **Analyzing the results.** Review/read through student responses and note the general themes and patterns for the class as a whole. Questions to consider include the following:
 - ☐ What do all or many students seem to grasp well, or better than expected?
 - ☐ What do all or many students seem to not yet understand, know, or be able to do?
 - ☐ What do students' responses reveal about their misconceptions or gaps?
- **Planning from the results.** Use the themes and patterns to inform or make revisions to the unit plan or specific lesson plans and tasks. Student responses can provide ideas for lesson hooks or activities (this includes using anonymous student responses *in* lessons), evidence for which lessons or tasks need to be differentiated for readiness (or interest or learning preference) and which ones do not, and the basis for documenting individual or class growth.

Pre-Assessment Strategy Examples

K-W-L

(Ogle, 1986)

Developed as an active reading strategy, K-W-L builds on students' prior knowledge and current interest in a concept or topic to provide a framework for acquiring information via texts, other sources, or their own practice, application, and learning experiences. Students revisit their ideas and questions to consider what they found out. The teacher begins by having students brainstorm what they already know (or think they know) about a topic, as well as what they want to learn about it. After reading or learning about the topic, students return to the K and the W to discuss what they have learned and still want to learn. K-W-L is a pre-assessment of individual students only when used as such. For example, a

whole class K-W-L discussion may give the teacher clues about some students' thinking but is less helpful for determining how *each* student is approaching a topic.

World War II

What Do you KNOW about ?	What do you WANT to know?	What have you LEARNED?
I know that...	I want to know...	I learned that...

Writing a Compelling Argument

What Do you KNOW about it ?	What do you WANT to know?	What have you LEARNED?
I know that...	I want to know...	I learned that...

Agree or Disagree?

The teacher shares a series of statements with which students can agree or disagree, based on their current understanding or experiences (e.g., The heavier an object is, the faster it falls.) The statements can be displayed and read aloud for student response via colored cards, hand signals, or numbers, and/or printed on paper. Any forced dilemma works (e.g., Biased or Unbiased?, Possible or Impossible?). This strategy has the greatest potential for informing instruction when students have to explain their thinking.

Agree or Disagree? Dividing with Fractions

Read each statement. Say whether you agree or disagree. Show WHY. You can use numbers, words, and pictures.

If 3 people share $\frac{1}{2}$ lb. of chocolate equally, each person will get $\frac{1}{6}$ lb.

There are two $\frac{3}{4}$ -cup servings in 1 cup of yogurt.

A rectangular strip of land with a length of $\frac{3}{4}$ miles and an area of $\frac{1}{2}$ square mile is $\frac{2}{3}$ mile wide.

Agree or Disagree? Heredity

1. Genes are traits.
2. All organisms have DNA.
3. DNA affects an organisms behavior.
4. In humans, half of a child's DNA comes from the father, and the other half comes from the mother.
5. A person's traits come mostly from their same-sex parent.
6. Different types of cells in a person's body all contain the same DNA.

Coming Soon

The coming soon strategy builds on students' familiarity with movie or television show previews or trailers. The teacher displays or presents images or video clips related to unit content or skills for students to evaluate or apply. For example, uploading (e.g., via Google Docs, Padlet) a set of primary source documents related to a movement, time period, or event with several prompts such as *Where/how do these sources agree? Where/how do these sources disagree? Write three to five questions that these sources give you about the time (or event, etc.).*

Rank It

Asking students to rank examples of a concept or idea can surface the nuances in how sophisticated their understanding really is or is not). Well-chosen examples can themselves be instructive as

students grapple with how to order the examples on a given continuum. Students can rank teacher-provided examples, find and select their own examples to rank, or both. For instance: *Rank these news headlines from more biased to less biased. Explain the reasoning behind your decisions. Then, use online news sources to find one to three additional examples to add to your rankings.*

Performance-Based Task

A performance-based task is any task that a student completes that requires a constructed response. Used as pre-assessment, a performance-based task can help teachers better see how a student makes sense of content and ideas, and/or how they apply skills. The task might involve creating, selecting, sorting, comparing, solving, and interpreting. Typically, performance-based tasks also create an opportunity for students to explain their thinking. Example prompts follow:

Engineering

Design a simple experiment for testing the best water ratio for bottle-flipping. (Assume a 12-oz. bottle.) Include an explanation for why you think your experiment will work.

Argument Writing/Civics

Write a 4-5 sentence paragraph about whether our school cell phone policy is fair or unfair. Then, annotate your response to show what techniques you used to persuade the reader that you are right.

Literature

Read the poem. Identify and explain the places you think the poet is speaking figuratively (versus literally).

Mathematics/Science

Depict the data in the table using a graph of your choice. Be sure to label the graph. Then, write two statement about what the data in graph DO show and two statements about what the data DO NOT show.

Pre-Assessment Item Examples

These example items can be used or adapted for use in pre-assessment. Some items and types of items also work for formative assessment if students have received instruction in the content or skills.

ELA

- Look at a student's draft thesis statement below. Based on what you learned last year, what advice what you give the student for how to improve it?
- Read the editorial provided. Identify (1) the writer's position on the issue, (2) his strongest point, and (3) his weakest point. Be sure to explain what you think makes those points strong and weak.
- These are lines from a Shakespearean play we will be reading. Re-write the lines in your own words. Try to keep the meaning the same.

- Show a screenshot of a news organization's home page. The specific news organization does not matter as long as there are both ads and actual news articles on the page. Some of the content is news stories, some is advertisements. Examine the content marked with (A), (B) and (C). Decide whether each one is an ad or a news story, and explain how you know.
- Are the narrator of a story and the author of a story the same thing? Why or why not? Use examples from stories you've read, if possible.

Mathematics

- Agree or disagree? $5\frac{1}{2}$ is a fraction. Explain your answer.
- Calculate the mean, median, and mode of family size at Carpenter Middle School (numbers provided). Then, tell when each one of these measures of central tendency would be *most* useful.
- Identify and describe three patterns that you see in the data.
- Mason wants to buy a new gaming system that costs \$225. He can save \$26 a week toward his goal. (a) How many weeks will it take Mason to save enough money? (b) How much *more* money would Mason need to save per week if he wanted to purchase the system in three weeks?
- If $\frac{2}{3}$ is $\frac{1}{2}$ of $\frac{4}{5}$ of a certain number, what is the number? Show your thought process using words, numbers, and/or visuals.

Science

- Examine the picture of the phases of the moon during one month. Each picture is the moon on one night. What causes these phases? Why does the moon look different each night?
- Imagine the ant population on a farm has changed over time. Explain two environmental factors that could INCREASE the population and two environmental factors that could DECREASE it.
- Consider this claim: *Carrots improve eyesight*. What kind of scientific evidence would you need to conclude whether this claim is valid?
- Watch the video clip of a ball rolling from one side of a room to the other. Use what you know about force and motion to describe how and why the ball is moving.
- How does temperature affect the size of an object? Why? Use a real-world example to show your thinking.

History/Social Science

- What characteristics do all civilizations share? In other words, what makes a civilization civilized? Consider ancient civilizations you know about, as well as modern-day civilizations.
- *Free speech* is one right that Americans are guaranteed under the U.S. Constitution. But this doesn't mean people can say whatever they want, whenever they want. Give two examples of free speech that *is* protected and two examples of free speech that *is not* protected.
- Use the census data table to write *two* questions about changes in the global population since 1980. Explain how each question is related to the data.
- Use *T* or *F* to show if you think each statement about world faiths is *true* or *false*. After each statement, explain what makes the statement true or false. If you're not sure, say so!

- Read the quotation excerpted from a letter from President Harry Truman to a journalist. Decide which statement below the excerpt is *best* supported by the content of the quotation. Explain the reasoning behind your choice.

Formative Assessment: Gauging Readiness During Instruction

Summary

Formative assessment (sometimes called *ongoing assessment*) is the ongoing process of taking regular and varied snapshots of students' learning during or after a lesson (or series of lessons) to inform next steps in instructional planning (Doubet & Hockett, 2015). Formative assessment can be formal or informal. Formal formative assessment usually involves more planning on the teacher's part, a set time and process for implementation, and formalized documentation of student thinking and skill. Informal formative assessment may involve less teacher preparation, be administered on the go (Tomlinson & Moon, 2013), and invite less formalized documentation.

Differentiation Connection

Formative assessment is the fuel for readiness-based differentiation. Through formative assessment, teachers can see what kind of impact their teaching is having on student learning. At its best, formative assessment captures and reveals the nuances of what students are and are not grasping. By studying the results of formative assessment, teachers are able to better detect patterns in student readiness and decide whether to differentiate a lesson or task in response. For example, a teacher may notice a single overall pattern in student responses. That pattern may align well with the teacher's existing instructional plan, or it might call for adjustments to upcoming lessons. The results may also reveal multiple patterns in student thinking and skill, some of which are significant enough to compel differentiation of content, process, and/or product for student readiness.

Design Guidelines

The process of designing formative assessments is much like designing pre-assessments. A key difference between formative assessment and pre-assessment is when in the instructional cycle the assessment is given and what it assumes that students have learned. Formative assessments are also usually limited in scope, focusing on gauging student learning after one or several lessons.

- 1. Decide at which points in the unit of study or series of lessons to formatively assess students.** Plan formative assessments by considering the points in a unit or lesson sequence when it is important and necessary to check if students are grasping key ideas and skills. At what points is it most critical to identify misconceptions? Where will students have had practice with skills that are building blocks for next steps? What ideas should be sticking before moving forward? Potentially, every lesson and task can generate evidence of student learning for formatively assessing students. Decide at what points formative assessment should be conducted more formally or intentionally, with analysis of individual students' responses.

- 2. Design formative assessment items that align with critical learning goals.** The best formative assessment items have certain characteristics; namely, they:
- are aligned with important learning goals (KUDs);
 - invite application and transfer (versus only memorization);
 - require responses that can be evaluated efficiently; and
 - reveal both what students are grasping and how well they are grasping it.

Frameworks like *Bloom's Revised Taxonomy* or the *Six Facets of Understanding* (Wiggins & McTighe, 1998) can be useful for generating ideas for prompts that represent various levels of cognition. Strategies such as those described later in this section can also be helpful in deciding how to frame formative assessment prompts or questions. Use a variety of formative assessment items and strategies over the course of a unit to enhance student engagement and offer different ways for students to show what they are learning.

- 3. Articulate desired and/or expected responses.** Be clear and specific about what correct responses might look or sound like, as well as what responses are predictable, given how students tend to make sense of and apply the ideas and skills being assessed. Consider, too, what implications the responses might have for instruction. In general, formative assessments that are narrowly focused on single correct answers aren't likely to provide information that can drive instruction, including differentiation for readiness.
- 4. Choose delivery, response, and documentation formats.** Like pre-assessment, formative assessment can be delivered orally or by reading or displaying prompts, alone or in combination with images and pictures, on paper, with physical materials/manipulatives, or via technology. Delivery can be whole group, small group, or individual. Students can respond by speaking, drawing, completing a task, performing, selecting from a set of choices, writing, or using cards, clickers, or other signals. The teacher can gather and document responses using sticky notes, audio-recording responses, taking pictures, or saving responses electronically.

Implementation Guidelines

- **When to formatively assess.** Administer formative assessment throughout a unit of study or across a series of lessons at the key points identified in advance, as well as at times that it seems important to check in with students to see if they are getting it. Frequent formative assessment checks keep assumptions at bay by confirming or challenging the teacher's thinking about what and how individual students are learning.
- **What to tell students.** Many formative assessment opportunities do not need to be announced or labeled as such. In general, it is advisable to make students feel comfortable about showing what they know, with advance preparation or notice for more formalized whole group or individual formative assessments. Use phrases like check-up or the name of the specific strategy or tool (e.g., exit ticket) to acclimate students to the act and purpose of formative assessment without using the term itself.

- **Analyzing the results.** Review student responses and note the general themes and patterns for the class as a whole. Questions to consider include the following:
 - ❑ What do all, many, some, or few students seem to grasp well, or better than expected?
 - ❑ What do all, many, some, or few students seem to not yet understand, know, or be able to do?
 - ❑ What do groups of or individual students' responses reveal about their misconceptions or gaps?
 - ❑ What do the misconceptions or gaps imply or suggest that these students need, instructionally? How can the misconception(s) be corrected and the gap(s) closed?
- **Planning from the results.** When formative assessment points to the need for readiness differentiation, consider using strategies such as those described in the following sections.

Formative Assessment Strategy Examples

Frayer Models

The traditional Frayer Model (sometimes called *Frayer Diagram*) is four-quadrant table centered on a term, concept, idea, or topic for which students construct a definition, characteristics, or attributes, and examples and non-examples. Responses in the non-examples category should be things that could be easily confused as examples (versus simply anything that isn't an example). The Frayer Model can also be used as a pre-assessment strategy and as a whole-group instructional activity. Example topics include *Functions, Proportionality, Adaptation, System, Energy, Civilization, Revolution, Irony, and Figurative Language*. The categories in each section can be modified to fit the focus.

Concept: _____	
Definition	Characteristics
Examples	Non-Examples

Entry/Exit Tickets

An entry or exit ticket is a response to one to three prompts or questions that students complete at the beginning or at the end of a lesson. Students can write or draw responses on index cards, sticky notes, or full-sized paper, or they can share or record their answers orally.

Quick Quizzes/Check-Ups

In secondary classrooms, a quiz typically refers to a series of assessment items (prompts, questions) that students respond to on-demand in a single sitting. The terms *quiz*, *quick quiz*, or *check-up* can be used to refer to less formal formative assessment opportunities with fewer items in which students respond orally, in writing, or through a task.

White Boards

White boards can be used anytime during a whole-class or small-group lesson—or in individual conferences—to assess students using one or more prompts, without having to collect paper-based responses. They work best when each student has his/her own board and with prompts that require depictions, representations, and/or simple written responses. Students can hold up their boards facing the teacher (or peers) when finished or keep their boards flat for the teacher (or peers) to see and take note of. The teacher can document responses or respond in the moment with feedback or next steps.

Sticky Notes

There are two general kinds of sticky notes that can be used in formative assessment: those that the *teacher* generates and those that *students* generate.

1. **Teachers** can use sticky notes to make observations during whole-class instruction, group work, or as students work individually. These can be notes that track student progress with a skill, where a student is having “a-ha” moments or getting stuck, a strategy or way of learning that seems helpful (or unhelpful) for a student, or peer with whom the student works well (or does not work well).
2. **Students** can use sticky notes in response to a question, prompt, or task, such as, “What big question is the author of this story posing to the reader at this point?” or “Give your best piece of advice for solving proofs successfully,” or “The organization of human body systems is similar to....” Students put their sticky notes in a designated place (e.g., on the door as they leave, on the whiteboard, etc.) for the teacher and/or peers to analyze.

Stoplight Method

This strategy also uses sticky notes. The teacher posts a paper stoplight (or displays a virtual stoplight on screen/interactive whiteboard). The red, yellow, and green signals represent different signals. Two versions follow:

Version 1

Students pause before the end of an ongoing task, write their name on a sticky note, and stick their name on the color that represents where they are in a process. The teacher checks in with students whose names are on the green light before proceeding to red and then yellow students.

- *Red:* I have stopped and need to confer with the teacher.
- *Yellow:* I have a question but can keep working.
- *Green:* I am ready to go on to the next step.

An example of the stoplight method can be found on the Teaching Channel website ([here](#)).

Version 2

The teacher poses a question to which students respond on a sticky note. Students place it on the color that best fits how sure they are about the accuracy of their response.

- *Red:* I am not at all sure of my answer.
- *Yellow:* My answer might be right, but I am not 100% sure.
- *Green:* I am 100% sure my answer is correct.

The teacher reviews the responses and plans for follow-up with the class and/or individual or groups of students.

Concept Sort

A concept sort is a simpler version of concept attainment (Bruner, 1956) that can be used to assess students' understanding of a concept or idea. Students have received instruction around a concept (e.g., First Amendment, algebraic functions) and are asked to physically or virtually sort examples and non-examples into YES and NO categories. For example, the teacher can mix examples of protected speech and non-protected speech or accurately-factored functions and inaccurately-factored functions. The teacher can observe students as they sort and prompt students to explain their thinking as they sort or after they complete the sort.

Classroom Response Systems and Online Tools

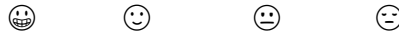
A variety of student response systems (SRS) and online platforms that use clickers, tablets, or other devices can be used to formatively—and interactively—assess students. Web-based applications that do not require purchasing specialized systems include:

- PollEverywhere (<http://www.polleverywhere.com>)
- GoFormative (<http://goformative.com>)
- Padlet (<http://www.padlet.com>)
- Plickers (<http://www.plickers.com>)
- Educreations (<http://www.educreations.com>).

Face Time

Face time is a simple, visually-appealing way for students to self-assess or express how they are feeling about a topic, concept, or skill. While a student's self-report may or may not be a true reflection of his/her readiness, the idea not to interpret the student's choice as *the* indicator of readiness. Rather, it's to let the student's choice and explanation of that choice provide clues about readiness that can focus further assessment and instruction. Example follows:

Circle the face that shows how you are feeling about graphing equations.



Explain your choice:

Hand Signals

Hand signals can be an efficient way to assess students on the fly. This strategy works best when students are explicitly taught what the signals do and do not mean and when the teacher has built a classroom culture where students feel safe expressing their comfort level. Potential signals include:

- **Thumb Check:** Thumbs up (I get it!), thumbs sideways (I am not sure), thumbs down (I do not get it.)
- **Windshield Check** (Tomlinson & Moon, 2013): Hand up if your windshield is *clear, buggy, covered with mud*.
- **Weather Report:** Show with your finger in the air if you are experiencing sunny skies, a few clouds, fog and smog.

Formative Assessment Item Examples

These are content-specific examples of prompts, questions, or tasks that could be used to formatively assess students. Items can be delivered on their own, alongside other items, and/or via one the formative assessment strategies described above. Although these examples use particular topics, the spirit of each one can be transferred to multiple topics across subjects.

Can and Cannot

We have been learning about instruments that are used to study deep space.

- What can these instruments do and show?
- What can't these instruments do and show?
- What is the one thing we know now (through these instruments) that we did not know before?

Important Things*

*derived from *The Important Book* by Margaret Wise Brown, which can be used to introduce this prompt.

Some important things about [e.g., using semi-colons, transfer of energy in an ecosystem, the Great Depression] is _____ and _____. But the MOST important thing about it/them is....

That Reminds Me....

The way that [cells function] reminds me of how _____ [function]. It reminds me of this because....

True or False?

Is this equation true or false?

$$24x + 18y = 6(4x + 3y)$$

It is _____.

How do you know?

1 'n' 1

One thing I **learned** about Electoral College is

One thing I'm still **wondering** about the Electoral College is....

Lunch Time

At lunch, your friend says, "Those storm clouds outside are huge. They must be holding a lot of water!" What would you say to her, based on what you learned today?

Show and Tell

Show (draw) and tell (explain) the difference between a primary source and a secondary source using an event from your own life. It could be a recent event (going to the movies) or an event from the past (being born).

Do's and Don'ts

What are some do's and don'ts of conducting online searches? Give at least three of each and include examples so that someone receiving your advice finds you credible.

General Strategies for Differentiating for Student Readiness

This table summarizes some of the ways that teachers can adjust content, process, and product to differentiate for student readiness.

	Strategy	Example Teacher Talk
Content <i>The information, ideas, and skills that students will take in or grapple with in order to reach the learning goals.</i>	<ul style="list-style-type: none">• Providing texts, resources, or websites at different reading levels, levels of complexity, or levels of abstraction around the same concept, theme, or topic• Providing audio/visual supports for taking in text or other information• Posing situations, problems, or dilemmas that vary by complexity, skill mastery, or background knowledge required• Pairing key academic vocabulary with native-language equivalents or visual cues• Modeling or demonstrating• Working with content/skills that are pre-requisite to targeted content/skills• Varying the time allotted to take in/learn content	<ul style="list-style-type: none">• <i>Each of you will read one of three articles about climate change. One is by an NOAA scientist, one is one of our state senators, and one is from Newsela.com.</i>• <i>When you come to words, sentences, or sections that are hard to understand, feel free to use Rewordify.com.</i>• <i>Go to the bookmarked video to hear the poem read aloud again—this time, by the author. Pay attention to what you see or hear now that you did not before.</i>• <i>You will choose one of two court cases: one happened in a school district, the other happened in a workplace.</i>• <i>The academic vocabulary for this unit is posted on the wall above the board. I have included the Spanish-language equivalents, if those help you. Let us work in partners to come up with ideas for the best emoji symbols to attach to each one.</i>

	Strategy	Example Teacher Talk
		<ul style="list-style-type: none"> • <i>We will not all be doing the same things with probability at the same time or in the same ways, but everyone will be using the same skills and working toward the carnival games project.</i> • <i>Remember that the model for how your instruments should be set up for the lab is at the back table.</i> • <i>Before starting our online research, let us go over what makes a source or site credible.</i> • <i>Come to this side of the room if you think you need a review of adding and subtracting positive and negative integers. If you feel like you have a solid grasp and would be willing to show someone else, come on the other side.</i> • <i>You will have until the end of the quarter to label this map from memory with 90% accuracy. You can attempt it as many times as you would like.</i>
Process <i>The activities through which students take in and make sense of key ideas in the content using essential knowledge and skills.</i>	<ul style="list-style-type: none"> • Giving tiered questions/organizers (same idea, different phrasing or emphasis, more/less support) • Increasing/decreasing the facets of a task • Increasing/decreasing the degree of scaffolding for a task • Working more/less like an expert, practitioner, or professional • Using icons and visuals to support taking in and processing information • Providing models of work at different levels of complexity • Asking students to see content through a certain focus or lens 	<ul style="list-style-type: none"> • <i>Partner 1, watch the video and use the Venn diagram find similarities and difference between Hamilton's and Jefferson's positions. Partner 2, watch and use the Venn for similarities and differences in the two men's motives.</i> • <i>Scan the QR code on your desk to go to the Padlet I've created for this task. There are three different versions with different steps, depending on what you're working on. I will come around to make sure you scanned the right one.</i> • <i>Since you four have some experience with public speaking, I want you to first watch this short video on how to speak like a professional. Try some of the techniques as you practice your speech.</i> • <i>As you read the textbook chapter, use a star for key points, an exclamation point for ideas that surprise you, and a question mark for ideas that confuse or puzzle you.</i> • <i>There are more peer editing checklists in the folders by the whiteboard.</i> • <i>In this article, identify the problem that is described, the cause of the problem, and the possible solution to the problem. There may be multiple for each, so don't limit yourself to just one.</i>

	Strategy	Example Teacher Talk
		<ul style="list-style-type: none"> • <i>Let us practice graphing coordinates in all four quadrants before graphing these equations.</i> • <i>Your discussion duty card shows what your role is during discussion and gives you some sound bites as examples of things you might say in your role.</i> • <i>I am going to give you several student models of argument-based essays so that you can mimic some of the qualities and techniques.</i> • <i>Use your assigned looking lens (e.g., philosopher, lawyer, detective, director) to focus your reading of the text.</i>
Product <i>How students demonstrate and extend what they know, understand, and can do as a result of a unit or series of lessons.</i>	<ul style="list-style-type: none"> • Varying the audience for the product (from closer to student experience/more familiar to further from student experience/less familiar) • Varying the demands or sophistication of the product • Having varied arrangements for working on a product • Giving more or fewer check-in dates and chunks in progress of completing task • Providing more or fewer givens or knowns (models/examples, resources, guidelines) 	<ul style="list-style-type: none"> • <i>I will be helping you choose an audience for your product. Everyone needs a real audience, whether it is your peers in this class, our school board, or visitors to one of the science centers in our community.</i> • <i>Here is the list of traits we decided a strong product should have. On your own, come up with one other trait you want your product to have. It can be something that you feel like you have mastered or do well, or something more aspirational!</i> • <i>In five minutes, I will be meeting with anyone who is interested in learning about some features in PowerPoint that you can use to enhance your presentation.</i> • <i>For those of you in this group, I want you to try to mimic the pattern in this personal narrative we read as you write your own narrative.</i> • <i>We will work on our projects after each test. You can also sign up to work on it during lunch or after school.</i> • <i>Ally, Jamal, and Tina, as you write your arguments, try to think about what someone who disagrees with you might say. Use the phrase "Some people might say____, but I say ____" to help.</i> • <i>I will be conferencing with each of you to make a schedule for completing your historical inquiries. We can decide together how many times you think you want me to check in with you.</i>

Readiness Strategy: Graphic Organizers

Strategy Summary

Graphic organizers are visual displays that show how concepts, ideas, or facts are connected or related. They are useful for helping students organize their thinking as they gather or make sense of information. Widely-used examples include t-charts, Venn Diagrams, Frayer diagrams, concept maps and webs, K-W-L charts, and fishbone models. Graphic organizers can be used in whole-class instruction, small-group instruction, group or partner activities, or individual work.

Differentiation Connection

Graphic organizers are scaffolds for student thinking and processing. By providing ways to visualize and classify information, graphic organizers help students see connections, explore relationships, and clarify misconceptions. In this way, the use of a graphic organizer—even if it's the same organizer with all students—might be viewed as a form of differentiation. Graphic organizers can also be tiered by altering the nature or number of facets on the organizer, making points of comparison more or less complex, or changing the content focus (Doubet & Hockett, 2017).

Differentiation of Content	Differentiation of Process	Differentiation of Content and Process
<ul style="list-style-type: none">• Students use the same graphic organizer but access resources or information that varies by reading level, complexity, or abstraction.• Students use the same graphic organizer but the question or focus driving the organizer is differentiated for readiness (e.g., more and less complex topics).	<ul style="list-style-type: none">• Students use different graphic organizers wherein the process represented (e.g., compare/contrast, problem/solution, cause/effect, sequencing) is adjusted to be more or less complex.• Students use different graphic organizers that emphasize different processes around similar content (e.g., comparing and contrasting historical events vs. sequencing historical events).	<ul style="list-style-type: none">• Students access content differentiated for readiness using graphic organizers that are tiered for readiness.

Design Guidelines

1. Choose or design the graphic organizer that matches the content and learning goals. The organizer should aid comprehension and make processing information more efficient than would be possible without the organizer.

2. Frame the organizer with a guiding question or focus. Be mindful of the purpose of using the organizer (e.g., using a Venn diagram to compare and contrast animal structures and their functions).
3. Remember that completing a graphic organizer is a means to an end, not an end itself. What will students do with the information? How or to what will they transfer it? This might include or involve asking students to draw conclusions, post questions, make predictions, or use their learning in a specific task.

Implementation Guidelines

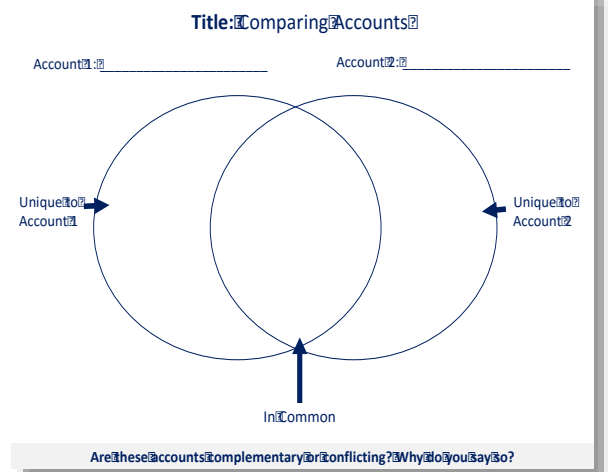
- ☑ Model *how* to use the organizer. In the process, emphasize the content and thinking skills being used (versus the kind of organizer being used).
- ☑ If students use graphic organizers to take in differentiated content or use different organizers that have been tiered for readiness, make sure they have a chance to come together (in groups or as a whole class) around a common question (e.g., How were the revolutions we have studied similar and different?).

Graphic Organizer Examples

Compare/Contrast

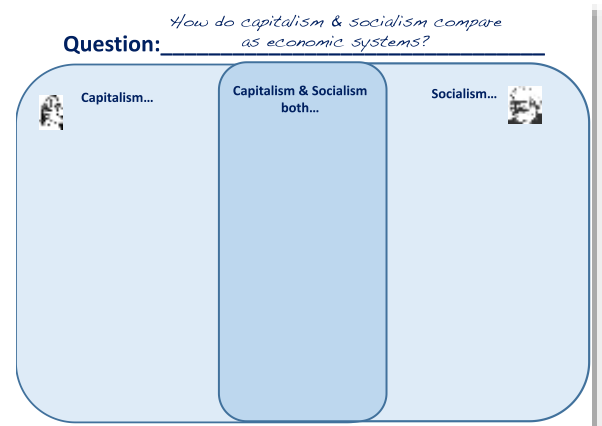
Subject: ELA, Science, History/Social Science

A Venn diagram can help students visualize what is unique and common to two or more things. This example is applicable to comparing two historical, scientific, or literary accounts. Students can work with or from teacher model, with teacher support, with a partner, or independently to identify similarities and differences (e.g., between a fictional and historical account, between two firsthand accounts of an event). The summarizing question can be addressed via discussion or in writing.



Subject: Economics

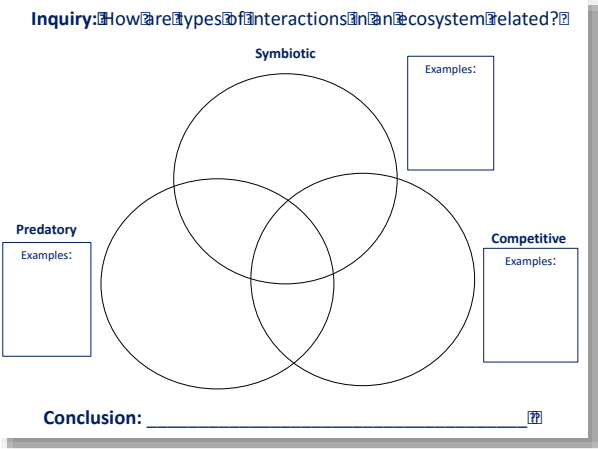
This Venn diagram is designed with shapes that allow more room for drawing or writing (by teacher or students). Shading the overlapping boxes visually reinforces to students that the ideas therein are shared by the two systems (people, concepts, events, etc.) being compared.



Subject: Science

A three-way Venn diagram, though more complex, invites students to consider the interconnected relationship between more than two things. This science example also includes a place to list examples of each interaction type. Other possible topics for three-way Venn diagrams include fractions, decimals, and percentages; historical figures; religions; philosophies; or different news articles.

Charts like these can be used in whole-class instruction, small-group tasks, and jigsaw activities. Other topics for comparison include biomes, types of energy, historical figures, and literary genre. Completing the organizer is not the goal; it is a stepping stone to drawing conclusions and transferring the information to a new task.



Subject: Literature

Literary Elements	Text 1	Text 2	Text 3	Text 4
Setting Where & when the story takes place				
Traits of Protagonist Personality, Motives, Hopes/Desires				
Conflict(s) Clash(es) that propel the plot and motivate action				
Resolution How the conflict is resolved				
Theme(s) The overarching message, abstract idea, or universal truth that emerges in the text				

Subject: Geometry

	Rotations	Reflections	Translations
Angles			
Circles			
Perpendicular Lines			
Parallel Lines			
Line Segments			

These two organizers use a strategy called *The Matrix* (as described in Doubet & Hockett, 2015). Things for comparison are arranged in the same order across the top and along the left side. Where the item meets with itself, students identify something that is true for that thing but not the other three things. Where two items meet, students identify something that is true for those items only. Consider teaching the spatial orientation by starting with a blank organizer and adding each item and the corresponding information (with student input) to model.

Subject: Poetry

All of these Romantic Poets...	Poetry of John Keats	Poetry of Percy Shelley	Poetry of William Wordsworth	Poetry of (Your Choice)
Poetry of John Keats	Unique to this poet	Shared trait	Shared trait	Shared trait
Poetry of Percy Shelley	Shared trait	Unique to this poet	Shared trait	Shared trait
Poetry of William Wordsworth	Shared trait	Shared trait	Unique to this poet	Shared trait
Poetry of (Your Choice)	Shared trait	Shared trait	Shared trait	Unique to this poet

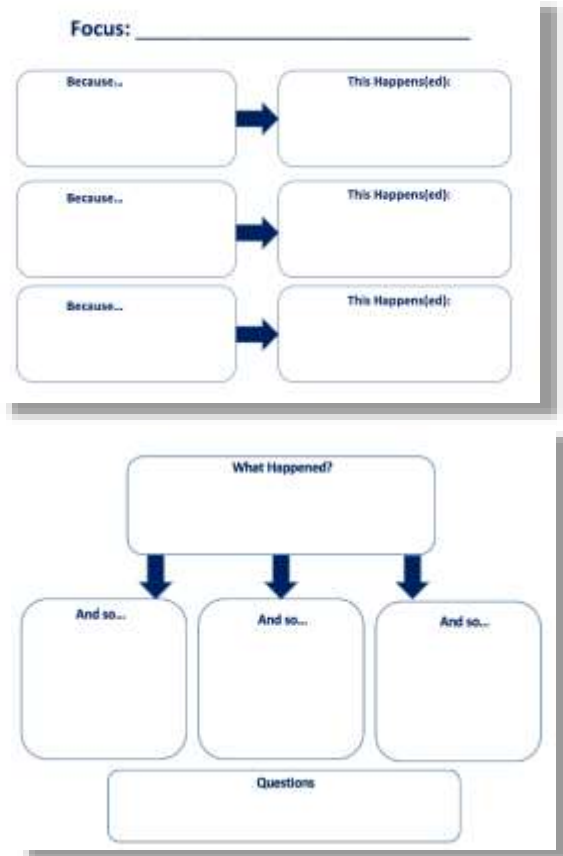
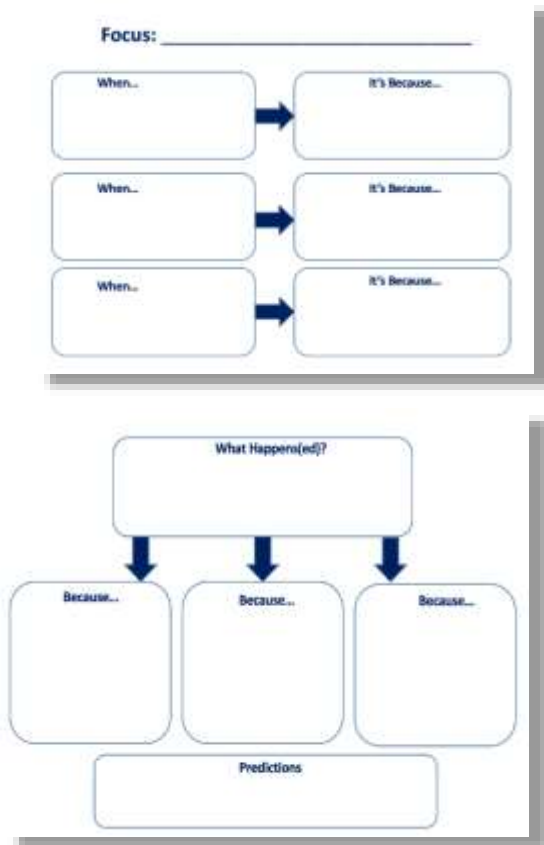
Subject: World History

Question: How were these revolutions alike & different?

They all...	American	French	Russian
American	Unique to this Revolution	Shared trait	Shared trait
French	Shared trait	Unique to this Revolution	Shared trait
Russian	Shared trait	Shared trait	Unique to this Revolution

Cause/Effect

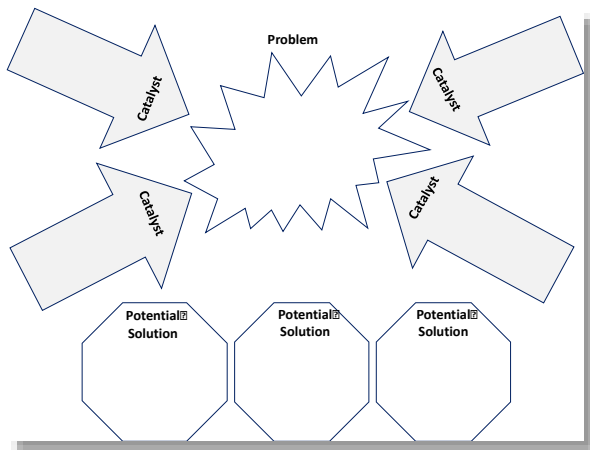
Organizers like these can be used to teach the concepts of cause and effect in the context of events in a fictional or biographical story, mathematical principles, a scientific process or phenomenon, or a historical/contemporary event. The examples below are arranged from less complex to more complex. Teachers may choose to substitute the terms *If...Then...* or *Cause...Effect...*



Problem/Solution

Subject: Various

A visually-appealing approach, uses for this problem-solution organizer include analyzing informational text, planning content for an argument essay, designing an engineering solution, and discussing challenges in a classroom, school, or community.



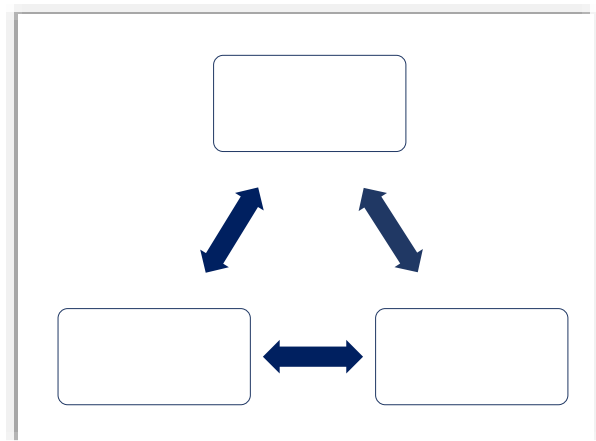
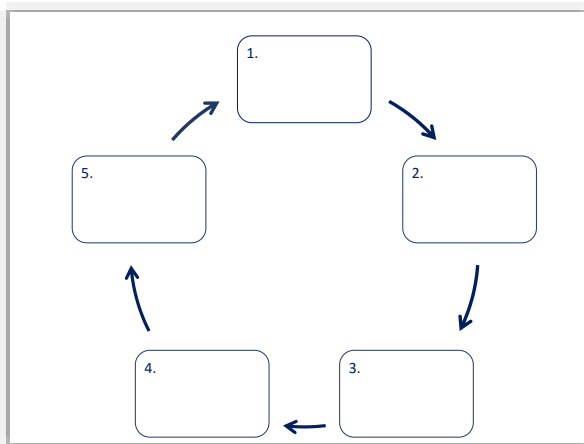
Subject: Various

This organizer can be used to support opinion writing, story discussion, analysis of an informational text, article, or speech, science- or technology-related problem, or current issue.

PROBLEM What's the Problem?	REASONING. How Do We Know? Why Do We Say So?
SOLUTION What's the Solution?	REASONING. Why Do We Think This Solves the Problem?

Systems & Cycles

Organizers for depicting or analyzing a cycle or system are ideal for topics and concepts such as earth systems, food chains, branches of government, and the writing/research process.



Readiness Strategy: Tiered Tasks

Strategy Summary

Tiered tasks are activities that are aligned with the same learning goals but vary by level of complexity, abstractness, open-endedness, or degree of independence (Tomlinson, 2014). They can include tiered questions, prompts, organizers, or complex tasks. Tiered tasks give all students access to important learning goals, honor all students' need for challenging and engaging tasks, and help equalize the time it takes students to complete tasks.

Differentiation Connection

Tasks that are tiered are differentiated for student *readiness* and can involve adjustments to content, process, or product. Tiered tasks can be designed around general learning progressions in a content area or skill, and/or around recent pre- or formative assessment results that are closely connected to learning goals. There is no set or ideal number of tiers; there may be two or there may be five, depending on patterns in student readiness.

Design Guidelines

Creating tiered tasks is a higher-prep strategy that involves a multi-step process. In effect, the teacher uses the same ingredients to make different meals that are both nutritious (help students grow and learn) and delicious (appeal to and engage students).

1. **Begin with a clear sense of the learning goals.** Identify the concepts, principles, insights, knowledge, and skills that should hold the tiered activities together.
2. **Consider the range of student readiness.** This should be informed by recent assessment evidence—as well as other characteristics like reading/writing skills, language development, strengths, learning preferences, etc. Standards and learning progressions can also provide concrete guidance for where students should be, ideally.
3. **Design the most advanced activity first.** It should be interesting, high-level, focused on the learning goals, and involve a stretch that is just beyond what you think students might be able to do with a bit of support. The activity could be one that students complete with a partner or in a group or one that they work on independently.
4. **Replicate and tweak the activity.** Create a version of the activity that is aligned with the same learning goals and closely approximates it. Consider ways to adjust the materials students use or access, how they process information, how they express what they are learning, and how close the experience is to a familiar experience. Match the activity to student readiness. Develop more activities as needed. Tomlinson's Equalizer (2014) is a useful visual and thinking tool for adjusting tasks.

- 5. Do a respect check.** Doubet & Hockett (2017) suggest evaluating tiered activities (and all differentiated tasks) with the key criteria to make sure they are respectfully differentiated (Tomlinson, 2014). The activities should:

- ☐ be aligned with the same learning goals and with one another;
- ☐ be equally interesting, appealing, and engaging from the students' perspectives;
- ☐ ask all students to work at high levels of thought;
- ☐ mimic what people and professionals in the real world do or how they think;
- ☐ represent a wise use of students' time; and
- ☐ be comparable in terms of workload and time required for completion.

Remember: The differences between various tiered tasks are primarily *qualitative*, not quantitative. Tiering is *not* simply giving some students more and other students less (e.g., five problems to solve versus one problem to solve).

- 6. Plan for degree of independence.** Plan tiered tasks with the goal of *all* students working at some degree of independence. This means that directions (oral or written) are clear, supported by text, visuals, models, or audio recordings as appropriate. Avoid designing a task that requires a student/group of students to work with the teacher for the duration of the task. Rather, design all tasks so that students can complete components without needing the teacher. Also, consider ways to make sure that all students have a chance to receive support and encouragement from the teacher.
- 7. Decide how students will come together.** Honor all tasks and/or provide closure by planning an opportunity for students who completed different tasks to come together. This might involve sharing and comparing their work or completing a new task.

Implementation Guidelines

- ☒ **Using tiered tasks in a lesson.** Think of the implementation of tiered activities like going down a ski hill. Skiers begin at the top of the hill and start to go down it together. They diverge by path and then meet up again at the bottom of the hill. In the same way, tiered activities should have a common launch before students are assigned and work on various tasks. Bring students back together to share ideas (e.g., around a common question or purpose), both to honor what each student was engaged in and bring closure to the lesson.
- ☒ **Student choice and tiered tasks.** As a *general* rule, tiered tasks—and tasks that are differentiated for student readiness—should be assigned by the teacher rather than left to student choice. The rationale is simple; differentiation for readiness is aimed at helping students grow (in skill, in understanding) from where they are. What it takes for one student to grow is different from what it takes for another student to grow. But, that growth should not be left to chance—which is what giving students a choice between tasks differentiated for readiness can do. There *may* be times when the teacher gives a choice between or among tiered tasks in order to see what students will choose. In those cases, the teacher should make sure that no student ends up with a task that is below his/her readiness level.

Tiered Tasks Examples

Topic: Math Reasoning (Finding Mistakes)

Learning Goals (KUDs)

Know	Understand	Do
<ul style="list-style-type: none"> Terms and procedures for specific problem types Kinds of mathematical errors (e.g., computational, careless, or conceptual) 	<ul style="list-style-type: none"> Solving problems means making sense of problems. Mathematical accuracy is shaped by the problem-solvers process. 	<ul style="list-style-type: none"> Make sense of problems and persevere in solving them. Construct viable arguments and critique the reasoning of others. Discuss and articulate mathematical ideas.

Context: The tasks can be used with math content that requires problem solving. They can also be applied to finding errors in other kinds of examples and student work in other content areas. Tasks can be presented in small-group instruction or for students to complete with a partner or independently. It is not necessary to use all three tasks. The content of each task can be differentiated by problem type or level. The word mistake can be substituted for error, if desired.

Less Scaffolding ← ————— → More Scaffolding

Task 1	Task 2	Task 3
<p>The problems below are another student's work. It is your job to analyze the work to decide if there are any errors.</p> <ul style="list-style-type: none"> Find and correct the errors. Annotate those problems to show how you know if there are or are not errors. Finally, generate two to four questions that would help the student—or someone else—detect or prevent similar errors. 	<p>The problems below are another student's work. Between the problems, there are [four] errors total.</p> <ul style="list-style-type: none"> Find and correct the errors. Annotate your work to show how you know each error is an error. Then, come up with one to two questions that would help the student—or someone else—detect the errors. 	<p>The problems below are another student's work. Each one has two mistakes.</p> <ul style="list-style-type: none"> Use the analysis questions in the box to help you find and fix the mistakes. Be ready to explain how you knew the error when you saw it, including which analysis questions were most helpful.

Come together: Students work in mixed-problem set pairs or trios to come with a list of top three errors not to make when solving problems in the target concept/skill.

Topic: Processing a Scientific Investigation

Learning Goals (KUDs)

Know

- A scientific claim is a testable statement or conclusion that answers an initial question.

Understand

- The results of scientific investigations can be used to prevent and correct scientific misconceptions.

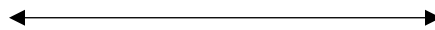
Do

- Support (or refute) a scientific claim based on results of an investigation.

Additional learning goals are specific to the content and skills in the investigation itself.

Context: Students are given one of two tasks following a scientific investigation (e.g., lab, experiment, demonstration) to assess their understanding of what the investigation shows. Task assignment is based on students' grasp of the scientific concepts under study and their skill in completing the investigation.

More open, more unknowns



More guided, more knowns

Task 1

Generate:

- two to three misconceptions that today's investigation could help prevent or correct. Use evidence from the lab to explain how and why it could combat or correct the misconception.
- two to three misconceptions that someone could walk away with from this lab, if they miss or do a part incorrectly or imprecisely. Explain how and why the misconception could happen using evidence from the lab.

Task 2

Analyze the list of [teacher-provided] five claims.

- Decide which ones are supported by the results of this lab, and which ones are not.
- Use yes and no to label each one.
- Justify your responses evidence from this lab.
- Add and explain one more conclusion that the results of this lab support.

Come together: Lab partnerships with different tasks come together as quads—or swap partners—to compare misconceptions and their thinking behind each one. Students give one another feedback and check for scientific accuracy and understanding. Then, the quad/duo comes up with one to three ideas for improving the lab (to prevent misconceptions).

Topic: Evaluating a Speaker's Argument

Learning Goals (KUDs)

Know

- Definitions of *argument*, *position*, *claim*, *evidence*, *reasoning*
- Modes of persuasion (ethos, pathos, logos)

Understand

- Close listeners evaluate a speaker's argument for how sound the reasoning is and whether the speaker's

Do

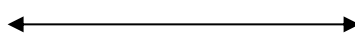
- Evaluate a speaker's claims, evidence, reasoning, and techniques

<ul style="list-style-type: none"> Examples of persuasive techniques 	<u>evidence</u> is relevant and sufficient.	
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Context: This activity is designed for use after other direct instruction on evaluating a speaker's argument. To launch, students do a quick write in response to the question, "Does social media make people less social?"* They share their thoughts with two to three peers before a whole class sharing of perspectives. Teacher polls class (aloud or using a site like PollEverywhere.com) to show the range or level of agreement. Students are then paired with a similar-readiness peer to watch and process Alison Graham's TedTalk "How Social Media Makes Us Unsocial."* After each viewing, partners compare and discuss their thinking before brief whole-class discussion wherein the teacher makes sure to use and reinforce the formal, academic vocabulary with all students.

**Other questions and content can be substituted.*

More Expert, Further from Self



More Novice, Closer to Self

TASK CARD 1: IN THE SPEAKER'S SHOES

Viewing 1: As you watch, outline the speaker's argument. Include her position, key claim(s), evidence, and reasoning. Try to make the structure of the argument clear.

Viewing 2: This time, try to identify the counterclaims that the speaker anticipates and/or addresses. Sometimes, it is more implied than explicit, so you will have to infer and think about her points from a different angle!

Viewing 3: For this last viewing, identify the modes of persuasion (and corresponding persuasive techniques) that the speaker uses. How intentional do these seem to be, and how can you tell?

TASK CARD 2: FEELINGS FOCUS

Viewing 1: As you watch, listen for how the speaker answers the question we just discussed. What does she believe and why? How does her talk make you feel—about yourself, about others, etc.?

Viewing 2: This time, listen for what you feel like are the speaker's strongest and weakest points. What do and don't you find convincing or easy to agree with? Why?

Viewing 3: For this last viewing, identify one persuasive technique the speaker uses that you feel is effective. What mode of persuasion is it? How does it make the audience feel, and why?

Come together: Students form quads with another partnership to rate the content of the talk and the speaker's techniques on a class-generated scale. Students swap partners for a research task where they seek out evidence that would challenge or confirm the speaker's argument. **Optional:** Students use their quick writes, the TED Talk, and other resources to develop an argument essay or speech on the topic.

Topic: Perspective on a Historical (or Contemporary) Event

Learning Goals (KUDs)		
Know <ul style="list-style-type: none"> Terms: <i>firsthand account</i>, <i>secondhand account</i>, <i>primary source</i>, <i>secondary source</i>, <i>corroborate</i> 	Understand <ul style="list-style-type: none"> Different accounts of an event offer different (sometimes conflicting) <u>perspectives</u> on the event. Historians compare <u>sources</u> to <u>corroborate</u> facts, discern <u>perspective</u>, and figure out what happened. 	Do <ul style="list-style-type: none"> Compare firsthand and secondhand account of an events. OR Compare and contrast different media accounts of an event.

Context: These tiered tasks can be applied to reading, analyzing, and discussing various firsthand and secondhand accounts from primary/secondary sources—including accounts from current media—around any historical, contemporary, or current event. As an alternative to using all three tasks, teachers can use one (or two tasks) but different content (the accounts) for readiness *within* the task.

More Open, Complex ← ————— → **More Closed, Simple**

<p>Task 1</p> <p>Read. Read these two conflicting accounts of the event. Note their similarities and differences.</p> <p>Compare. Come up with a way to clearly show where/how the accounts agree and where/how they disagree.</p> <p>Decide. Why are these accounts so different from another? Which one is right? How could you find out?</p>	<p>Task 2</p> <p>Read. Read these two slightly different accounts of the event.</p> <p>Compare. Use the Venn Diagram to show how the accounts are similar and different. (<i>Hint: There are more similarities than differences.</i>)</p> <p>Decide. How big are the differences? Do the differences matter? Why or why not?</p>	<p>Task 3</p> <p>Read. Read the account of the event. Keep track of the five w's (who, what, where, etc.).</p> <p>Compare. Use the same/different T-chart to show how this account compares to the information we read in the textbook. <i>Remember that this is a primary source and your textbook is a secondary source.</i></p> <p>Decide. Are the accounts more alike than different, or more different than alike? How so?</p>
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Come together: Students come together in mixed-task pairs or trios to share *new* information/facts about the event and generate two to three questions they still have. Teacher provides an additional, common source/account to for whole-class study and corroboration.

Readiness Strategy: ThinkDots

Strategy Summary

Developed by Kay Brimijoin (as cited in Tomlinson, 2004), ThinkDots is a strategy for processing or discussing ideas, or experimenting with skills, in whole- or small-group format. The teacher designs six questions, prompts, or tasks related to a common topic, labeling each one with dots that correspond with the sides of a die.

Differentiation Connection

ThinkDots can be used in a differentiated *or* undifferentiated (but still interactive) way. If all students see and use the same questions around the same content or skills, with the roll of a die deciding which question is answered (and by whom), the teacher is not necessarily using ThinkDots to differentiate for readiness; however, ThinkDots can be used to differentiate for readiness in at least three ways:

Differentiation of Content	Differentiation of Process	Differentiation of Content and Process
Students use the same ThinkDots to process/discuss different information (e.g., stories, articles, media) that varies by complexity or reading level.	Students use different sets of ThinkDots, each with questions/prompts that have been tiered for readiness but aligned with common goals.	Students use different sets of ThinkDots with tiered questions/prompts to process/discuss different information.

Design Guidelines

1. Select the content, concept(s), text, or skills on which the ThinkDots will focus.
2. Use learning goals or standards to guide the design of ThinkDots prompts or use an existing framework to generate ideas (e.g., Bloom’s Revised Taxonomy, The Six Facets of Understanding, DeBono’s Six Thinking Hats). Icons or pictures can be used in place of or to scaffold text. All prompts should be goal-aligned and compel students to *think*.
3. If designing sets of *tiered* ThinkDots, make sure the prompts are aligned between the sets. For example, if there is a question about the problem in the story on one set of ThinkDots, then there should also be a question about the problem in the story on the other set.

Implementation Guidelines

- ☑ **How to Use ThinkDots.** There are several ways that ThinkDots can be presented and used.
 - **Project the 2 x 3 ThinkDots grid on a screen.** Use the prompts in a whole-class discussion with a different student coming up to roll a die (physically or virtually). Alternatively, put students in partners or small groups, give each group a die.

- **Copy the grid on 8 ½ x 11 paper.** Use in teacher-led or independent small groups. Students use a die to take turns answering questions or roll the die to divide the questions for individual think time before convening to discuss their responses.
- **Print ThinkDots cards on cardstock.** Cut into six hole-punched cards and secure on a loose leaf ring. Store each one in a plastic bag with a die. Use in teacher-led or independent groups. Students use a die to take turns answering questions or roll the die to divide the questions for individual think time before convening to discuss their responses.







- ☑ **When to Use ThinkDots.** ThinkDots can be used to hook students into a topic, structure whole- or small-group discussion or skill practice, or to review concepts.

ThinkDots Examples

Topic: Mathematical Problem-Solving







Context

These ThinkDots focus on engaging with Standards of Mathematical Practice 1, 2, 3, 4, and 7. They can be modeled and used in whole-class instruction, in small group instruction, or in partnerships or trios. Students can solve the problem before or as they engage with prompts or use the prompts to engage with a problem that they or someone else has solved (incorrectly or correctly). Problems can be differentiated for student readiness.

<p>Think above the strategy for solving this problem. How else could you use this same strategy (in math, in real life)?</p> 	<p>How sure are you that the solution to the problem is correct (e.g., very sure, kind of sure, not sure at all)? What would make you surer?</p> 	<p>Show and tell another way to solve this problem. Which way is better: your first way or your second way? Why?</p> 
<p>Does the solution make sense? Convince us that it does (or does not).</p> 	<p>Depict the problem and/or solution visually—with a model, diagram, table, picture, etc.</p> 	<p>How could you help someone else solve this problem without solving it for him/her? What hint or clue could you give? Why would this be helpful?</p> 

Context







Designed with the Six Facets of Understanding (Wiggins & McTighe, 1998), these ThinkDots are useful for small-group discussion/review of a concept that students have engaged with over a series of lessons. They are transferrable to many concepts, topics, and skills (scientific or otherwise) by replacing the underlined and bracketed content.

<p>Explanation</p> <p>Explain what <u>[global climate change]</u> is and give as many examples as you can.</p> 	<p>Interpretation</p> <p>How is <u>[global climate change]</u> connected to <u>[human activity]</u>? Says who? What's the evidence?</p> 	<p>Application</p> <p>Where could someone see or find <u>[global climate change]</u> at work? Be specific!</p> 
<p>Perspective</p> <p>What are different scientific points of view about <u>[global climate change]</u>?</p> 	<p>Empathy</p> <p>What are some common misconceptions that people have about <u>[global climate change]</u>? How could you correct them (nicely)?</p> 	<p>Self-Knowledge</p> <p>How has your understanding of <u>[global climate change]</u> changed since you started learning more about it? What do you know now that you didn't before?</p> 

Topic: Dissecting a Historical Document

Context







Based on questions from the National Archives and Records Administration, these ThinkDots can be used with a range of historical or contemporary documents in whole-class or small-group activities. As with the Historical Image example below, documents can vary by complexity to differentiate for readiness, or students can select images based on interest.

Meet the Document What type of document is this (e.g., letter, image, recording, article)? Does this document look similar or different from how this kind of document looks today? 	Producer and Audience Who wrote or produced this document? How do you know? Who is the document for—who is the audience? Why do you say so? 	All About What is this document about? What key ideas, facts, or information does it give? Look for events, people, feelings, and actions it describes or shows. 
Purpose Why this document was created? Can you tell? Think about who created it, when they created it, and who the audience was at the time. 	Context When and where was this document created? How can you tell? Is that different from the time and place the document shows or is about? 	Evidence What could this document be used as evidence for? What could it help prove or demonstrate (about an event, a person, a time period, a country, an idea or value)? 

Topic: Studying an Image

Context










These ThinkDots can be used with a photograph, painting, or drawing that depicts moments, people, and events from the past or present in a whole-class or small-group setting. Images can vary by complexity to differentiate for readiness, or students can select images based on interest.

People and Things Who and what is in the picture? What people, things, objects, buildings, and parts of nature do you see? What is clear? What's not so clear? 	Moments and Events What is happening in this picture? Is it a special event/moment or an ordinary event/moment ? Why do you say so? 	Time and Place Where was this picture taken? When was it taken (drawn, painted)? What time of year and day? How do you know? 
Before and After What might have happened before and after the moment in this image? What are the clues or hints? 	Same and Different What in the image seems the same as today—or, the same as where you live or what you know and have experienced? What seems different ? 	Questions and Wonderings What questions do you have about this image? What does this image make you wonder ? 

Topic: Analyzing an Argument

Context







These sets of ThinkDots are designed for analysis of a written or oral argument (e.g., a news editorial, a campaign speech). They are tiered for readiness, with Set 1 being more accessible in terms of language and focus, and Set 2 being more advanced. Teachers can use the same set with all students (in whole-class or small-group/partner discussion) or give different groups different questions. Content (what students listen to, watch, or read) also can be differentiated for interest or readiness.







Set 1		
Credibility What is the author/speaker's job or role? It is okay to do a search! Does his/her job or role make sense with the topic? Why or why not? 	Position What does the author/speaker believe about the issue or topic? What is his/her bottom line? How can you tell? 	Reasons What reasons does the author/speaker use to support what he/she believes? Do these reasons make sense to you? Why or why not? 
Purpose What does the author/speaker hope you (the audience) will think or do? Why do you say so? 	Persuasiveness Do you agree or disagree with the author/speaker? Explain why or why not. How does the author/speaker try to persuade you? What strategies or techniques does he/she use? 	Evidence What evidence does the author/speaker give to support his/her points? Are you convinced by it? Why or why not? 
Set 2		
Credibility How credible is the author/speaker? Why do you say so? How does his/her credibility influence the argument being made? Does it make the argument stronger or weaker? 	Position What is the author's/speaker's position on the issue? Identify his/her key claim. Go beyond the surface of the issue to capture to nuances. 	Reasons How logical are the author's/speaker's reasons? What flaws in thinking do you detect? (Correct the flaws, if possible.) 
Purpose What are the author's/speaker's motives? Respond in terms of the intended audience of this text/speech AND in the bigger picture? 	Persuasiveness How persuasive is the author's/speaker's argument? What appeals, techniques, and strategies does he/she use? Which ones are the most effective, even if they don't persuade you? 	Evidence What kind of evidence does the author/speaker give to support the claim(s)? Is the evidence <i>credible (believable)</i> , <i>relevant (connected to the claims)</i> , and sufficient (enough to support the claims)? 

Topic: Poetry Analysis

Context

These ThinkDots are tiered for readiness, with Set 1 being more advanced than Set 2. Teachers can use the same set with all students (in whole-class or small-group discussion) or give different groups different questions. Poems can be differentiated by interest or readiness as well. In any case, the questions assume students will engage in multiple readings of a poem (e.g., independently, with a partner, read aloud by teacher or recorded actor).

Set 1		
Who is talking in this poem? Who is telling about the experience? How do you know? 	<ul style="list-style-type: none">• WHAT happens in this poem?• WHERE does it happen?• WHEN does it happen? (What time of year?)• WHY & HOW does it happen? Can you tell? 	What do you see, understand, or believe more or better after reading this poem? Why do you say so? 
What do these phrases in the poem have in common? [Teacher inserts] 	Which words or sounds in the poem are used over and over? Why? Is it on purpose or on accident? 	Which of the five senses is the strongest in the poem: touch, taste, smell, sound, or sight? Which one does the poet do the best job with? 

Set 2		
How many voices do you hear in this poem? If there are different voice, where and how do they change? 	What story or experience is being shared in the poem? Explain using the five Ws —who, what, where, when, why, and how. 	What does the poet hope that readers walk away with or get from reading this poem? What is her/her central message? 
What comparisons do you see in the poem? Why does the poet make these comparisons? 	Where do you see repeating in the poem? (Think about sounds, words, images in your head, ideas....) What repeats—and why? 	Often, the most powerful writing appeals to all five senses. With that in mind, what line (or word) in the poem is the most powerful? What makes it powerful? 

Post-Analysis: All students sketch a picture of what they see in their mind's eye when they read/hear the poem. Students compare drawings with peers in multiple brief exchanges (e.g., standing up, walking around the room, doing gallery walk).

Readiness Strategy: Role Cards

Looking/Listening Lenses & Discussion Duties (Doubet & Hockett, 2017)

Strategy Summary

Role cards give students a specific job or responsibility for reading a text, completing a task, or participating in a group. The teacher can assign each student a role or let students choose, depending on the lesson goals and purpose. Two kinds of role cards are *looking lenses* and *discussion duties*, each of which can be used in either whole-class or small-group activities. Looking lenses can be used to read and discuss fiction or non-fiction text or to watch and listen to a live speaker or video content. Discussion duties are aimed at teaching students how to participate in a group dialogue. (See Profiler Text-Analysis Jobs in the Learning Profile: Multiple Intelligences section of this handbook for another example of Role Cards.)

Differentiation Connection







Both looking lenses and discussion duties can be used to build students' skills in reading, processing, and/or discussing content. Note that each set of role cards uses role names that are student friendly and imply that the role is substantive and important.

Differentiation of Content	Differentiation of Process	Differentiation of Content and Process
<ul style="list-style-type: none">Students use looking lenses or discussion duties in small groups to process and/or discuss texts, videos, ideas, etc. that differ by reading level, abstraction, complexity, etc.Teacher tiers content within each looking lens such that there are two or more versions of each lens.	<ul style="list-style-type: none">Teacher assigns looking lenses or discussion duties according to student readiness, matching students either with a role that matches an area of strength or an area of weakness.	<ul style="list-style-type: none">Students use looking lenses or discussion duties to process and/or discuss texts, videos, ideas, etc. that are differentiated for readiness and are in a role that has been tiered for readiness and/or assigned based on readiness.

Design and Implementation Guidelines

- Begin with a central idea, key question, text, or understanding goal for all students to grapple with or arrive at as a result of using the lenses.
- Derive the prompts for each lens from this idea, question, or goal. Keep in mind the fit between the content (materials) and each lens; only use the lenses that are a good fit or make sense.

- Use listening/looking lenses first in whole-class or small-group instruction and model the purpose of each one. In such lessons, all students can first apply the same lens; subsequent lessons can introduce additional lenses.
- Have students meet in similar-lens partnerships to briefly share their thoughts relative to their prompt before participating in mixed-role discussion.

 Philosopher <i>Analysis Role</i> <p>Job: Consider the “big picture”—overall purpose, essential questions, & connections to important or lasting “truths.”</p> <p>Lens: Connect _____ to this idea/ concept/question: _____</p>	 Detective <i>Analysis Role</i> <p>Job: Inspect “the details” to arrive at reasonable, evidence-based conclusions.</p> <p>Lens: Search for “clues” about _____ _____ in order to decide _____.</p>
 Lawyer <i>Analysis Role</i> <p>Job: Prove whether or not a certain allegation or assertion is true.</p> <p>Lens: Gather “evidence” that either supports or refutes the following claim: _____</p>	 Director <i>Analysis Role</i> <p>Job: Identify parts that illuminate or bring to life a certain idea or aspect of the narrative or purpose.</p> <p>Lens: Capture or quote the “scenes,” moments, parts, or ideas that you think shed the most light on _____.</p>
 Psychologist <i>Analysis Role</i> <p>Job: Get “inside the mind of” someone (e.g., author/speaker, character, figure) to discern motive or purpose.</p> <p>Lens: Determine _____’s purpose in or motive for _____.</p>	 Architect <i>Analysis Role</i> <p>Job: Evaluate how something (e.g., a text, an argument, a speech) is designed—the structure, the word choice, the syntax—how those elements influence each other and work together to convey ideas.</p> <p>Lens: Evaluate _____ to figure out _____.</p>

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Looking Lens Example Prompts

Literature

"A Poem for My Librarian Mrs. Long" by Nikki Giovanni

Philosopher: Connect the poem to the essential questions of What power can books have? Where does that power come from?

Detective: Search for clues about setting in order to decide when and where the events described in this poem take place.

Lawyer: Gather evidence that either supports or refutes the following claim: The narrator's perspective on Mrs. Long did not change as she grew older.

Director: Capture or quote the parts that you think shed the most light on what Mrs. Long meant to the narrator.

Psychologist: Determine the poet's purpose in or motive for writing this poem. What is she trying to do or say?

Architect: Evaluate the poet's use of conventions to figure out the effect of her use punctuation and capitalization on the meaning of the poem.

History

John Adams' "Letter on Thomas Jefferson"

Philosopher: Connect the content of Adams' letter to Adams' reputation as vain and arrogant.

Detective: Search for clues about whether Adams' version of events is credible.

Lawyer: Gather evidence that either supports or refutes the following claim: John Adams respected Thomas Jefferson's abilities, even though the two didn't always agree politically.

Director: Capture or quote the parts of the letter that you think shed the most light on Adams' perspective on his role in drafting the Declaration of Independence.

Science

Developed for [this](#) article.

Philosopher: Connect the technology described in this article to the idea of letting nature take its course. Is the technology working with or against this idea?

Detective: Search for clues about what methods have been used prior to this technology in order to decide what this technology does better or more efficiently.

Lawyer: Gather evidence that either supports or refutes the following claim: The technology described in this article is effective enough to replace old methods.

Director: Capture or quote parts and ideas that you think shed the most light on who wins and who loses in the development and use of this technology.

Psychologist: Determine the scientists' purpose in or motive for using this technology.

Architect: Evaluate the overall structure of the article to figure out what kind of text structure is being used, and why.

Mathematics

For use with a college admission data set.

Philosopher: Connect these data to the essential question What's the difference between causation and correlation?

Detective: Search for clues about obvious and not-so-obvious patterns in the data in order to decide whether SAT scores should be used in the admissions process.

Lawyer: Decide whether the data support or refute the following claim: SAT scores are a strong indicator of college readiness.

Director: Capture the parts of the data that you think shed the most light on why many colleges require SAT scores.

Psychologist: Determine Adams' or motive for relating the conversation between him & Jefferson.
What is he trying to show?





Architect: Evaluate the qualifiers that Adams uses to figure out how much credit he is giving Jefferson for authoring the Declaration of Independence.

Psychologist: Determine the College Board's purpose in or motive for presenting the data in this way. What are they trying to show?

Architect: Evaluate the presentation of the graphs to figure out what each one does and doesn't show well.

Discussion Duties

- Use discussion duties first in whole-group or small-group instruction and to model the purpose each one. A fishbowl model or concentric circles structure can also be used to introduce and model the duties.
- Have students come up with names, roles, and soundbites for duties.
- Two examples of discussion duties follow. The second set corresponds with the looking lens.

<p style="text-align: center;">Orchestrator</p> <p>During Discussion:</p> <ul style="list-style-type: none"> • BEGIN the discussion. Use the question(s) that have been has posted as a starting point. • Make sure the discussion doesn't get off topic. • Bring the discussion to a CLOSE when time is called. <p>Soundbites:</p> <ul style="list-style-type: none"> • "Let's start by..." • "Can we get back to...?" • "What about...?" • "Let's end by..." 	<p style="text-align: center;">Includer</p> <p>During Discussion:</p> <ul style="list-style-type: none"> • Make sure that all group members contribute to the discussion and feel included. <p>Soundbites:</p> <ul style="list-style-type: none"> • "What do you think about that, _____?" • "I agree/disagree with what you said, _____, because..." • "I want to hear what _____ thinks..." • "Wait, _____, I think you might have just interrupted _____." 
<p style="text-align: center;">Prober</p> <p>During Discussion:</p> <p>Make sure that all group members back up their opinions, ideas, feelings, and observations by giving details, examples, and explanations.</p> <p>Soundbites:</p> <ul style="list-style-type: none"> • "Can you give an example?" • "Do you remember where that is/was? Can you show us?" • "How is that related to what we read?" • "That's interesting! How did you figure that out?" • "What part is that from (or in)?" 	<p style="text-align: center;">Pacer</p> <p>During Discussion:</p> <ul style="list-style-type: none"> • Make sure that the discussion moves at a good pace. • "Refresh" the discussion when you feel like it's lagging. <p>Soundbites:</p> <ul style="list-style-type: none"> • "We've talked a lot about _____. Can we also talk about...?" • "We have ____ more minutes, so let's also talk about..." • "I'm also wondering about..." • "Here's something else to think about..." • "It sounds like we agree/disagree about..." 

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Philosopher

Discussion Role



Job:

- Make sure that all group members contribute to the discussion and feel included.

Soundbites:

- "What do you think about that, _____?"
- "I agree/disagree with what you said, _____, because..."
- "After I make this point, I want to hear what _____ thinks..."
- "What was your job, _____?"
- "Wait, _____, I think you might have just interrupted _____."



Detective

Discussion Role



Job:

- Make sure that the discussion moves at a good pace.
- "Refresh" the discussion when you "detect" it's lagging.

Soundbites:

- "We've talked a lot about _____. Can we also talk about...?"
- "We have ____ more minutes, so let's also talk about..."
- "I'm also wondering about..."
- "Here's something else to think about..."
- "It sounds like we agree/disagree about..."



Lawyer

Discussion Role



Job:

- Make sure that all group members back up their claims, feelings, and observations by citing evidence.

Soundbites:

- "Can you give an example?"
- "Do you remember where that is in the text? Can you show us?"
- "How is that related to what we read?"
- "That's an interesting insight. How did you figure that out?"
- "What line/section/page is that from (or on)?"



Director

Discussion Role



Job:

- BEGIN the discussion. Use the question(s) that the teacher has posted as a starting point.
- Make sure the discussion doesn't get off topic.
- Bring the discussion to a CLOSE when time is called.

Soundbites:

- "Let's start by..."
- "Can we get back to...?"
- "What about...?"
- "Let's end by..."



Psychologist

Discussion Role



Job:

- Be aware of and monitor people's feelings during the discussion.
- Redirect individuals and/or the course of conversation if/when it seems like emotions are getting in the way of productive conversation.

Soundbites:

- "What do you think, _____?"
- "Can we hit the pause button for a second?"
- "Okay, everyone, breathe..."
- "It sounds like we're pretty passionate about this issue/point."
- "How do we all feel about...?"



Architect

Discussion Role



Job:

- Plan the discussion using the directions, questions, or protocols that are provided to you.
- During discussion, you'll monitor the group's progress with the plan, re-directing when necessary.

Soundbites:

- "Our next task/question/focus is..."
- "According to the directions/discussion plan, we should be..."
- "That's sort of a tangent. Can we save it for later?"

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Strategy Summary

Stations are a structure for managing and organizing instruction and tasks, differentiated or not. The teacher sets up different spots in the classroom with specific learning activities, tasks, or teacher-led instruction where students work simultaneously. Stations can be temporary (for a single lesson) or ongoing (as part of a standing routine). They are useful for piquing interest in or giving students a tour of a new topic, engaging students in skill practice, providing teacher-led instruction and feedback in small groups, addressing a large amount of content in a short time, managing limited resources, *and* giving students a chance to move. Implemented well, stations provide flexibility for both the teacher and students and can support the development of student independence and ownership for learning. Stations are especially well-suited to co-taught classrooms and classrooms with push-in specialist support.

Differentiation Connection

For stations to be a vehicle for differentiation, they must be used as such. If all students go to all stations and complete the same tasks (or interact with peers or the teacher in the same way), they might be interactive and purposeful but not differentiated. In other words, stations are not inherently a strategy for differentiation per se. It is how teachers use stations that *can be* differentiated. There are several approaches to leveraging stations for readiness-based differentiation. These adjustments also apply to using stations to support interest and learning profile differentiation or to support a combination of common learning experiences and experiences that are differentiated for readiness, interest, and learning profile.

Differentiation of Content	Differentiation of Process	Differentiation of Product
<ul style="list-style-type: none">• Tasks at the same or different stations have content elements that are differentiated for readiness.• The content focus of instruction at teacher-led stations is differentiated for readiness.	<ul style="list-style-type: none">• Students visit only the stations on their schedule/rotation, which are matched to readiness. (Not all students need to go to the same stations.)• Students spend different amounts of time at assigned stations.• The task(s) at or between stations have process elements that are differentiated for readiness.• The process focus of instruction at teacher-led stations is differentiated for readiness.	<ul style="list-style-type: none">• Students rotate into stations to work on product-oriented tasks that are differentiated for readiness.• Teachers plan station tasks that help students complete a product that has been differentiated for readiness.• All students are working on the same product and visit different stations to refine aspects of their product according to their progress toward completion.

Design Guidelines

To plan stations, teachers consider:

- ☐ The goal, focus, or driving question behind the stations
- ☐ Station tasks
 - What students will do
 - How they will do it
 - With whom they will do it
 - How they will know what to do
 - The degree of independence with which students will work
- ☐ Station materials
 - What students will need at the station in order to complete the task
- ☐ Station rotation/assignment
 - Which station(s) students will go to
 - How students will know which station(s) to go to and when
- ☐ Station transitions
 - How students will move between stations, including the route and length of time

Implementation Guidelines

- ☒ Timeline. Be sure to match station tasks with time allotments and deadlines for completion. This can be tricky at first and will involve some trial and error.
- ☒ Introducing stations. For stations that will be used as an ongoing routine, introduce and model each station. This may involve introducing one station at a time, over the course of one to two weeks, and/or having all students work on a particular kind of station task at one time to get them used to the kind of work they will encounter at the station.
- ☒ Station focus and number. The number and focus of stations should be manageable and meaningful for both the teacher(s) and the students. Exercise caution in using a station to introduce something brand new. In general, stations that require students to work with peers or independently are more successful when students have been primed or had experience with the content and/or kind of task they'll be working on. Two exceptions are stations as hooks and stations that are teacher-led.
- ☒ Stations and choice. The teacher can assign students to a station rotation or schedule, can allow students to choose which stations to visit (and/or when to visit them), or can orchestrate a combination of teacher-choice and student-choice options. For stations or tasks that are targeted to specific student readiness needs, exercise caution in giving students choices that might result in doing a task that isn't a good fit or in opting out of a key task altogether.

Examples

The classroom video clips that follow show stations and station-like activities at work in middle and high school classrooms.

Hook Stations

A science teacher using stations to build student interest and hook them into a new unit of study.

<https://www.teachingchannel.org/videos/increase-engagement-and-understanding/>

Carousel Stations

A geometry teacher uses carousel stations to have groups of students work through transformations.

<https://www.teachingchannel.org/videos/carousel-activity-math-lesson>

Interactive Stations

An English teacher designs interactive stations to aid students' analysis of how an idea develops over the course of a text.

<https://www.teachingchannel.org/videos/increase-engagement-and-understanding>

Lab Stations

A science teacher plans and implements lab stations for students to observe and make sense of different forms of energy at work.

<https://www.teachingchannel.org/videos/student-character-development>

Review Stations

A science teacher uses stations to review for an upcoming assessment.

<https://www.teachingchannel.org/videos/preparing-students-for-exams>

Stations in a Co-Taught Classroom

Teachers and paraprofessionals in an ELA classroom use stations to meet students' varied readiness needs.

<https://www.teachingchannel.org/videos/teaching-diverse-learners>

Readiness Strategy: Agendas

Strategy Summary

An agenda (Tomlinson, 2014) is a personalized list of tasks for a particular student or group of students to be completed in a set timeframe. (Two to three weeks is typical, but the timeframe may be shorter in primary-grades classrooms.) Agendas mimic and model a structure for how tasks are completed in real world situations (e.g., in a workplace, in a household). The teacher determines agenda tasks, which are guided primarily by evidence of student readiness but can include interest and learning profile-based tasks or provisions. Students work on agendas during set times, such as a dedicated block during the week, as a downtime activity, or as a part of a stations rotation. The teacher decides what tasks a student will complete, and with whom (if applicable), but the student decides the order of completion for at least some tasks.

Differentiation Connection

Agendas are a strategy that can be used to differentiate content, process, or product for readiness. Although student interest and learning profile can also be addressed in agendas, student readiness is the overarching driver of agenda design.

Differentiation of Content	Differentiation of Process	Differentiation of Product
<ul style="list-style-type: none">• Content within agenda tasks is adjusted for student readiness (e.g., by complexity, abstraction, degree of independence required).• Agendas can be designed to address content across different subject areas.	<ul style="list-style-type: none">• Process within agenda tasks is adjusted for student readiness (by complexity, abstraction, degree of independence required).• Students decide when and in what order to complete some or all tasks, within a given timeframe.	<ul style="list-style-type: none">• Products within agenda tasks are adjusted for student readiness (by complexity, abstraction, degree of independence required).

Design Guidelines

- Design two or more sets of agendas that respond to patterns among student readiness needs (versus designing 25 different agendas). Regardless of the number of agendas designed, those agendas can have elements that are the same and elements that are differentiated.
- Unlike many other strategies for differentiation, different agendas do not necessarily need to be aligned with the same learning goals (KUDs). Students can be working on different tasks targeted toward different goals that *they* need to be working on.
- Use a student-friendly template to plan an agenda. Incorporate pictures/icons to aid memory and reinforce task type.

Implementation Guidelines





- ☑ **How to introduce/launch.** Teach the word agenda using schedule or to-do list as synonyms. Discuss with students what they think any agenda should include or do, including what happens when someone does not get through an agenda.
- ☑ **Building capacity for agenda work.** Before using agendas to differentiate, teach the structure and spirit by having all students complete the *same* agenda. Agenda tasks can be simpler at first—and require less stamina—and then build to more complex, higher-stamina tasks with each implementation.
- ☑ **When to use.** Agendas can be used at the beginning of a unit or series of lessons or after the teacher has had a chance to formatively assess students and gauge their progress. Agendas can help structure days/times when students are in different places in terms of what they need to work on. Agendas can also be used to allow the teacher to work with small groups or individual students

- ☑ **Agendas and choice.** By design, agendas do *not* usually give students a range of choices about which tasks to complete. Contracts, learning menus, and choice grids are appropriate strategies for building in student choice.

Agenda Examples

This Week's Agenda

This Week's Agenda is ideal for structuring class time for several days or longer to create flexibility and time for students to work with the teacher, with partners or in groups, or independently.

THIS WEEK'S AGENDA	
NAME _____	FOCUS: _____ DATE(S): _____
	CONFER WITH TEACHER
	<input type="checkbox"/> Lab readiness activity (in small groups)
	<input type="checkbox"/> Project Feedback
	<input type="checkbox"/> Agenda Progress check-in
	COLLABORATE
	<input type="checkbox"/> Photosynthesis Lab w/ Lab Partner
	<input type="checkbox"/> <i>Scientific American</i> article Think Dots discussion w/ Think Tank Group
	<input type="checkbox"/> Project Feedback w/ Peer Reviewers
	COMPLETE INDEPENDENTLY
	<input type="checkbox"/> Lab write-up
	<input type="checkbox"/> Project Feedback Form (including questions)
	<input type="checkbox"/> Other: _____
	CONSUME OR PRODUCE ("DOWNTIME" TASKS)
	<input type="checkbox"/> Choose an experiment to do alone or with a peer from <i>The Naked Scientist</i> website here (linked). Share your results with the Teacher using this form (linked).
	<input type="checkbox"/> Watch a SciShow video on the SciShow YouTube channel. Link it to the class Padlet. Share your rating of the video, and one thing you learned or are still wondering.
	<input type="checkbox"/> Another idea: _____

Pad-Quests

Similar to a WebQuest, a Pad-Quest is guided inquiry that uses Internet-based resources and tasks posted on a virtual bulletin board via [Padlet](#). Teachers can share the Pad-Quest web address directly with students or use a QR code. A screen shot of one example focused on the Electoral College follows:

Electoral College Pad-Quest
What is the Electoral College? Should we keep it, amend it, or abolish it?

- 1. (Optional) Review the Presidential Election Timeline**
If necessary, refresh your memory on what the typical presidential election timeline involves.

Election 2016 Timeline (Scholar's N... Take your students on an animated T...
- 2. Watch this animated overview of the Electoral College.**
Take & submit the quiz afterward.

Does your vote count? The Electoral... what would happen if the Electoral C...
- 3. (Optional) What happens in a tie?**
Watch this video to learn more about what happens in the event of an EC tie.

What If the Electoral College is Tied? Help support videos like this: <http://w...>
- 4. Become an Expert on 1 Election.**
Choose one election: 1800, 1824, 1876, 1888, 2000, or 2016. Review the election results and be ready to explain "what happened" to group of peers who studied different elections in a jigsaw activity. See your teachers for the handout you'll use to record your findings

Resources
U.S. Electoral College The official U.S. Electoral College web...
- 5. Review the top Pro/Con Electoral College arguments**
Read the top points and participate in poll that follows.

The Electoral College: Top 3 Pros and... Research on the US Electoral College ...
- 6. Decide which "side" of the Electoral College debate you'd like to be on.**
Based on your current understanding, choose a side to argue: Keep the EC, Amend/or Change the EC, or Abolish the EC. Rank and submit your preferences.
- 7. Pro Arguments**
See these resources for Pro EC arguments. Use your Argument Analysis sheet to record the claims, evidence, and reasoning offered in the arguments you read.
[Dump the Electoral College? Bad Idea](#)
[Keep the Electoral College In Defense of the Electoral College](#)
[Should the States Get Rid of the Electoral College?](#) (includes opinions from both sides)
- 8. Con Arguments**
See these resources for Pro EC arguments. Use your Argument Analysis sheet to record the claims, evidence, and reasoning offered in the arguments you read.
[Abolish the Electoral College: Why We Should Abolish the Electoral College](#)
[Should the States Get Rid of the Electoral College?](#) (includes opinions from both sides)
- 9. Find your own Pro/Con resource &**
Find another credible resource that argue for or against the EC. Post it in this Google Doc (linked).
- 10. Read/watch someone else's posted resource.**
Read/watch someone else's posted resource in the shared Google Doc and comment below it. How helpful was it and what did you learn?
- 11. Write your position paper**
Get ready for our class debate by writing your position paper according to the guidelines linked [HERE](#).

Playlists

Playlists are digital task lists that students work through at their own pace within a given timeframe. Teachers can create the same playlist for all students in a class or different versions based on student readiness (or interest or learning profile). In either case, the most efficient approach is to design the core or ideal Playlist of tasks first. Then, revisit the list and make tweaks for learner needs. Experiment with a common Playlist before implementing differentiated Playlists.

Playlist Title: _____			
Task	Directions	Student Notes	Date Completed
1.			
2.			
3.			
4.			
5.			
6., etc.			

For Playlist examples, see <https://www.cultofpedagogy.com/student-playlists-differentiation/>.

Readiness Strategy: Learning Contracts

Strategy Summary

A learning contract is a negotiated agreement between the teacher and the student. The teacher designs the contract, but the student has freedom (within guidelines) about what tasks to complete and/or when and/or where. Contracts are a strategy for long-term work over days or weeks (versus a strategy for a single lesson). Designed well, contracts are a student-centered way of organizing content time and content in a unit of study.

Differentiation Connection

Learning contracts are a strategy that can be used to differentiate content, process, or product for readiness. Contracts *can* incorporate or involve interest and learning profile differentiation. In this handbook, learning menus and choice boards are viewed as sister strategies to learning contracts but focus primarily on interest and learning profile differentiation.

Differentiation of Content	Differentiation of Process	Differentiation of Product
<ul style="list-style-type: none">• Content within contract options is adjusted for student readiness (e.g., by complexity, abstraction, degree of independence required).• Students decide which tasks to complete, within parameters.• Teacher can design more than one contract that is tiered for readiness so that not all students make choices from the same contract.	<ul style="list-style-type: none">• Process within contract options is adjusted for student readiness (by complexity, abstraction, degree of independence required).• Students decide when to complete tasks, within a given timeframe.• Students have choices about the conditions under which to complete the tasks.	<ul style="list-style-type: none">• Products within contract tasks are adjusted for student readiness (by complexity, abstraction, degree of independence required).

Design Guidelines

- 1. Identify the purpose of the contract.** The purpose might be more general, or it may be aligned with specific KUD goals.
- 2. Use a template or framework to guide the structure of learning contract tasks.** See [Appendix](#) for examples.
- 3. Design substantive tasks.** All learning contract tasks should require the use or transfer of knowledge and skills in meaningful context. Aim for quality over quantity. Contract tasks can be simpler at first—and require less stamina—and build to more complex, higher-stamina tasks with each implementation. If there will be tiered contracts, make sure the contracts are aligned and meet the criteria for respectfully differentiated tasks.
- 4. Consider required and choice-based elements of the contract.** What will be required and what will be left to student choice? Consider choice in what will be learned, how content will be applied, and how content will be expressed.

5. **Specify contract terms.** This includes where, when, how, and for how long students will work on the contract; criteria for quality completion of tasks; and a place for the teacher and the student to sign their names.

Implementation Guidelines

- ☑ **How to introduce/launch.** Teach the word contract, with an emphasis on it being an agreement between two or more people. Discuss with students what they think any contract should include or do, including what should happen when someone doesn't follow through on the contract.
- ☑ **When to use.** Contracts can be used for organizing sense-making activities, partner and individual tasks, as ongoing work, or with summative tasks. Like agendas, contracts can be used during station rotations or otherwise to free the teacher to work with small groups or individual students.
- ☑ **Design and delivery.** Contracts can be paper-based, electronic, or both.

Learning Contracts Examples

The Math Games Contract, Independent Reading Contract, and Homework Contract can be used as templates or structures for delivering and managing tasks in any topic, skill, or content area. Teachers guide students through the contract options and terms.

Math Games Contract

Name: _____ Time frame:_____

What concepts or skills will you be practicing?

Is there a number range you will work with? _____ Range: _____

Select the games you will play.

- ☐
☐
☐
☐
- ☐
☐
☐
☐

Game	Tally	Self-Assessment	Explanation
Write the name of the game.	Use tally marks to show how many times you did this.	Make a face to show how helpful this game was to you.	Explain your self-assessment.
		☹	
		☹	
		☹	

Student & Teacher Initials (when planned): _____

Student Signature (when completed): _____

Independent Reading Contract

Use the paper or e-version of this contract to plan and keep track of your independent reading. Add rows based on your goal number. You and I will access this during each reading conference.

My goal for number of books read this year: _____

_____ I will work hard to reach this goal!




_____ I will work hard to support you!

Required Genre			
<input type="checkbox"/> Graphic Novel Title & Author: My Rating:	<input type="checkbox"/> Mystery Title & Author: My Rating:	<input type="checkbox"/> Adventure Story Title & Author: My Rating:	<input type="checkbox"/> Sci-Fi/ Fantasy Title & Author: My Rating:
<input type="checkbox"/> Biography Title & Author: My Rating:	<input type="checkbox"/> Historical Fiction Title & Author: My Rating:	<input type="checkbox"/> Narrative Poetry Title & Author: My Rating:	<input type="checkbox"/> How-To Title & Author: My Rating:
Free Choice			
<input type="checkbox"/> Genre: Title & Author: My Rating:	<input type="checkbox"/> Genre: Title & Author: My Rating:	<input type="checkbox"/> Genre: Title & Author: My Rating:	<input type="checkbox"/> Genre: Title & Author: My Rating:
<input type="checkbox"/> Genre: Title & Author: My Rating:	<input type="checkbox"/> Genre: Title & Author: My Rating:	<input type="checkbox"/> Genre: Title & Author: My Rating:	<input type="checkbox"/> Genre: Title & Author: My Rating:




Homework Contract

This homework contract is designed to be used periodically, when assignments are sufficiently complex in how they are organized and presented and student readiness varied. Students pick and choose amongst different levels or types of items (e.g., problems, questions, prompts), with guidelines for minimum item types to complete and an overall total. The number of thumbs is not connected to a student's grade for an assignment—it is a mechanism for distinguishing the challenge level of items and guiding selection.

Blank Template:

Thumbs- Up Homework		
Assignment Name/Page Number(s): _____		
Choose _____ thumbs' worth of items to do. You are required to do at least one Single Thumbs-Up item and one Double Thumbs-Up item.		
		
Section/Item #s:	Section/Item #s:	Section/Item #s:
Total = _____	Total = _____	Total = _____
On the backside, explain any items you attempted but had trouble completing.		

Completed Template:

Thumbs- Up Homework		
Assignment Name/Page Number(s): 3.2: Quadratic Equation (pp. 101 102)		
Choose 8 thumbs' worth of items to do. You are required to do at least one Single Thumbs-Up item and one Double Thumbs-Up item.		
		
Section/Item #s:	Section/Item #s:	Section/Item #s:
Part A: #1-5	Part B: #6- 8	Super Challenge: #6
Total = 3	Total = 2	Total = 3
On the backside, explain any items you attempted but had trouble completing.		

Readiness Strategy: Conferencing and Meeting/Huddling

Strategy Summary

Conferencing and meeting or huddling are middle and high school friendly names for convening with individual or small groups of students to instruct, assess, check in, etc.

- *Conferencing* or conferring with a student usually involves meeting with the student during class (or before or after class) to give feedback, direction, clarification, or meet some other need related to the student's readiness. Student work or assessment results are typically the focus of a conference.
- *Meeting/huddling* involves convening with more than one student to plan, instruct, or assess. The teacher brings together groups of two to eight students at a designated place in the classroom for a specific purpose and set amount of time (e.g., from 10–20 minutes). Often (but not always) the purpose is connected to student readiness. Groups can be heterogeneous or homogenous. Homogeneous groups might comprise students who are struggling with content, ideas, or skills; lack pre-requisite knowledge; have misconceptions; are English language learners; or have advanced readiness.

Differentiation Connection

Conferences and meetings/huddles can be used for a full range of lessons and tasks that adjust content, process, or product for student readiness, including the following:

- Differentiated reading instruction and support
- Re-teaching or reviewing key concepts and skills
- Modeling
- Giving feedback on drafts, summative work, or assessments
- Engaging students in focused or supervised practice
- Clarifying misunderstandings
- Launching or providing enrichment or extension

Conferencing and meeting/huddling are most powerful when teachers use them with all students and for a variety of instructional purposes—not just with students who evidence lower-readiness in a skill. These strategies also can be used for purposes other than readiness-based differentiation. For example, the teacher can form groups and design mini-lessons or tasks on the basis of shared interest (in a certain topic, in a historical figure, in a product option) or learning preference (seeing a video, learning from additional models, being guided through a process).

Design and Implementation Guidelines

There is no one model for planning a conference or designing a small-group meeting/huddle. In general, when used to address student readiness, such interactions:

- are purposeful and goal aligned;
- are informed by informal/formal formative assessment;

- enhance student participation, engagement, and focus;
- build student knowledge, understanding, skill, and independence; and
- incorporate opportunities for students in a small group to interact with one another (not only with the teacher).

Opt-In Small-Group Instruction (Doubet & Hockett, 2017)

Opt-in for small-group instruction is another approach that affords flexibility in the differentiated classroom. The teacher announces or advertises opportunities using language such as “Everyone, I’ve been noticing that there is still a little confusion how to quote from a source in your informational article. If you’d like some pointers on this, come to the table in five minutes,” or “Boys and girls, some of you were asking about using Google Earth for your presentation. If you’re interested in learning more about that, write your initials on the board.” The teacher can also urge certain students to opt-in. Practiced well and alongside more traditional (but flexible) approaches, the opt-in strategy can help destigmatize small-group instruction and itself be a formative assessment of readiness.

High School English teacher Sean McComb shows how he uses one-on-one conferencing and mini-lessons in small-group meetings for instruction and feedback in this video clip:

<https://www.teachingchannel.org/videos/personalize-feedback-for-students>

Opt-In Small-Group Instruction (Doubet & Hockett, 2017)

Opt-in for small group instruction is another approach that affords flexibility in the differentiated classroom. The teacher can announce these opportunities. For example, “I have been noticing that there still a little confusion how to quote from a source in your informational article. If you’d like some pointers, come to the table in five minutes,” or “Some of you were asking about using Prezi for your presentation. If you’re interested in that, write your initials on the board.” The teacher can also urge certain students to opt-in. Practiced well and alongside more traditional (but flexible) approaches, the opt-in strategy can help destigmatize meeting with the teacher or in a small group and can itself be a formative assessment of readiness.

Differentiating for Student Interest

What is interest?

Interest refers to the passions, kinships, and affinities that can motivate a student to learn (Tomlinson, 2014). In a differentiated classroom, leveraging students’ interests is one secret to making learning both more cognitively and affectively engaging and more joyful. While not every interest that students have or develop has equal potential as a basis for differentiated tasks, most interests can be connected to required content and skills in some way or at some point in the year. Educational psychologists make a distinction between two kinds of interest: personal interest and situational interest.

Personal Interest

Personal interests are interests that the student brings to the classroom. They are activated from inside the student, but they can be initiated or stoked by the interests of parents and friends or events and experiences. Personal interests are developed over time and are largely beyond the teacher’s control to steward or grow, unless the interest is directly related to content. But, teachers can design rich, authentic learning experiences and tasks that build on or connect to students’ personal interests. Examples include video games, a fictional character or world, a collection of something, animals, sports, hobbies, music, etc. Note that a student’s personal interests are not the same as personal tastes. For example, if a student’s favorite color is red and she loves eating pizza that is not the same as the student having an interest in collecting red hair bows and having a passion for learning about and making different kinds of pizzas.

There are patterns in personal interests that often hold true for many adolescents. This does not mean that every student holds these interests, but rather that a teacher can usually count on a good number of students having the interest and the interest having general appeal for most students in a class. For example, many middle and high schoolers are interested in social media, video games, technology, sports, music, maps, famous people, movies, fashion, and earning money.

The geography, values, and context of the community or region where students live influences patterns in student interest. For instance, there are likely some predictable distinctions between adolescents who live in rural areas and adolescents who live in urban areas. Cultural background and socioeconomic status can also influence the interests that students develop. Although teachers should interpret patterns with these and other factors in mind, the idea is not to stereotype or pigeonhole students by interest—or to assume a student is or is not interested in something based on their age, locale, experiences, or heritage. Rather, the spirit is to understand that all students have personal and situational interests, some of which may be very different from those the teacher might consider typical.

How do teachers uncover personal interest?

The tasks, prompts, and inventories below can be used to discover students’ personal interests at the beginning of the year and as students develop new interests throughout the year. Understandably, some students may *not* want to divulge information to a teacher they have just met. Being asked to fill out a long inventory or respond to a question about themselves on the first day or in the first week may not yield the best responses for students who are more cautious in trusting new adults. Therefore, teachers may be wise to gather data on student interest in more or less formal ways throughout the first weeks of school—as they build trust and community—rather than trying to do so up-front or all at once.

List or read topics and interests—general or closely connected to a subject area. Have students circle or select	Ask students to connect an interest they have outside of school to a list of topics/content they are	Have students fold a large piece of paper into quadrants to list, show, or tell about four kinds of faves: (1) favorite non-school
---	--	--

or finish blank emoji faces to show their level of interest.

learning in school. For example, *“What interests in your own life relates to the idea of system?”* or *“Where do you see revolution or conflict in something you enjoy doing outside of school?”*

activity, (2) favorite show/movie to watch or genre or read, (3) favorite place to go with friends, and (4) favorite memory.

The [Secondary Interest-A-Lyzer](#) by Joseph Renzulli is a lengthier inventory that can be administered in one sitting or in stages. Teachers can also excerpt or adapt items. See also [Reading Interest-A-Lyzer](#).

Pose for exit slip response: *“Do you collect anything? If so, what? If not, what’s something you might like to collect? Why?”*

What do you want to be when you grow up? Why? What do you think it is like to be a _____? What do you think that person does all day? What makes that sound interesting to you?

Have students make a digital collage of their interests and values and present their work in small groups or to the class as a self-introduction.

Prompt: *If I could write a book about anything, it would be...*

Have students make a bar graph or pie chart of their interests and/or things they do with their time outside school.

Prompt: Draw or tell about your best day ever. It can be a day that actually happened or your ideal day?

Prompt: Tell or show the story of your weekend. What are some things you did? Where did you go? Who did you see? What was the most fun thing that happened? Is there anything you wish you would’ve done?

Have students capture their interests as snapshots from an album or movie about themselves: When I was a little kid, I was interested in.../Then, in grade school, I got into.../Now that I’m in middle/high school, I’m all about...

Finding Patterns in Students’ Personal Interests

After gathering information about students’ personal interests, take time to examine both individual student’s preferences and the patterns of the class as a whole. This can take pressure off of feeling like every interest warrants an individualized instructional response. A sample process follows:

- 1. Gather and assemble student interest data.**
- 2. Read through the responses.** Do not yet categorize them in any way. Take note of any interests that are particularly unique, unexpected, or surprising.
- 3. Categorize the data.** Use sticky notes (or another method) to create categories that make sense. Aim to collapse interests, and note interests that are difficult to categorize or that fit into multiple categories. Separate the interests from individual students.

4. **Aggregate the results.** List the categories. Which categories are similar and could be grouped together? Which categories seem similar on the surface but are nuanced enough to be divided into separate categories?
5. **Depict the results.** Use a graph, table, or other helpful visual to see the relative number and nature of the interests. Share this depiction with the class; elicit their observations and questions.
6. **Brainstorm connections.** Consider upcoming curricular topics. Record potential connections between those topics and the categories of students' personal interests. Note ideas for collaborative and individual tasks that build on interests.

Situational Interest

Situational interests are interests that arise in response to or as a result of a situation. Situations interests are activated by the environment and are spontaneous or in the moment. They can develop into personal interests over time. Teachers create situational interest when they plan and implement tasks with intriguing, choice-based elements. For example, teachers can create situational interest by letting students choose an animal to research, asking students to express an opinion about a book they enjoy, allowing students to play a role in a skit, or selecting a real-world context for solving a problem.

How do teachers uncover (and create) situational interest?

These example prompts can be used orally or in writing, on pre-assessments, or entry/exit tickets to discover situational interest as related to upcoming or current content.

"Soon, we will be learning about deep space. Which topics about deep space sound the most interesting to you? Circle your two favorites." OR "What are some things you hope we learn about or do as we study deep space?"	"Those are the three task choices for tomorrow. On the index card, write the number of the task you are most interested in doing."	"What was the most interesting thing you learned about climate change? What are you still wondering about it?"
"Draw a face that shows how you're feeling feel about this topic right now. Be ready to explain why you made the face."	"We will be writing and acting out modern versions of the Shakespearean scenes we've read. Where would you like your scene to take place?"	"We have been learning about changing people's minds by making a strong argument. Who is someone you would like to persuade? What would you like to persuade that person to do or think?"

Responding to Student Interest

There are numerous general ways to respond to student interest. For example:

- ❑ **Connect students who share interests with one another.** In real life, interests are often the seeds of relationships. But even students who share the same classroom for the school year will not necessarily discover commonalities on their own. Find opportunities—during instruction or in downtimes (e.g., as they trickle in or depart before or after the period starts)—to tell students that they share an interest. Maybe two students take dance, a handful love comic books, or several root for the same college sports team. Use small moments to draw attention to interest-based connections, using questions to encourage students to chat briefly about the interest (e.g., “Rowan and Max, did you know you’re both hockey fans?”). Sharing a depiction or graph of reported student interests can also be a launch point to foster student-to-student connections.
- ❑ **Show how curricular content is related to general or specific personal interests.** Many interests can be connected to what students are learning. While it is rarely necessary to connect *every* student interest to the topic or skill under study, one to three relevant and meaningful connections that all or many students can relate to can increase engagement and help students make better sense of what they are learning. For example, *Pi* (π) is a mathematical *constant*. What are some constants in your life—some things, people, events, or ideas that stay the same and that you can depend on?”
- ❑ **Use interests as a basis for random and intentional grouping.** Shared personal or situational interests can be a criterion for pairing or grouping students for instructional purposes. For example, a teacher might quickly pair students by a general common interest (e.g., sports, music, movies) for a nature walk, not as a way of differentiating per se, but to mix things up. A more intentional grouping linked to a task might involve giving different math problem scenarios linked to various interests and matching students with a partner and a scenario that corresponds with a self-reported interest. Or, as an example of situational interest, perhaps students have read stories that involve heroes with tragic flaws. Students choose one hero as the basis for a character analysis task that they complete with a partner who has selected the same hero.
- ❑ **Offer choice.** Learners of all ages appreciate having choices in learning. Choices based on students’ personal interests or posed to create situational interest can quench their desire for autonomy *and* increase engagement. Choices can be simple and limited in number and scope; 10 different complex project options are not required to provide meaningful interest-based choices. Students also can generate their own idea for a project or task. If the goals, parameters, and criteria are clear and agreed-upon by teacher and student, such ideas can result in products and performances that are better than what the student may have done with a teacher-generated task.

General Strategies for Differentiating for Student Interest

This table summarizes some ways that teachers can adjust content, process, and product to differentiate for student interest.

	Strategy	Example Teacher Talk
Content <i>The information, ideas, and skills that students will take in or grapple with in order to reach the learning goals</i>	<ul style="list-style-type: none"> • Providing interest-based texts or resources around a similar concept, theme, topic, or skill • Designing tasks with situations, problems, or dilemmas that appeal to student interest • Giving interest-based research topic options • Discussion roles or tasks based on a choice of character, figure, conflict, events, etc. • Designing tasks with open-ended elements for students to fill in the blank with interest/experience-based content 	<ul style="list-style-type: none"> • <i>Choose one news story to investigate using the questions we generated as a class. Remember to read about the story in four different media outlets that represent different perspectives.</i> • <i>Everyone will learn more about one industrial capitalist of their choice using online resources I've put on a Padlet.</i> • <i>Here are some rate problems involving students making decisions about time and money. Use your math skills to help the student in the situation that is most interesting to you.</i> • <i>Decide whether you want to talk about the conflict from Gatsby's, Nick's, Daisy's, or Tom's point of view.</i> • <i>Compare the theme of righting wrongs in two different texts: one that we studied together and one of your own choosing.</i> • <i>Here are some advertisements related to the war effort. Choose one for our next activity based on your interest.</i> • <i>You have been asked to give a TedTalk on _____ to an audience that is interested in _____.</i> • <i>You will choose from one of two inquiries related to the structure and function of plants: 1) Why are leaves green? and 2) Why do trees' leaves turn colors in autumn?</i>

	Strategy	Example Teacher Talk
Process <i>The activities through which students take in and make sense of key ideas in the content using essential knowledge and skills</i>	<ul style="list-style-type: none"> Using interest-based print or online resources to manage time, to support the development of a product, to support understanding of content Giving choice of roles in simulations, literature circle/book groups, or performance tasks Asking students to apply a skill or concept to an interest area 	<ul style="list-style-type: none"> <i>Rank your RAFT task choices. Think carefully about which role you like best.</i> <i>Decide who in your group will take each job for the discussion.</i> <i>If you liked the graphing game we learned today, you can play it during any down time you have in class.</i> <i>Use the concepts and skills we've learned to predict the 1-, 5-, and 10-year performance of a stock in a company that is related your interests.</i> <i>Select a looking lens for reading based on your interest.</i>
Product <i>How students demonstrate and extend what they know, understand, and can do as a result of a unit or series of lessons</i>	<ul style="list-style-type: none"> Giving product options that vary by interest Offering product audience options that vary by interest Using independent studies, enrichment/extended projects, and interest-driven inquiry tasks Choice of models for a product 	<ul style="list-style-type: none"> <i>You can write a speech, a how-to list, or a set of directions to show what you understand.</i> <i>Choose the audience that is best suited to your product. (Keep in mind whose mind you are trying to change!)</i> <i>Now that you have gathered information for your climate change study, we will brainstorm product options for sharing that information.</i> <i>Here are five different examples of this project from past students. You can decide which one(s) is the best inspiration for your own project.</i> <i>Use the geometry we have studied over the past few weeks to draft a mathematically accurate sketch of a superhero movie set, the layout of a store, or a sports/recreation center.</i>

Interest Strategy: Jigsaw (Aronson & Patnoe, 1997)

Strategy Summary

Jigsaw is a cooperative learning strategy that involves putting students in small groups and having each member become an expert on a different piece of the puzzle (i.e., content) before sharing and his or her expertise with other group members as they work together toward completing an interdependent task. Jigsaw is ideal for conceptual topics and for addressing large amounts of information in a short timeframe. The process follows:

1. Students meet in home groups of three or four students. The teacher launches the lesson with a guiding question, purpose, or goals.
2. Students choose to become an expert on one of several topic/content options based on interest.
3. Students meet in expert groups with peers who have chosen the same topic to learn more about. Expert groups gather their information and prepare to share their work with their home group.
4. The teacher checks for individual or expert group understanding in order to catch misconceptions and close knowledge gaps.
5. Students return to their home group to share their information.
6. The home group puts the pieces together by completing a synthesis or transfer task.
7. The teacher checks for individual student understanding.

The heart of the jigsaw structure (students meeting in content- or task-alike groups or pairs before connecting with peers who did not acquire the same content or work) can also be used as a general grouping mechanism or with other strategies such as looking lenses, RAFT, and TriMind.

Differentiation Connection

Jigsaw is a strategy that can be used to differentiate according to interest or readiness. In the table below, *readiness variations are italicized*.

Differentiation of Content	Differentiation of Process	Differentiation of Product
<ul style="list-style-type: none">• Assigning expert groups texts or resources based on the topic of interest• <i>Forming and assigning expert groups different texts or resources based on reading skills or level of complexity/abstraction</i>	<ul style="list-style-type: none">• Having different questions to answer or processes to follow in expert or home groups based on the interest being explored• <i>Using tiered questions in expert or home groups</i>• <i>Providing tiered graphic organizers for gathering or synthesizing information in expert or home groups</i>	<ul style="list-style-type: none">• Home group synthesis task allowing for choice of product based on interest• <i>Home group synthesis task with tiered products or criteria</i>

Design Guidelines

- 1. Identify the topic, goals (KUDs), purpose, and/or driving question of the jigsaw.** Jigsaw is best used with content that can be explored through varied topics without compromising important goals. For example, if students are studying biotechnology, there may be some technologies that all students learn about as well as technologies that can be interest-based options for students to explore further.
- 2. Plan the home group task.** This task is the reason for students to divide the content and become experts. Students can receive this task at the beginning of Jigsaw or after they share their information from expert groups with their home group. In either case, the task should need or rely on the information gathered in the expert groups to be accomplished.
- 3. Plan the expert group activity.** Typically, the expert group gathers information from teacher-provided resources to gain expertise about their topic from books, videos, or online resources. Give students a way to record the information independently (e.g., a graphic organizer) so that they can bring it back to their home group. Build in a process or directions for students to work together in the expert group and corroborate their information.
- 4. Plan for formative assessment.** The two points at which it's critical to check for student understanding are after the expert group activity and following the home group task. These checks can be informal, but the idea is to catch misconceptions and to distinguish individual progress toward learning goals from the group effort.

Implementation Guidelines

- ☑ **Timeline.** Set and enforce time limits for each part of the jigsaw. This is a strategy that can be implemented in a shorter timeframe (30–45 minutes) or over several days, depending on the complexity of the content and task and the grade level of the students.
- ☑ **Group size and composition.** Keep home and expert group size small (e.g., two to three students). This might mean having more than one expert group for a topic (e.g., two expert groups who are researching animals who live in desert habitats). Home groups can be composed of students with complementary strengths and/or formed according to the expert group topics that students have selected ahead of time.
- ☑ **Mechanics.** There are many mechanical considerations in planning a jigsaw. Questions that guide this planning include the following:
 - ❑ How will I move from home groups to expert groups—and back again?
 - ❑ How and when will I tell students who is in their home and expert groups? Where will groups meet?
 - ❑ Will I give the home group task early in the jigsaw or after their expert group work?
 - ❑ What is the best way for me to monitor activity during the expert group and home group tasks?

- ❑ What should I tell students to do when they are finished with an expert group or home group task? What happens if some groups do not finish in the timeframe?

Jigsaw Examples

Topic: Climate Change in Regions of the United States

Learning Goals (KUDs)

Know

- Causes, effects, and impacts of climate change on U.S. regions

Understand

- Changes in the earth's climate affect the ecosystem and resources in and across regions in similar and different ways.
- Humans can influence and work to reduce or minimize the causes, effects, and impacts of climate change in a region.

Do

- Explain effects, causes, and impacts of climate change.
- Determine the central ideas or conclusions in a text.
- Synthesize information from different texts on the same subject.

Inquiries

How does climate change impact the United States? What are its causes and effects?
To what extent can it be controlled?

Launch



- Teacher revisits key ideas that students have been learning about the causes, effects, and impacts of climate change. In this jigsaw, they will gather information about climate change in specific U.S. regions to generate ideas for minimizing causes and reducing its impact.





Home Groups



- Students convene in home groups of four according to their interest in reading about climate change in one of the U.S. regions.
- Teacher previews the Home Group task of generating recommendations that would minimize the impact in two or more regions.
- Students receive organizer (right). Teacher uses [this article](#) about climate change in the Southeastern region of the U.S. as a shared example to model what students will be doing in their expert groups.

Climate Change: Effects, Causes, & Impact in _____

Effect	Cause	Impact

Expert Groups 	<ul style="list-style-type: none"> Students meet in expert groups of two to four students. Students read <u>the article that corresponds with their region</u> (Midwest, Northwest, Great Plains, Southwest). They use blank organizer to gather information on the effects, causes, and impacts.
Home Group Sharing 	<ul style="list-style-type: none"> Students convene in home groups. Each Expert reports effects, causes, and impact. With input from all group members, the group recorder tracks similarities between region.
Synthesis Task 	<ul style="list-style-type: none"> Students generate a list of recommendations for reducing the impact of climate change. Each recommendation should apply to at least two regions.
Wrap-Up 	<ul style="list-style-type: none"> Home groups present their recommendations, as well as their picks for the most surprising facts about climate change in the U.S. Activity closes with discussion of the implications of climate change for the policies in the state of Tennessee specifically.

Topic: Historical Inquiry: Women's Suffrage Movement in the U.S.

This framework for a jigsaw activity can be used with any historical inquiry or document set.

Learning Goals (KUDs)

Know




- Arguments for and against women's suffrage




Understand

- Primary and secondary sources inform our perspective on what happened in the past.
- Leaders and organizations for and against women's suffrage made logical, emotional, and moral arguments.

Do

- Use primary sources to analyze the arguments for and against women's suffrage.

Inquiries	
<p>What were some of the arguments against women's suffrage? Did they make sense then? Do they make sense now?</p>	
<p>Launch</p> 	<ul style="list-style-type: none"> Prior to this activity, students have read, analyzed, and discussed Susan B. Anthony's 1873 speech on Women's Suffrage—and other pro-suffrage documents—with a focus the key claims, reasoning, and techniques. Teacher launches the jigsaw as an inquiry into the arguments against suffrage, including who was opposed and why—and previews the synthesis task.
<p>Home Groups</p> 	<ul style="list-style-type: none"> Students convene in home groups of four to five students. All students receive links to (or paper copies of) the following documents: <ul style="list-style-type: none"> "Why We Oppose Votes for Women" "America When Feminized" "Anti-Suffrage Answers" "Declaration from the Southern Women's League for the Rejection of the Susan B. Anthony Amendment" "The Federal Suffrage Amendment Will Never be Ratified" Students decide who will become the expert in each document. (Alternatively, the teacher can form home groups based on students' situational interests in the historical figure or document type or based on student readiness.)
<p>Expert Groups</p> 	<ul style="list-style-type: none"> Students move into expert groups of two to four students. In the expert group, students read and analyze their document. Note: Groups can start by using the Dissecting-A-Document ThinkDots in this handbook. Students record the claims, reasoning, and techniques in each document noting similarities and differences in perspective and approach. Teacher reviews student notes for accuracy and understanding before students reconvene in home groups.

Home Group Sharing 	<ul style="list-style-type: none"> • Each expert shares what document he/she analyzed and the key claims and reasoning in the document. • Home group members use a teacher-provided organizer to record information as their peers report.
Synthesis Task 	<p>Each group:</p> <ul style="list-style-type: none"> • creates a two-column chart that shows arguments against suffrage and their own response to each argument, which can be based on pro-suffrage documents. Teacher checks group's charts before group moves to next step. • produces a pro-women suffrage flyer/broadside of their own design. Possible roles for group members include copywriter, layout designers, artists, and historians. If desired, teacher can share the "Why We Oppose Votes for Men" poster as a real example. • Groups post/share their charts and products.
Wrap-Up 	<ul style="list-style-type: none"> • Group shares poster/flyer, with the historian as the spokesperson. The historian explains the group's approach, including how their work is rooted in the primary sources they examined. • Teacher leads whole-class discussion of common and unique features of the flyers and the technique uses. • Teacher engages class in the activity's initial inquires to summarize students' conclusions.

Topic: Patterns and Themes in Myths

Learning Goals (KUDs)

Know






- Story elements of selected myths
- *Theme* is the overarching message, abstract idea, or universal truth that emerges from a literary text's treatment of the subject matter.

Understand

- Myths within and across cultures follow similar patterns and address common themes.

Do

- Analyze the structure of a text and consider how its structure contributes to its theme and meaning.
- Determine the theme of a text.

Inquiries: How are Greek myths similar and different? What patterns and themes unite and distinguish them?	
Launch 	<ul style="list-style-type: none"> • Teacher launches with guiding questions for the jigsaw. • Teacher tells students they will be reading different myths to figure out what those myths have in common share. Their synthesis task will involve writing and acting out a modern-day myth that follows the same pattern and has a similar theme.
Home Groups 	<ul style="list-style-type: none"> • Students choose a myth to read based on teacher-provided teasers or previews. The myths share a theme and pattern, which is left to the students to determine. • Teacher forms interest-based groups, distributes (or provides links) to myths, and provides a graphic organizer for tracking the elements of the myth, similar to the literature example in the graphic organizer section of this handbook.
Expert Groups 	<ul style="list-style-type: none"> • Students read chosen myths in expert partnerships or groups (e.g., myths about the consequences of hubris: <i>Icarus</i>, <i>Midas</i>, <i>Arachne</i>, <i>Prometheus</i>, <i>Narcissus</i>) • Students use their organizer to record and discuss the elements of each myth. • As an expert group, members depict/draw the pattern of their myth on backsides of their respective organizers. • Teacher checks expert group work before students convene in home group.
Home Group Sharing 	<ul style="list-style-type: none"> • In home groups, students take turns sharing summaries of their myths, using their depictions as supporting visuals. • Group members record elements for each myth on their own organizers.
Synthesis Task 	Home groups have two tasks: <ol style="list-style-type: none"> 1. Come to consensus about the theme and pattern that the myths share. 2. Write a contemporary version of one of the myths (or do a mash-up) that follows the same pattern and speaks to the same theme(s).

Wrap-Up



- Groups read or perform their myths. Audience members provide feedback about how faithful the myth was to the theme and pattern.

Interest Strategy: RAFT (Santa, 1988; Buehl, 2009)

Strategy Summary

RAFT is a strategy for designing differentiated performance tasks that asks students to assume a **role**, address an **audience**, in a particular **format**, about a given **topic**. Essentially, RAFTs give students a choice of situations for applying or transferring what they have learned. Students step outside of the context of producing work for the teacher to solve a problem, address a challenge, address a dilemma, or put knowledge to use. RAFT can be used to design unit or lesson hooks, sense-making activities, jigsaw tasks, or assessments.

Differentiation Connection

RAFT tasks are a natural fit for interest-based differentiation but can also differentiate for readiness or learning profile. The table below emphasizes interest differentiation, with *readiness variations italicized*.

Differentiation of Content	Differentiation of Process	Differentiation of Product
<ul style="list-style-type: none">RAFT topics are designed to appeal to personal interest or create situational interest <i>or vary in abstraction/complexity</i>.RAFT tasks require students to use or reference content or material that varies by interest <i>or differs by reading level or sophistication</i>.Roles and audiences are <i>closer to or further from student experience</i>.	<ul style="list-style-type: none">Students address an audience from the perspective of a role that appeals to personal interest or creates situational interest.Addressing the situation or problem in the RAFT requires a process that appeals to varied interests <i>or a more/less complex process</i>.	<ul style="list-style-type: none">RAFT formats appeal to varied interests <i>or are tiered for readiness (e.g., more/less complex products, more/less demanding criteria)</i>.

Design Guidelines

- 1. Identify the purpose and learning goals (KUDs) of the RAFT tasks.** Decide how the RAFT will be used in instruction or assessment. Articulate what students should understand, know, and be able to do as a result of the RAFT.
- 2. Use a 4x4 grid to generate ideas for RAFT tasks.** RAFT strips are read from left to right, with each one representing the essence of the RAFT task option. Roles are in column 1, audiences in column 2, formats in column 3, and topics in column 4. Students *can* mix-and-match the elements, or come up with their own, but they should check their ideas with the teacher first to

ensure the new task makes sense and aligns with the learning goals. Include images in the grid to heighten interest and support students' understanding of the task.

3. **Articulate quality criteria.** If the RAFT will be used to assess student knowledge, understanding, or skills, then articulate the qualities that students' work should have, regardless of what task they choose. These criteria should be the basis for informally or formally evaluating and providing feedback on the tasks.

Implementation Guidelines

- **Introducing tasks.** RAFT tasks require students to step outside of themselves and take on a different perspective. Acclimate students to this idea by likening it to pretending to be someone else.
- **Task description and expectations.** The RAFT template provides an at-a-glance or bird's eye view of the task options, but it is not a substitute for a more complete description (oral or written). Avoid letting students figure out what the task is based on the template alone.
- **RAFT formats.** When first using a RAFT, consider using format types that students are already familiar with. Both the formats and the tasks overall should be equitable in terms of workload and time. If a format is new to students, provide instructions and guidelines around that format.
- **Task choice.** If the RAFT is differentiated for interest or learning profile, then let students choose the task that appeals most to them. Make sure that the choice is an informed one—that is, that students understand what the task involves. If the RAFT is differentiated for readiness, and it is important that students work with a specific task, consider giving students their individual strip/task and removing the choice aspect. Or, use tiered RAFTs that give students only good-fit choices. In any case, avoid giving some students choice but not others.
- **Task appeal.** After implementing the RAFT, evaluate how many students chose each task and whether tasks held equal appeal—and if not, why not. Use those results to adjust the RAFT for future use.

RAFT Examples

Topic: Proportional Relationships (Multi-step Ratio and Percent Problems)

Learning Goals (KUDs)

Know

- Terms and procedures for solving various problems involving tax, simple interest, markups/markdowns, gratuities and commissions, fees, percent increase/decrease, percent error.

Understand

- Proportional reasoning can be used to model and solve problems in real-world situations.

Do

- Recognize and represent proportional relationships between quantities.
- Use proportional relationships to solve multi-step ratio and percent problems.

Context: In this example, the RAFT elements are rearranged and expanded. These six situations represent contexts for real-world, multi-step problems involving ratios and percentages. Students have been applying the operations, concepts, and procedures to problems presented by the teacher and in their textbooks. Based on their interest and comfort level, students select one RAFT situation and create their own problems for other students to solve. The teacher can supply numbers and additional guidance as needed. After the teacher checks student work for accuracy, students trade and solve one another problems. The idea is that all students solve problems in all six situations.

Directions: Choose one situation. Your job is to come up with two to three word problems that involve proportional reasoning and the targeted skills focus for other students to solve. Your teacher will provide you with examples of real-world numbers, charts, etc. that are relevant to your chosen situation. Present the problems and solutions to your teacher when you're finished.

#	Role	Audience	Topic	Content
1	Experienced Restaurant Server	Restaurant Server in Training	How to Know if You Got a Good Tip	Sales tax and gratuities
2	Owner of a Car Dealership	New Sales Manager	The Way We Do Business	Commissions, sales tax, markups/markdowns
3	Customer	Retail Store Manager	My receipt's not right	Sales tax; markups/markdowns
4	School Superintendent	School Board	Projected vs. Actual Enrollments	Percent increase and decrease; percent error
5	Banker	Adolescent	Comparing Your Options	Simple interest and fees
6	Citizen of this Community	Other Citizens	What a Tax Increase Means for You	Percent increase & decrease, sales tax, property tax

Topic: Results of an Experiment: Independent & Dependent Variables

Learning Goals (KUDs)		
Know	Understand	Do
<ul style="list-style-type: none"> Definitions of <i>independent variable</i> and <i>dependent variable</i> 	<ul style="list-style-type: none"> <u>Experiments</u> test relationships between <u>variables</u>. <u>Relationships</u> between <u>variables</u> can be described in different ways, using words (e.g., strong to weak, causal, correlative), visuals (e.g., graphs, tables), and statistics. 	<ul style="list-style-type: none"> Identify the independent and dependent variables in an experiment. Explain the relationship between the independent variable and dependent variable in an experiment.

Context: Students choose one of four RAFT tasks to demonstrate their understanding of the differences and relationship between the independent variable and dependent variable in an experiment that they have just conducted or observed. The tasks are intended to be a formative assessment check—not elaborate or extended projects. The teacher can re-use the RAFT throughout the year, with different experiments, encouraging students to select a different task each time and to propose their own ideas.

	Role	Audience	Format	Topic
1	Independent Variable (IV)	Dependent Variable (DV)	Text messages	The state of our relationship
2	Dependent Variable (DV)	Independent Variable (IV)	Emails	Do I depend on you?
3	Dear Abby... Advice Columnist	Independent or Dependent Variable	Letter	This relationship, in my humble opinion (IMHO)...
4	Dramatist	Independent Variable (IV) & Dependent Variable (DV)	Skit Script	How this relationship <i>really</i> works

<p>Task 1: Write a text message conversation between the independent variable and dependent variable, in which the two variables discuss what the experiment did—and did not—show about their relationship. Feel free to use emoji and abbreviations to enhance your messages, but be sure to convey your scientific ideas clearly and completely.</p>	<p>Task 2: Write two emails: one from the dependent variable in the experiment to the independent variable, asking a series of questions about what the experiment showed. The other is the independent variable's explanatory reply. You can have fun with the voices of each variable, but be sure to show your understanding of the science!</p>
<p>Task 3: You're an advice columnist that has received an email from the independent variable OR the dependent variable in this experiment, with the experiment results attached. The sender wants your advice on the strength of the relationship. Use your understanding of science to give your opinion how strongly connected the variables are, and why (or why not).</p>	<p>Task 4: Write (and perform?) an entertaining skit based on the results of this experiment. The dialogue should show what happened with/to each variable in the experiment, and why. Make the relationship between the variables clear. Be creative but also scientifically accurate.</p>

Topic: Reading Response Prompts: Analyzing Complex Characters

Learning Goals (KUDs)

Know

- Terms related to *character*: protagonist, antagonist, dynamic/static, flat/round
- Elements of selected text (e.g., characters, plot, setting, theme, conflict)
- An *inference* is a conclusion drawn from prior knowledge and evidence or clues from text.

Understand

- Skilled readers process a text using what the text says explicitly and what they can infer.

Do

- Analyze complex characters in a literary text using key details.
- Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

Varies by prompt and text type

Context: In this example, RAFT is used to frame options for students' reading response/journal prompts. The text can be common or differentiated, part of the curriculum or independent choice. Students can choose a different RAFT for each response entry. The topics are intentionally broad to give students flexibility in (and responsibility for) tailoring to their text and interest.

Directions: For each reading response, you will write from a certain **role** and address a particular **audience** about a given **topic** in a **format** of your choice. Your response should be specific to the text you are reading. It should be clear to someone who is reading your response that you are reading and referring to the text. Try to use a different format for each entry. Important: Annotate your entries with textual evidence to show where your ideas come from.

Role	Audience	Topic	Format (Choose 1.)
A character with conflicting motivations	You, the Reader	My biggest problem right now is...	<input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Secret Note <input type="checkbox"/> Apology <input type="checkbox"/> Confession <input type="checkbox"/> Dialogue/ <input type="checkbox"/> Conversation <input type="checkbox"/> Q & A
You	A Character	My advice	
Dynamic Character	Static Character	Don't tell anyone, but...	
Protagonist	Antagonist	The way I see it...	
Flat Character	Round Character	Please!	
You, the Reader	Author	Why?	
Fortune-Teller	Any Character	I predict...	
Author	Reader	Here's why I did that	
Any Character	Self	The struggle within	

Topic: Inquiry RAFT (History, Science, or Literature)

Learning Goals (KUDs)		
Know	Understand	Do
<ul style="list-style-type: none"> Facts and terms related to the event, text, phenomenon, etc. under study. 	<ul style="list-style-type: none"> Evidence and reasoning can help determine probable causes and trace expected and unexpected events. 	<ul style="list-style-type: none"> Construct a compelling case, argument, or model around a specific position, claim(s), position, or purpose.

Context: This generic RAFT can be applied to a historical/contemporary event or figure, making scientific arguments, explaining processes, or drawing conclusions about the theme, motivations, conflicts, and characters, etc. in a literary text. The teacher can write task cards for each option that are tailored to content and student characteristics. Content can be framed with questions such as:

- Why did the framers of the Constitution compromise on slavery?
- Could the Bubonic Plague have been prevented? To what extent?
- Who is really responsible for Romeo's and Juliet's deaths?
- How strong is the evidence for global climate change?
- Is Pluto a planet? Does it matter?

<u>In the ROLE of...</u>	<u>...address this AUDIENCE...</u>	<u>...in this FORMAT...</u>	<u>...about this TOPIC...</u>
Detective	Chief of Police	Report	The evidence suggests...
Judge	Plaintiff and Defendant	Verdict	Based on the evidence, my verdict is...
Artist/Designer	Fellow Students	Annotated Visual(s) or Interactive Presentation	A visual perspective
Journalist (broadcast, print, or online)	Audience (viewers, readers, listeners)	Article or Transcript	Setting the record straight
Come up with your own RAFT task idea. Be sure to clear it with your teacher first!			

No matter which task you choose, your work must:

- Make/Establish precise claims
- Support claims with credible evidence and valid reasoning
- Anticipate and/or acknowledge and address counterclaims (explicit or implicitly)
- Use a voice and style that is appropriate to the role, audience, format, and topic

Topic: Evaluating a Historic Decision

Learning Goals (KUDs)		
Know <ul style="list-style-type: none"> • People and facts related to a specific historic decision • Strategies for synthesizing and reconciling different accounts related to the same event 	Understand <ul style="list-style-type: none"> • Reasonable <u>conclusions</u> about what happened in <u>the past</u> are rooted in credible <u>evidence</u>. 	Do <ul style="list-style-type: none"> • Use primary and secondary sources to draw conclusions about historic events.

Context: This RAFT is designed for use in a study of a historic decision made by a person, group, or entity. For example, Lincoln's decision to emancipate the slaves, Truman's decision to drop the atomic bomb, a Supreme Court decision, a country's decision to remain neutral in a conflict, etc. RAFT elements are written generically but can be tailored or personalized by the teacher or by the students to fit a specific common or differentiated study of a time period, figure, or event. Students can work with the same set of documents and resources or with sets that are differentiated for the emphasis or focus of the task or for student readiness. Students can share their completed work in jigsaw-like fashion with the goal of finding where their work agrees or disagrees about what happened and why.

In the ROLE of...		...addressing this AUDIENCE...	...in this FORMAT...	...about the TOPIC...
Key leader/figure	Posterity (future readers)	Diary entry		What I am/was thinking
Proponent and opponent of the decision to ____.		Readers	Pro/Con feature	Two viewpoints
Proponent <i>or</i> opponent of the decision to ____.		Person/Group responsible for making the decision	Memo	Some things to consider...
Person/Group impacted by the decision		Newspaper editor	Letter to the editor	From my/our perspective...
Balanced historian		Documentarian	Essay	A complicated decision

Evaluating a Historic Decision RAFT Task Cards

RAFT 1

- ❖ Imagine that you are a key leader/figure involved in making the decision. What were you thinking? What had you considered? Why did you decide to do what you did?
- ❖ Use the primary & secondary sources you've analyzed to compose a multi-page diary entry about the decision. Choose a point in time (e.g., just before the decision, shortly thereafter, many years later) for the entry.

RAFT 2

- ❖ Write PRO/CON feature about the decision from two perspectives, respectively: a PROPONENT of the decision and an OPPONENT of the decision.
- ❖ The authors and "outlet" for the columns can be real or fictitious. (See U.S. News & World Report's "Debate Club" or the *New York Times* "Room for Debate" for real examples.) Choose a point in time from which to write.
- ❖ Both perspectives should be rooted in your analysis of the primary & secondary sources provided.

RAFT 3

- ❖ Assume the perspective of EITHER a Proponent OR an Opponent of this decision. The leader/group responsible for the making the decision has consulted you for your expert opinion.
- ❖ Decide "who" you are; your role should make sense with the context.
- ❖ Consult your analysis of the primary and secondary sources. Compose a 1-2 page memo that advises the leader/group on the best course of action.

RAFT 4

- ❖ You are a person (or spokesperson for a group) who is/was affected—or will be affected—by this decision.
- ❖ Decide who you are, where you "stand", and from what point in time you are writing. Root your understanding of the decision in your understanding of the primary and secondary sources you analyzed.
- ❖ Craft a letter to the editor of a newspaper about the predicted or actual short- or long-term outcomes of the decision.

RAFT 5

- ❖ You are a historian who is well-versed in different perspectives on this decision. A documentary has contacted you about contributing to a short film about the causes and effects of the decision, including why and how it was made.
- ❖ Write an essay that distills and represents different viewpoints about the decision that the documentary can use to inform his/her own understanding and determine whether you know what you're talking about enough to be interviewed for the film. (Base your essay on the relevant primary & secondary sources you've analyzed.)

Interest Strategy: Choice Grid

Strategy Summary

A choice grid presents interest-based task options in a grid, similar to a Think-Tac-Toe (Tomlinson, 2014). The tasks are arranged by the goals they share; students select one task from each set to complete. Choice grids can be used to organize tasks that students will complete independently during a unit of study, tasks at an interest center, or anchor activities. Tasks can be aligned vertically or horizontally.

(Shared Goals/Purpose)	(Shared Goals/Purpose)	(Shared Goals/Purpose)
Task Option 1	Task Option 1	Task Option 1
Task Option 2	Task Option 2	Task Option 2
Task Option 3	Task Option 3	Task Option 3

Differentiation Connection

Choice grids are a delivery system for tasks that differentiate content, process, or product for interest or learning profile. They can also be a strategy for readiness differentiation when the teacher uses tiered choice grids with more/less advanced options. Choice grid tasks can be designed using other strategies, such as RAFT, Tri-Mind, or multiple intelligences.

Design Guidelines

- 1. Focus the choice grid.** Use a topic, concept, text, text type, or set of skills. Examples include *functions, novel study, environmental issues, heredity, and American Revolution*.
- 2. Select learning goals for each set of tasks.** Decide what knowledge, understanding, and/or skills each task set will focus on. Alternatively, start with one or more worthy tasks, determine what the learning goals are, and place them in the corresponding row(s).
- 3. Create tasks.** All tasks should be engaging, appealing, and substantive, but also require roughly the same workload and cognitive stretch. Use a specific strategy to design tasks, select or adapt existing tasks from other resources, or create new tasks. One approach is to place any suitable preexisting tasks into the grid, discern the goals, and fill in the grid with the blank spots that remain. An alternative to using a nine-task grid is to start with a three- or six-task grid and work up to a nine-task grid over several units.

4. **Place tasks in the grid.** Ensure that all three tasks in a given row are aligned with the same goal(s). Choices aligned with the same goals should look equally appealing and require a similar effort. Also, consider all possible task-choice combinations to make sure that a particular combination doesn't leave a student with too much—or too little—to do.
5. **Make the grid user-friendly.** The choice grid that students receive or see should take into account their ages, reading skills, and attention spans. Making the choice grid look fun—or even game-like—without obscuring the purpose of the tasks can go a long way in increasing student interest and investment. Use shapes, images, or graphics to reinforce the focus of tasks or as a way for students to select tasks.

Implementation Guidelines

- ☑ **Introducing a choice grid.** Launch the choice grid in the context of a game where students have to make choices about the best task for them in each row (or column, depending on how it is designed). Display the grid up front for review. Make sure that all students know what each task is and involves.
- ☑ **Guiding students' choices.** The placement of tasks within each set of goals is intentional, so make sure that students know that they shouldn't choose three tasks under the same goal set. It otherwise doesn't matter what students select. If a student is having trouble choosing, prompt along these lines: "Which one are you most excited about?" "I know you enjoy graphic design, so this task might be good for you," and "Do you have another idea that is similar to one of these choices?" Let students know that if they start to work with one task choice and feel like it's not working for them, they can switch tasks.
- ☑ **Timeframe.** Choice grids are best for tasks that will be completed over the course of days or weeks rather than in a single lesson or day.
- ☑ **Task completion.** Decide whether students will turn in tasks as they complete them or turn their work when all tasks are finished. This is a decision that will likely be guided by how and for what purpose the choice grid is being used.

Choice Grid Examples

Topic: Ancient Egypt

Learning Goals (KUDs)		
Know <ul style="list-style-type: none"> Roles and relationships in the social structure of Ancient Egypt Significant rulers in Ancient Egypt (e.g., Ahmose, Menes, King Tut, Queen Hatshepsut, Ramses the Great) Lasting achievements of Ancient Egypt: agricultural and irrigation systems, calendar, pyramids, hieroglyphics, papyrus Facets of religion in Ancient Egypt (e.g., beliefs about death and the afterlife, the practice and purpose of mummification, roles of different deities) 	Understand <ul style="list-style-type: none"> <u>Civilizations</u> are defined (in part) by their <u>social hierarchy</u>, religious <u>beliefs</u>, and <u>achievements</u>. What we know about ancient <u>civilizations</u> has been pieced together over <u>time</u> based on archeological <u>evidence</u>. 	Do <ul style="list-style-type: none"> Depict the social structure of Ancient Egyptian society. Use information from texts to explain polytheistic religion of Ancient Egypt. Summarize the lasting achievements of Ancient Egyptian civilization. Compare and contrast the hallmarks and legacies of various rulers in Ancient Egypt.

Directions: Choose one task from each category (i.e., row), according to your interest, to show and apply your learning about Ancient Egyptian Civilization. If you have an alternate idea for a task that gets at the same ideas and skills, propose it to your teacher.

Social Structure	Find a visual online that depicts the social structure of Ancient Egypt but doesn't do a very good job. First, annotate it to show where and why you think it falls short, including what's missing, and what concepts, roles, or relationships are unclear or misrepresented. Then, create an upgraded version of the visual that addresses your concerns.	Visually represent the social structure of Egyptian society <i>without</i> using a pyramid or triangle shape. Show the role of pharaohs/rulers, the concept of dynasties, the relationship of pharaohs to peasants, and the role of slaves. Your depiction can be paper-based, electronic, recorded, or acted out.
Religious Beliefs	Design an infographic or interactive presentation that clearly distills the polytheistic religious beliefs and practices in Ancient Egypt. You can use Piktochart , Canva , Prezi , or another tool you know about. Record an audio narrative to accompany your visuals that leads the audience through the content of further explains key ideas.	Choose another religion with which to compare the religious beliefs and practices of Ancient Egypt. It could be the religion of another ancient civilization, your own religion, or a modern-day religion that you know well or would like to learn about. Come up with an engaging, clear, and appealing way to show the similarities and differences to an audience of your peers.
Notable Rulers	Decide in which section of a web page on Ancient Egypt the rulers we studied should be featured: the Hall of Fame or Hall of Shame. Draft and layout this webpage that includes pictures and one to two paragraphs biographical narratives that justify your placement using archeological evidence and historical facts.	Write an afterlife conversation between the six Ancient Egyptian figures we've studied where they are fighting about who was the greatest ruler. The conversation should highlight the positives and the negatives of their rule. The conversation should be rooted in archeological evidence and historical facts.
Achievements	Create a narrative (e.g., book, skit, video) that tells the story of what archeologists <i>used</i> to think about how or when significant achievements Ancient Egyptians happened or came to be, and what they think now, based on the latest evidence. Your narrative should also convey the purpose and impact of the achievements in Ancient Egypt, as well as impacts over time.	Write and record a five- to seven-minute video commercial that entices potential travelers to visit Egypt by highlighting the lasting achievements of Ancient Egyptian civilization. Incorporate a range of images and/or video from a range of sources—as well as on-screen text and music. Try to surprise the viewer with information and connections.

Topic: Interpreting Shakespeare

Learning Goals (KUDs)		
Know <ul style="list-style-type: none"> Types and effects of filming techniques such as lighting, sound, color, camera focus & angles Literary & dramatic elements in the Shakespearean play and scene being studied 	Understand <ul style="list-style-type: none"> The <u>power</u> of a drama (i.e., Shakespeare) over <u>time</u> lies in its potential for multiple and varied <u>interpretations</u>. 	Do <ul style="list-style-type: none"> Analyze multiple interpretations of a drama (e.g., recorded or live production), evaluating how each version interprets the source text. Create and explain an original interpretation of a scene from a drama.

Context: Students have read and studied all of parts of one or more Shakespearean plays. This choice grid calls for analyzing multiple filmed interpretations of the same scene for the purpose of dramatically interpreting the scene themselves.

Directions: Select a scene(s) from the list provided. You will watch and discuss with peers three versions of the scene (repeatedly) in three different filmed productions, complete an evaluation task, and create your version of the scene. There are three different task options for each of those steps. Read all options before making your selections.		
Analyze versions of the scene.	Evaluate them.	Create your version.
<input type="checkbox"/> Use the scene analysis questions to guide your repeated viewings of each version. Decide in advance how to organize your responses for each version so that you can easily see and compare your thoughts.	<input type="checkbox"/> Which version of the scene is the most compelling, from a film critic's perspective ? Write a review that answers that questions clearly, using elements of the scenes that you analyzed to commend and critique key aspects of each scene.	<input type="checkbox"/> Work alone or with others to plan and perform in a filmed version of the scene that will be shown to—or performed for—the class. Your choice of setting should be deliberate and the lines audible.
<input type="checkbox"/> Use the text of the scene itself (print or electronic) to guide your repeated viewings of each version. You can use different-colored pens or typeface to capture the text as portrayed in each scene or take notes on three different clean copies.	<input type="checkbox"/> Which version of the scene is most faithful to the text? Write a scholar's opinion that answers the question clearly, drawing on your analysis of each scene as compared to the text. Cite evidence from both.	<input type="checkbox"/> Work alone or with others to plan and perform in a live version of the scene that will be shown to—or performed for—the class. Costumes and props are encouraged.

<input type="checkbox"/> Use your own questions to guide your repeating viewings of the scenes. Choose or devise a method for taking notes, such as visual organizer, a pictorial approach (like Sketchnotes), a bulleting system, etc. <u>Tip</u> : You might want to figure this out <i>after</i> watching the three versions of your scene one time through.	<input type="checkbox"/> Which version of the scene is award winning? Decide on five categories. For each one, provide your judge's rankings , including explanations for who should win and why if the versions went head to head in a competition. Cite evidence from the films.	<input type="checkbox"/> Work alone or with others to plan and create a version of the scene that doesn't involve human actors on stage or screen but that can be presented or performed. You can use animation or other forms in which you are skilled.
Final Task: For your own version of the scene, turn in a written explanation that explains the choices that you (or you and your group) made. What did you do, and why? Refer to both the original text of the scene and/or the other versions you watched.		

Interest Strategy: Learning Menus

Strategy Summary

A learning menu presents interest-based task options in the framework of a restaurant menu. Like a choice grid, tasks are arranged by goals or purpose. Unlike a choice grid, the teacher can incorporate both required and choice-based elements. Learning menus can be simpler or more complex, depending on the age and readiness of the students, and be modeled after menus at a range of restaurant types (e.g., fast food/quick service, full service, fine dining).

Learning menus are ideal for organizing and delivering tasks that students complete alone or with others over the course of a unit, during dedicated menu time, when the teacher is conferencing with individual or grouping of students, or as an anchor activity. Learning menus are an excellent tool for marshalling and using tasks that can be hard to get to in the course of a normal day or week—and for structuring multi-part tasks or text studies.

Sample Learning Menu Template

Appetizers
<i>Hooks that invite students into the menu (give them something to nibble on)</i>
Main Dishes
<i>Goal-aligned tasks that all students complete</i>
Side Dishes
<i>Choice-based, goal-aligned tasks</i>
Desserts
<i>Choice-based, goal-aligned tasks</i>

Differentiation Connection

Learning menus are a delivery system for planning and implementing common tasks as well as those that differentiate content, process, or product for interest or learning profile. Menus can also be a vehicle for readiness-based differentiation when the teacher created tiered versions (e.g., one that is more advanced and one that is less advanced). Learning menu tasks can be designed with strategies such as entry points, RAFT, Tri Mind, VAK, or Multiple Intelligences.

Design Guidelines

- 1. Focus the learning menu.** Use a topic, concept, text, text type, or set of skills. Examples include *probability, angle relationships, the Renaissance, biography, World War II, cellular systems, To Kill a Mockingbird, and word study.*
- 2. Articulate learning goals (KUDs) for the menu.** Overall, what should students know, understand, and be able to do as a result of engaging with menu tasks? It's okay to be general; goals for each section of the menu will be more specific.
- 3. Select/design menu framework.** Real or adapted restaurant menus (handheld or menu boards) of any kind provide possible frameworks for learning menus. Decide what parts the menu will have, including which sections will feature tasks that all students will complete and which sections will feature tasks differentiated by interest.
- 4. Articulate the purpose and/or learning goal(s) for each menu section.** Regardless of which or how many sections the menu has, decide what purpose each section serves. For example, is

the appetizer section (if there is one) a hook into the menu content, or is it a first step that's connected to a main dish task? If the task(s) in a section are targeted toward certain learning goals (KUDs), select those goals from the menu goals, or articulate more specific learning goals. Alternatively, start with one or more worthy tasks, determine what the learning goals are, and place the task(s) into the appropriate section of the menu.

5. **Select/design common tasks.** Decide which tasks all students will complete. Select or design these and place them into the corresponding section(s).
6. **Select/design differentiated tasks.** Select or design tasks for sections of the menu where students will have task choice. All tasks should be engaging, appealing, and substantive, but also require roughly the same workload and cognitive stretch. Ensure that all tasks in a section are aligned with the same goal(s). Consider all possible task-choice combinations across the menu to make sure that a particular combination won't leave a student with too much—or too little—to do.
7. **Make the menu user-friendly.** The learning menu that students receive or see should take into account their ages, reading skills, and attention spans. Making the menu look appealing without obscuring the purpose or the tasks can go a long way in increasing student interest and investment. Use a realistic layout or images of food to make the menu seem real.

Implementation Guidelines

- ☑ **Introducing a learning menu.** Launch the learning menu in the context of being at a restaurant, going to party, or eating a meal at someone's house, where there might be a combination of things you have to eat and things you choose to eat. Display or project the menu for all students to see as the tasks are reviewed and the timeline specified. Make sure that all students understand each task and what it involves.
- ☑ **Guiding students' choices.** In the choice-based sections, students can select based on interest or preference. If a student is having trouble choosing, prompt along these lines: "Which one are you most excited about?" "I know you really like to [draw], so this task might be good for you," "Do you have your own idea that is like one of these choices?" Let students know that if they start to work with one task choice and feel like it's not working for them, they can switch tasks.
- ☑ **Task completion.** There may be aspects of the menu that the whole class does at the same time. In addition, decide whether students will turn in tasks as they complete them or turn in their work when all tasks are finished. This is a decision that will likely be guided by how and for what purpose the learning menu is being used.

Alternative Menu Frameworks

Other frameworks beyond the restaurant/food metaphor can be used for variety or to better suit a teacher's style. Examples include:

- The Basics, Next Steps, Deep Dives
- Get Your Feet Wet, Dive In, Swim Around, Step Out
- Imperatives, Negotiables, Optionals

Learning Menu Example

Topic: Science Research in the News (Inheritance of Traits)

Learning Goals (KUDs)

Know

- Terms and facts related to the specific genetic concept/ research under study

Understand

- Scientific knowledge about inheritance of traits has the power to improve life and solve science mysteries.
- Whether or how scientific research should be applied to the development and use of technologies can raise dilemmas.

Do

- Determine the central ideas and conclusions of texts.
- Integrate information from various sources to gain understanding about a scientific concept.
- Conduct research projects to answer a question.
- Gather information to inform pro/con arguments on using certain techniques or technologies.

Key Question: How is existing and recent DNA and genetics research being used to improve life and solve scientific mysteries today? What dilemma does this present?

Hors D'Oevres

As we begin the genetics unit...

- ☐ Choose three articles from [\[this Inheritance of Traits text set\]](#) to read, according to your interest. Use the following questions to guide your reading:
1. What is this article about? Is this article about scientific research results, applying scientific research, both, or something else? Where or what is the science (e.g., genetics) in this story? Explain.
 2. On a scale of 1-10 (1=not at all, 10=extremely), how controversial is the science described in this story? Why do you say so? On the same scale, how beneficial is the science that's described in this article? Why do you say so?
 3. What questions does the science in this article raise? What are you still wondering?

- ☐ Prepare a 30-second oral summary of the article you found most interesting. When you finish, turn your written responses to the guiding questions into your teacher for review.
- ☐ Meet in a trio with students who read articles different from yours. Take turns sharing your summaries. Answer any questions they pose; write down the questions you can't answer (based on the article or your knowledge) on an index card.
- ☐ Choose one of the articles/article topics (e.g., genetically engineered fruit). Use your own and your peers' questions as a starting point to further explore the science in this article.

Soup & Salad

As we progress in the Genetics unit...

- ☐ Use your questions and the teacher-assembled resources on the Padlet that fits your chosen topic as a launching point for further research on this topic. As you seek out and find additional relevant credible resources, please add them to the Padlet.
- ☐ Use Google Docs to keep track of your notes and questions. Refer to the models given in class. Remember to add content from lessons in this unit that is relevant to your topic and questions.

Main Dishes

Then, choose one task as an outlet for your genetics research.

- | | | |
|--|---|---|
| <input type="checkbox"/> Science news content developer. Create an enhanced version of the original article that includes hyperlinks to explanations of genetics concepts, supporting data or research, and models or visuals. The goal is to upgrade the article by giving the reader ways to better understand the science in it. | <input type="checkbox"/> Tech-savvy teacher. Create a TedEd lesson that teaches others the science behind the article you read. Include the Watch, Think, Dig Deeper, and Discuss components. (You can use video from another source.) Your teacher will show you examples of lessons that are good models to emulate. | <input type="checkbox"/> Podcast writer/host. Write and record your own episode of the NPR Science Podcast for Kids, Wow in the World that revolves around your topic. (If you do the writing, you can enlist a peer to read the script with you.) |
|--|---|---|

Dessert (Eat Both!)

Finally....

- | | |
|---|---|
| <input type="checkbox"/> Provide feedback on two of your peers' products, using the form provided.

<input type="checkbox"/> Names: _____ & _____ | <input type="checkbox"/> Participate in a four-member academic controversy around a genetics-related question/issue. <ul style="list-style-type: none"> ○ Choice 1: _____ ○ Choice 2: _____ |
|---|---|

Topic: George Washington's 1796 Farewell Address

Learning Goals (KUDs)

Know

- Facts related to the historical context and impact of the address
- Themes of and key points in the address

Understand

- Certain documents in U.S. history shape and reflect American perspective and values.
- Certain documents in U.S. history have had the power to establish precedents and influence posterity.

Do

- Analyze the precedents set in Washington's Farewell Address.
- Evaluate the themes and lasting significance of the address.
- Compare and contrast the address with other addresses.

Context: This menu—which uses a swimming metaphor as a framework—is designed to engage students in close study and application of a seminal document in U.S. history. The Dive In! section is intended to be completed in class; completion of tasks in other sections can be in- or out of class. Sections and activities can be adapted to the study of other documents or sets of documents.

Get Your Feet Wet...

Do one or more to pique your interest and give you some background about the address.

- | | |
|---|--|
| <ul style="list-style-type: none"> <input type="checkbox"/> Read the <u>Wikipedia entry</u> on the address to get an overall sense of the purpose, context, and structure. <input type="checkbox"/> Listen to the <u>song "One Last Time"</u> from the musical <i>Hamilton</i>, in which Washington states his motives for resigning the presidency and enlists Hamilton to help him craft his goodbye address to the American people. Follow the lyrics <u>here</u>. Read the annotations if you'd like! | <ul style="list-style-type: none"> <input type="checkbox"/> Do visual drive-bys of a draft of the address in its <u>handwritten</u> and <u>digitally-transcribed</u> versions. Compare visually with final handwritten version <u>here</u> and published edition <u>here</u>. <input type="checkbox"/> Watch <u>this video overview</u> with animations of the content of the address. |
|---|--|

Dive In!

Complete all steps to read, analyze, and make sense of the address itself.

- 1. Read the address** (or the sections that have been assigned). Remember that this address was *not* delivered as a speech but printed in a newspaper. The version your teacher has provided shows the general theme he is addressing in each section. Use the organizer provided to record notes about what he is warning against or advising and why.
- 2. Listen to or watch a reading of the address.** It can be a professional reader's/actor's version, like this one, or any available video-recording of the address that has been read in the U.S. Senate on Washington's birthday.

3. Participate in a Socratic seminar about the address. You will participate in a Socratic seminar around key ideas in and issues raised by the address. Stay tuned for directions on how to prepare!	
Swim Around. Choose one task for comparing Washington's Farewell Address with another address.	
<input type="checkbox"/> Choose another presidential farewell from this list to analyze and compare with Washington's. Create a graphic organizer or other visual to show the similarities and differences in themes, style, themes, tone. Then, write a one-page analysis of where you see evidence of the influence of Washington's address on your chosen president's address.	<input type="checkbox"/> Compare Washington's Farewell Address with another well-known addresses in American history—for example, Lincoln's Gettysburg Address, Roosevelt's Four Freedoms, King's I Have a Dream or Letter from Birmingham Jail, etc. Create a graphic organizer or other visual to show the similarities and differences in themes, style, themes, and tone. Write a one-page analysis of how the addresses compare in speaking to American values.
Step Out. Choose one way to apply the advice and ideals in Washington's address to today.	
<input type="checkbox"/> Have We or Haven't We? Is America following Washington's advice today? To what extent? Select key points or pieces of advice in his address that you believe America (or Americans) definitely <i>are</i> or <i>are not</i> following. Come up with a way to show <i>how</i> the country/people are realizing his vision. Your product can be a visual display, a video, an animation, an extended comic strip or book, or something else you come up with.	
<input type="checkbox"/> Dear Mr. President... Write a letter to George Washington, updating him on how/whether his advice has influenced the country. Focus on today, but feel free to reference events in America's history since his death in 1799. Make references to the content of his address; quote directly, as appropriate. You're addressing THE George Washington, so be sure to use a formal, respectful tone and style.	

Differentiating for Student Learning Profile

Uncovering the Student Learning Profile

What is a Student Learning Profile?

A learning profile refers to how students seem learn to best, how they process what they need to learn, or how they think about, remember, and prefer to use what they learn (Tomlinson & Sousa, 2011). Learning profile is best thought of as a set of preferences, not as inherent characteristics or traits of a student.

In the Tomlinson model, learning profile has several overlapping dimensions:

- **Learning style:** Learning style theories and models contend that people learn in different ways, and that they will learn better or more efficiently when the circumstances or demands of learning match their preferred approach. The idea isn't to label a student as x or y kind of learner, and most individuals can and do learn in a variety of ways. Rather, the spirit of learning style is to help students find pathways and conditions for learning that work best for them in a given situation. Models developed by David Kolb (Learning Style Inventory), Bernice McCarthy (4Mat), and Kenneth and Rita Dunn (Dunn & Dunn Learning Styles Model) are well-known examples. Teachers should note that the idea of students having particular learning styles that they need to learn or produce with is *not* well-supported by research (for a review, see *Differentiation and the Brain: How Neuroscience Supports the Learner-Friendly Classroom* by Carol Tomlinson and David Sousa).
- **Intelligence preference:** Intelligence preference refers to models of human intelligence and ways of thinking that are related to individual learning preferences. Specifically, the work of Howard Gardner and his Theory of Multiple Intelligences and Robert Sternberg's Triarchic Theory of Intelligence are particularly well-known theories. Each of these models is described further in the context of related strategies in the following pages. Both theories view intelligence as multi-faceted, complex, and malleable, and these theories advocate leveraging students' intelligence preference strengths as well as growing in areas of relative weakness.
- **Culture- and gender-influenced preference:** Although a person's culture or gender does not dictate how an individual will learn, research indicates that culture and gender may influence individual preferences in learning (see Tomlinson & Sousa, 2010, for review). For example, culture or gender may shape a student's proclivity for:
 - working independently or working collaboratively;
 - viewing time and schedules as fixed or viewing them as flexible;
 - interpreting communication literally/directly or interpreting communication figuratively/indirectly;
 - valuing logic over feelings or valuing feelings over logic;
 - approaching tasks in an orderly way or approaching tasks in a roundabout way;
 - spatial and number-based tasks or verbally based tasks;
 - learning well in stressful situations; and
 - teacher feedback or approval.

For teachers in diverse classrooms, it is important to recognize that their own sense of how learning should happen is shaped by their own culture and gender, which is different from at least some of their students. While teachers should refrain from overgeneralizing to every student from a cultural group or gender, planning with certain patterns in mind can make a learning a better fit for many students.

How do teachers gauge student learning profile?

Gauging student learning profile can involve (1) asking students about their preferences and (2) observing how students work and the choices they make. In practice, it is similar to gauging student interest. There is no scientific basis for using an inventory or assessment to diagnose students as a certain kind of learner. But, students' responses to questions or prompts can reveal patterns among students in a class or preferences that are unique to individuals.

The tasks, prompts, and inventories below can be used to discover students' learning preferences at the beginning of and throughout the year. Items can be delivered orally or in writing, on pre-assessments or entry/exit tickets to discover specific preferences related to upcoming or current content.

Strategies for Differentiating for Student Learning Profile

My Way is an Expression Styles Inventory that asks students about preferences in creating certain kinds of products. The inventory can be delivered orally as an interview with spoken responses or hand signals to indicate strength of preference, or students can circle responses on paper copies.	Use the prompt <i>Would you rather...?</i> to pose questions related to learning preference. For example, "Would you rather work by yourself or work with a partner?" "Would you rather stand up or sit down while learning something new?" "Would you rather work in a quiet work or work in a room where there's noise or music in the background?"	Have students rank their choices based on this list to assign them an entry points task (see Entry Points): <i>Right now, I think I would prefer to....</i> ___ Tell, read, or hear a story ___ Give reasons for something ___ Think about big questions ___ Use my senses ___ Work with numbers ___ Do a hands-on activity
Pose for an exit slip or journal prompt: When is learning easy for you? Hard for you? <i>For me, learning is easy when...but hard when...</i>	Expose students to varied techniques for a skill like memorization. Observe which technique seemed to work best for each student, in addition to asking students which technique they preferred.	Ask students about learning preference-based choices related to an upcoming task. For example, "Next week, we are going to be learning about how to use Google Docs. Would you prefer to hear about it from the teacher, go to the site and try to figure it out yourself, or watch a video tutorial before trying it?"
Give students a brief survey to guide their selection of Tri-Mind tasks differentiated for Sternberg intelligence preference (see Learning Profile Strategy: TriMind on	Have students sketch, describe in words, or use digital images to show their ideal place to learn. OR Alone, in partners, or in small groups, give students a 10-	When you are learning about famous people, do you prefer to... <ul style="list-style-type: none">• Listen to a real person/ teacher talk

page 114). I like ___ <i>figuring out how things work</i> ___ <i>using my imagination</i> ___ <i>giving practical advice to friends</i>	minute challenge to come up ideas for a classroom makeover that would make the space a better place to learn. Institute some of the proposed changes, if possible!	<ul style="list-style-type: none"> • Watch a video about the person • Read about the person • Something else: _____
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Examples of Adjusting Content, Process, and Product for Student Learning Profile

	Strategy	Example Teacher Talk
Content <i>The information, ideas, and skills that students will take in or grapple with in order to reach the learning goals</i>	<ul style="list-style-type: none"> • Taking in content by reading it, listening to it, or viewing it • Seeing models or demonstrations that illustrate a concept or skill • Presenting content whole-to-part and part-to-whole • Providing different entry points (Gardner, 2006) into content (storytelling, giving reasons, thinking big, activating senses, working with numbers, or using experience) 	<ul style="list-style-type: none"> • <i>Go to two of the four stations to learn about the Bubonic Plague. There are books at station 1, videos on iPads at station 2, written primary sources at station 3, and images at station 4.</i> • <i>Watch the TedEd video to better understand how small atoms really are.</i> • <i>You have two options for learning about new technology that prevents texting while driving: Read the article or listen to a story on Listenwise.com</i> • <i>First, we'll examine the roles and responsibilities of each branch of government; then, we'll study how the branches of government work together as an interdependent system.</i> • <i>You can first examine how plant and animal cells use different structures to perform similar function or study how plant and animal cells perform different functions with similar kinds of structures.</i> • <i>Choose an entry points activity to get you thinking about energy. There's a storytelling task, a five senses task, a giving reasons task, and a hands-on experience task.</i>
Process <i>The activities through which students take in and make sense of key ideas in the content using essential</i>	<ul style="list-style-type: none"> • Making sense of ideas orally, visually, by acting them out, or in writing • Competing against self or competing against others • Varying roles or lenses for processing information or applying skills • Offering different types of graphic organizers 	<ul style="list-style-type: none"> • <i>Use the multi-operation problem to show or tell in words, pictures, or actions why an order of operations is needed and how it works.</i> • <i>Play the clothespin football dice game to practice adding and subtracting positive and negative integers. You can play against yourself or play with a partner.</i> • <i>Rank your choices for jobs in tomorrow's class discussion. Think about which one you are <u>best</u> at and make that #1.</i>

<i>knowledge and skills</i>	<ul style="list-style-type: none"> • Working in different places in the classroom • Processing/reflecting with others with others or processing/reflecting alone • Using analytical, practical, or creative thinking • Using thinking associated with a multiple intelligence preference 	<ul style="list-style-type: none"> • <i>There are two kinds of organizers you can use to gather information about your world religion. Choose one or come up with your own way to organize. Check with me first!</i> • <i>I'll be showing you three different ways to record your measurements. You'll choose and use the one that makes the most sense to you.</i> • <i>You can work on the rug, on the bean bag chairs, at the table, or at a desk. Choose a spot where you think you'll get the most work done.</i> • <i>Decide whether you will want to do the experiment I modeled alone or with a partner.</i> • <i>Identify and show the relative importance of ideas in the speech using a bar graph or the journalist's inverted pyramid. Then, write your summary.</i>
Product <i>How students demonstrate and extend what they know, understand, and can do as a result of a unit or series of lessons</i>	<ul style="list-style-type: none"> • Product modes or options that vary by means of expression • Using varied technologies in developing a product • Developing products that emphasize analytical, practical, or creative thinking • Developing products that are associated with a multiple intelligence preference 	<ul style="list-style-type: none"> • <i>Represent arguments of the interventionists and non-interventionists in writing, visually, or by staging a conversation between them.</i> • <i>Record your presentation.</i> • <i>Make an annotated list of Do's and Don'ts, write a simple how-to guide, or deliver a monologue.</i> • <i>Act out the poem, draw it, or create a soundscape for a dramatic reading of the poem.</i> • <i>Write musical rhymes or helpful diagrams with pictures that would help someone remember the different states of matter and types of each one.</i>

Learning Profile Strategy: Entry Points

Strategy Summary

Entry points is a strategy developed by Howard Gardner for inviting students into a topic, concept, or text through one of six doorways. The idea is to leverage a learning preference to pique students' interest in what they are about to study. Each entry point is derived from Gardner's multiple intelligences. The table below shows each entry point in Gardner's strategy, some student-friendly names, and a brief description. The framework can also be used to design culminating tasks, which are better characterized as exit points.

Entry Point (Gardner, 2006)	Student Friendly Name (Doubet & Hockett, 2017)	Brief Description	Potential Task Starters
<i>Narrational</i>	Storytelling	Use story or narrative structure to communicate ideas or principles.	<i>Read or listen to a story about..../Tell a story about....</i>
<i>Logical</i>	Giving Reasons	Use reasoning, argument, or cause-and-effect relationships.	<i>Make a case that..../Prove..../Decide how..../Provide a good explanation for....</i>
<i>Quantitative</i>	Looking at Numbers	Provide or examine data; examine numerical relationships.	<i>What do these numbers say about...?/Find the connection between....</i>
<i>Existential</i>	Thinking Big	Pose or think about big questions about life and the world; consider big ideas; make meaning.	<i>Think about..../Here's a big question for you:</i>
<i>Aesthetic</i>	Activating Senses	Emphasize sensory or surface features; activate the five senses.	<i>Use your five senses to..../Describe how ___ looks, tastes, smells, feels, or sounds....</i>
<i>Experiential</i>	Using Experience	Use a hands-on approach, deal directly with materials (physically or virtually), experience simulations, give personal explanations.	<i>Sort..../Classify..../Use..../Imagine that you're in this situation..../You're a ___ faced with the problem of....</i>

Differentiation Connection

Differentiation of Content	Differentiation of Process	Differentiation of Product
The materials, text, or information can fit the entry point or task parameters. For example, spoken, written, or video narratives; various pictures, images, or symbols; and graphs or sets of numbers.	Each entry point draws on different kinds of thinking processes for taking in and making sense of content.	Adjusting the product/output of each task (e.g., written, drawn/sketched, spoken, selected).

Design Guidelines

- 1. Select a concept, topic, skill, or text.** If using entry points at the beginning of the unit, this would be the essence of what the unit is about. For example, *folktales and myths*, *romantic poetry*, *Ancient Greece*, *statistics*, *The U.S. Constitution*, or *cellular systems*. Entry points do not need to connect to shared learning goals (KUDs). The topic is sufficient to unite the tasks.
- 2. Brainstorm entry points.** Use the names and descriptions of each entry point to generate task ideas. Focus on the kind of *thinking* each one calls for—not on a kind of product. Note: It is not necessary to come up with tasks for all six entry points; use only those that make sense. Several options can be enough. Consider using tasks that are similar to or sampled from tasks that all students will be exposed to or worth with later in the unit.
- 3. Refine and balance the tasks.** Make sure that the entry point tasks are equalized in cognitive demand and time required. Remember that the purpose is to give tastes or previews of unit content, not to engage students in elaborate activities or product development.

Implementation Guidelines

- **Student choice.** Let students choose from entry point options, or give students an entry point task based on a simple survey derived from the task options. Students can work independently or in partners, depending on task design.
- **Labeling and reinforcing tasks.** Label the tasks with the student-friendly name or other engaging terms that elevate the status of all task options. Use icons or images (on the screen, on cards) to show the essence of each task (e.g., a book for storyteller, a head for thinking big).
- **Managing task responses.** Bring students together in same-task pairs or group and/or mixed-task pairs or groups to share their ideas. Follow with a whole-class discussion to synthesize key ideas and generate questions for the upcoming unit.

Entry Points Examples

Topic: Argument

These tasks are designed to pique student interest in and get them thinking about argument in the context of reading, analyzing, and crafting powerful arguments.		
Storytelling Task Tell a story either about a time that you won an <u>argument</u> or that you lost an argument. Include details about the circumstances and how you felt afterward.	Reasoning Task Construct a simple but powerful <u>argument</u> that supports or refutes this claim: <i>An argument has to have a winner and a loser.</i>	Numbers Task Write a short list of tips called Top 10 Techniques for Crafting a Compelling <u>Argument</u> . Be sure to that your #1 way is your idea for the best way.
Think Big Task What makes an <u>argument</u> powerful? <i>More</i> powerful? <i>Less</i> powerful? Can an argument ever be <i>too</i> powerful?	Senses Task Make an <u>argument</u> that the lunch period at this school should be 10 minutes longer than it is. Try to use language and ideas that appeal to the five senses.	Experience Task Work with a friend to write and act out situations show the difference between having an opinion or making an <u>argument</u> .

Topic: Hero

Prior to a study of the hero or heroic literature, students consider their own definitions of hero through one of these five tasks.		
Storytelling Task Examine the diagram of the classic <u>hero</u> cycle/journey. Brainstorm and be ready to share or act out ideas for a story that takes place in a high school setting that contains these elements.	Reasoning Task Who are the top five <u>heroes</u> of movies and/or literature? Create a bar graph that shows your choices and their heroicness relative to one another. Write a brief paragraph that explains who and what your graph shows, including how you defined who and what a hero is.	Think Big Task How is term <u>hero</u> used in everyday life? Does it have multiple meanings, or just one? Is there a difference between a hero and a heroic act? Develop a concept map or diagram to show your ideas and definitions.
Senses Task Examine the pictures/descriptions of selected comic book superheroes. Consider what is appealing about each one in terms of his/her appearance and superpowers. Decide which one best represents what a <u>hero</u> should look like and be able to do. Or, sketch and annotate a picture of what you would consider to be the ideal superhero.	Experience Task Watch the clip of Katie Couric's interview with Capt. Sully Sullenberger—a U.S. Airways pilot who landed a passenger plane in the Hudson. Discuss and decide whether Capt. Sullenberger is a <u>hero</u> . Be ready to share how you defined hero.	

Topic: World Religions

Students choose an entry point task as a hook into the study of various world religions (or, in modified form, the study of one religion in particular). The tasks may also be used as activities in hook stations, with students visiting three to five stations.

Storytelling Task How did the <u>religions</u> we will be studying originate? Read the narratives provided and identify similarities and differences in how the religions came to be.	Senses Task Examine picture of examples of the places of worship for each of the <u>religions</u> we will be studying. What do the designs of these buildings suggest to you about what each religion believes?	Numbers Task Find out how many people worldwide practice each of the <u>religions</u> we will be studying, as well as including where the highest concentrations of followers reside. What patterns do you see?
Think Big Task Write a list of the big questions about life you think any <u>religion</u> ought to help its followers answer. If there's time, use the resources provided to begin to finding one religion's answers to your questions.	Experience Task Read Wikipedia's summaries of the rites and/or practices of the <u>religions</u> we will be studying. Generate a list of questions that the summaries raise about how followers of each religion live their daily lives.	

Topic: American Revolution

These entry points tasks are well-suited to stations designed as hooks at the beginning of study of the American Revolution. Students can choose a certain number of stations to visit or can rotate through all with a partner.		
Storytelling Task Watch this three-minute animated song that tells a story of the American <u>Revolution</u> . (Your teacher will give you the lyrics.) What does this cartoon tell you about <i>why</i> the American Revolution happened?	Reasoning Task This cartoon was published in a newspaper during the time of the American <u>Revolution</u> and is now very famous. It depicts a snake cut into pieces, each of which is labeled with the abbreviation of a colony. What do you think it means? Think about the picture <i>and</i> the slogan ("Join or Die").	Numbers Task Look at this infographic on the American <u>Revolution</u> . What are the most interesting or surprising numbers? Which numbers do you have questions about?
Think Big Task What is a revolution? (Look up a definition, if you'd like!) Does a revolution have to involve government? Give examples of kinds of <u>revolutions</u> (big or small) that <u>do not</u> involve war.	Experience Task Give an example of a time in your life when <i>you</i> <u>revolted</u> against someone or something. Include an explanation of against whom or what you revolted, <i>how</i> you revolted, and <i>why</i> .	

Topic: Probability

These five tasks ask students to consider probability in light of this mathematical definition: <i>A number between zero and one that represents the likelihood that an outcome will occur.</i>		
Reasoning Task Can math predict the future? Make a two-column T-chart with YES and NO as the headers. Consider the mathematical definition of <u>probability</u> and generate reasons to support each side.	Numbers Task Find and use data from an article related to <u>probability</u> on FiveThirtyEight.com. Expand the definition of probability on the board using numbers and ideas from the article.	
Think Big Task Here is a big question for you: Does a <u>probability</u> <i>have</i> to be expressed as a number between zero and one Why or why not? What's the difference (if any) between probability and odds?	Senses Task Use hands-on manipulatives (e.g., dice, coins) to come up with demos that show the mathematical definition of <u>probability</u> at work.	Experience Task Generate a list of all the places you see <u>probability</u> in your life and the world around you. Choose one to two to explain further using the mathematical definition of probability.

Topic: Renewable and Non-renewable Resources

Students do all four of these entry points tasks, which are delivered via Padlet, with a partner as part of an introduction to energy resources.

Storytelling Task Read the article that tells the story of how a new technology that utilizes renewable energy resources was developed. Be ready to share the highlights with a peer.	Reasoning Task Watch the video about our dependence on non-renewable resources. Use the problem-solution organizer to summarize the content of the presentation. Be ready to share what you hear and wonder.
Numbers Task Review the data on the U.S.'s dependence on various energy resources. Come up with three things these data say for sure and three things that these data leave us unsure about.	Experience Task Sort the pictures related to energy resources into two categories: renewable and non-renewable. Check your work with the answer key provided. Then, decide what characteristics the resources in each category share. Add additional examples.

Learning Profile Strategy: Tri-Mind**Strategy Summary**

Tri-Mind is a strategy based on Robert Sternberg's Triarchic Theory of Intelligence, which views intelligence as having three components, all three of which are necessary to be what Sternberg calls successfully intelligent.

- **Analytical (Schoolhouse) Intelligence:** Analyzing, comparing/contrasting, seeing the parts and the whole, examining cause and effect, and thinking logically or sequentially. This kind of intelligence is emphasized in traditional school instruction and on standardized tests.
- **Practical (Street-Smart) Intelligence:** Putting ideas into action, applying knowledge and skills in real situations, carrying out tasks efficiently, and engaging in on-the-spot problem-solving. This kind of intelligence is emphasized in Girl Scouts/Boy Scouts.
- **Creative (Innovative) Intelligence:** Imagining possibilities, thinking out of the box, inventing, innovating, proposing unique solutions, or generating novel insights. This kind of intelligence is emphasized in technology development and in the advertising world.

In Tri-Mind, the teacher designs tasks that emphasize the thinking represented in each of these intelligences and are aligned with the same learning goals (KUDs). Tri-Mind can also be used as a framework for planned varied tasks throughout a unit that all students will complete.

Differentiation Connection

Differentiation of Content	Differentiation of Process	Differentiation of Product
<p>The materials, text, or information can fit the intelligence type or task demands. For example:</p> <ul style="list-style-type: none">• Graphs, charts, bulleted text, informational narratives, and opinions for analytical intelligence• How-to texts or videos, demonstrations, and models for practical intelligence• Designs, images/graphics, and synthesis of multiple sources for creative intelligence <p><i>Note: Content of any kind can be matched with tasks that emphasize each intelligence.</i></p>	<p>Each of the intelligences draws on different kinds of thinking processes for taking in and making sense of content. For example:</p> <ul style="list-style-type: none">• Analyzing, breaking down, and evaluating for analytical intelligence• Applying, adapting, and transferring for practical intelligence• Creating, designing, and synthesizing for creative intelligence	<p>Using products in tasks that employ or require each intelligence. For example:</p> <ul style="list-style-type: none">• Timelines, tables, flow charts, and classifications for analytical intelligence• Letter of advice, how-to list/guide, and note to self for practical intelligence• Role-play, sketch of a new idea, advertisement, and symbol for creative intelligence

Design Guidelines

- 1. Identify the learning goals and purpose of the Tri-Mind tasks.** Articulate what students should understand, know, and be able to do as a result of Tri-Mind tasks. Tri-Mind *can* be used to design hook activities, but it is best reserved for designing sense-making tasks and summative products.
- 2. Design or choose a base task.** Design or select a rich task that aligns with the learning goals and fits the instructional or assessment purpose. Then, ask whether the task emphasizes analytical, practical, and/or creative intelligence.
- 3. Use task frames associated with each intelligence to create other versions of the task.** The frames in the table below are scaffolds for drafting analytical, practical, and creative tasks. Final versions of tasks may sound different, but the prompts are helpful brainstorming tools.

Analytical Task Starters	Practical Task Starters	Creative Task Starters
<ul style="list-style-type: none"> • Evaluate [this situation] for clues about.... • Compare and contrast.... • Give step-by-step directions for.... • Explain how [this] works the way it does. • Describe and show how the parts of.... • Carefully study...to decide the best.... • Prove that.... 	<ul style="list-style-type: none"> • Give advice to someone about.... • Apply what you learned about [this topic] to help [this person/group] solve.... • Teach someone how to.... • In the role of...decide how.... • Decide how someone in the real world could.... • Use your own experiences to.... • Think about how a real person.... 	<ul style="list-style-type: none"> • Come up with a new way to.... • Suppose/imagine that.... • Invent a new way to.... • Write a skit that shows.... • Use words and/or pictures to design.... • Connect [this] to [this] to show.... • Change...so that.... • Predict what might happen if....

4. **Refine and balance the tasks.** Make sure that the Tri-Mind tasks are equalized in cognitive demand and time required for completion.

Implementation Guidelines

- ☑ **Student choice.** Let students choose from Tri-Mind options, or give students the task that matches their preferences on a simple survey. As a general rule, students should work with their preferred intelligence task when content or skills are new or when the task is an assessment. When content or skills are more familiar, the teacher might ask students to work with a task outside their comfort zone.
- ☑ **Labeling the tasks.** Using the terms analytical, practical, and creative with students is not necessary, but doing so can work in the context of teaching them different ways to think about strengths and differences. Label the tasks with the student-friendly name or other engaging terms that elevate the status of all task options, or simply number the tasks.
- ☑ **Management.** Bring students together in same-task pairs or groups and/or mixed-task pairs or groups to share their work. Follow with a whole-class discussion to synthesize key ideas.

Tri-Mind Examples

Topic: Mathematical Problem-Solving

Learning Goals (KUDs)

Know	Understand	Do
<ul style="list-style-type: none">Terms and procedures for specific problem types	<ul style="list-style-type: none">Solving problems means making sense of problems.Skilled mathematicians can solve problems, explain how to solve problems, and model problems.	<ul style="list-style-type: none">Make sense of problems and persevere in solving them.Articulate mathematical ideas.

Context: These tasks provide three ways to engage in problem solving and the Standards for Mathematical Practice. (The KUDs above are broadly written and not grade-level specific.) Students can solve the same problem or different problems that are tiered for readiness.

Analytical Task	Practical Task	Creative Task
Solve the problem. Then, give someone else step-by-step directions for how to solve it. Include how the person can tell if they're right.	Solve the problem. Then, come up with a list of practical tips (do's and don'ts) for solving this <i>kind</i> of problem.	Solve the problem. Then, come up with another problem like it for someone else to solve. Use different numbers and a different situation.

Topic: Interpreting Data (Scatter Plots)

Learning Goals (KUDs)

Know	Understand	Do
<ul style="list-style-type: none">Bivariate data is data that has two types of variables, usually that are thought to be related.Patterns of association in bivariate data: clustering, outliers, positive or negative association, linear association, and nonlinear association	<ul style="list-style-type: none"><u>Patterns of association</u> describe <u>relationships</u> between bivariate measurement <u>data</u>.Straight lines are widely used to <u>model</u> <u>relationships</u> between two quantitative <u>variables</u>.	<ul style="list-style-type: none">Construct and interpret scatter plots and two-way tables for bivariate measurement data.Describe patterns of association in bivariate data.For scatterplots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the

closeness of the data
points to the line.

Context: T In partners, students 1) collect data from their classmates on who has assigned chores at home [or another variable of interest] and three other bivariate measures of their choice (e.g., gender, having a curfew, having a sibling), and 2) construct a scatterplot and two-way table for each set of quantities, 3) explain the patterns of association in each one, and 4) (for linear associations), fit a straight line and informally assess the model for goodness of fit. Then, choose one Tri-Mind task.

Analytical Task	Practical Task	Creative Task
Write a brief evaluation in which you use your data, scatterplots, and tables to argue for or against parents assigning chores to their children. (You can also decide to argue that the data is inconclusive.) Include list of questions that the patterns in your data <i>raise</i> but don't answer. Suggest additional measures that could be collected and analyzed to inform a parent's decision.	Use your data, scatterplots, and tables to design a lesson that teaches someone else how to construct and interpret scatter plots for bivariate measurement data. Your lesson should reveal what <i>you</i> understand about patterns of association <i>and</i> be instructive to others.	Choose one set of your bivariate measures—the one with the strongest pattern of association, perhaps? Collect additional data from more students to see if this pattern holds up. (You decide the how and the who.) Then, come up with a creative way to communicate your findings with the class that incorporates scatterplots and two-way tables.

Topic: Characterization Journal Prompts

Learning Goals (KUDs)

Know

- *Characters* interact with the conflict and move the plot forward through their actions. Characters can be more simple/more complex, flat/round, and dynamic/static.
- An *inference* is a conclusion drawn from prior knowledge and evidence or clues from text.

Understand

- Readers use seen and unseen details from the text and their own knowledge to make inferences (about characters, about what the author is saying).

Do

- Analyze characters in a story using key details.
- Refer to details and examples from a text when referring to what a text implicitly and explicitly says.

Context: These tasks are designed for shared or differentiated texts. Students can choose from the three tasks, or all students can complete the analytical task and choose from the practical or creative task as a part 2.

Analytical Task

What misunderstandings or misconceptions could someone have about this character? (The someone could be a reader of the story, or another character in the story.) Generate a list. Then, correct these misconceptions using evidence from the text.

Practical Task

What advice does this character need at this point in the story? Counsel him/her based on your understanding of him/her and other characters, as well as the events of the story. Your advice should be based on evidence from the text.

Creative Task

What will this character do or say next? Make predictions about the character's future decisions and actions, based on what he/she has done (or not done) so far. Your predictions should be rooted in evidence from the text.

Topic: Evaluating Evidence-Based Scientific Claims

Learning Goals (KUDs)

Know

- Terms related to scientific arguments: *claim, evidence, reasoning, valid, relevant, sufficient*

Understand

- Credible scientific claims are supported with relevant and sufficient evidence and valid reasoning.
- Articles about scientific research have a different perspective than original research report articles.

Do

- Delineate and evaluate the specific claims in a text, assessing whether the reasoning is valid and the evidence relevant and sufficient.

Context: These tasks are designed to use with mainstream media articles on scientific research. Students can read the same article or select from/be assigned different articles based on interest or readiness.

Analytical Task

Part 1: All students complete

- Use a chart, diagram, or table to depict and analyze the strengths and weaknesses of the scientific claims, evidence, and reasoning in this article.
- Include an explanation that reflects your analysis and the conclusions you're drawing.

Practical Task

Part 2: Choice A

- Write a multi-paragraph, formal email to [the editor, author, scientist] regarding how reasonable and well supported you believe the scientific claims are.
- Be sure to cite and address the claims, evidence, and reasoning.

Creative Task

Part 2: Choice B

- Imagine that you will interviewing [this author, scientist] on your radio or television show regarding the scientific claims and evidence in the article.
- Generate a list of questions that probe his/her claims, evidence, and reasoning. Explain why you are asking each question—that is, what in or about the argument is prompting you to pose each question.

Topic: Source Credibility**Learning Goals (KUDs)****Know**

- Criteria for source credibility (e.g., accuracy, validity, authorship, timeliness, integrity of information)
- Examples of credible versus un-credible sources

Understand

- Readers must determine source credibility. (Not all sources are created equal!)

Do

- Evaluate source credibility.
- Interpret criteria for and the process of determining source credibility.

Context: These tasks are designed as a formative assessment activity following lessons on source credibility. All students complete the analytical task, which can be differentiated for readiness using sources that vary by reading level or complexity. Tasks can also be adapted to use with historical accounts/sources, with trustworthiness substituting for credibility.

Analytical Task***Part 1: All students complete.***

Go to the sources that have been bookmarked for you. Decide which one is the most credible. In your analysis, justify your choice by citing features of all of the sites.

Practical Task***Part 2: Choice A***

What advice would you give to younger students who need help figuring out whether a source is credible? Express your advice in terms and in a form that your audience would understand. (And be sure to use examples that are a good fit for the grade!)

Creative Task***Part 2: Choice B***

Come up with an engaging way to help other students your age tell a credible source from an un-credible source. Your audience should walk away with clarity about what to look for—and look *out* for!

Topic: Protestant Reformation (Comparing & Contrasting Historical Figures)

Learning Goals (KUDs)

Know

- Acts and claims of key figures in the Reformation (e.g., Luther, Calvin, Erasmus, and Tyndale)
- Causes and effects of problems and struggles in the Catholic church in this era

Understand

- Key figures in the Reformation attempted reconciliation between their perspectives on God's Word and the Church's actions.

Do

- Compare and draw conclusions about the beliefs, motives, and actions of historical figures.

Note: Although these tasks are content-specific, their essence is readily transferable to other figures/eras

Analytical Task

Compare and contrast the teachings and significant acts of Protestant theologians and scholars of the Reformation in order to decide whose beliefs and actions were the most challenging to the status quo in the Catholic Church at the time. Design your own graphic organizer for your comparison. Present your claim with convincing evidence to a small group of classmates and have them rate their agreement/disagreement.

Practical Task

Consider what Protestant theologians and scholars of the Reformation would say to a friend who is increasingly discontented with the Catholic Church. Based on what each man did and believed about reforming the Church, what would be their message and guidance? Craft a thoughtful response from each person that is true to his stated convictions.

Creative Task

Imagine and write (and/or stage) a face-to-face or online conversation between the major Protestant theologians and scholars of the Reformation. Capture their areas of agreement and disagreement, especially when it comes to how they would have seen as the Catholic Church's biggest problem(s) at that time, from their perspective. Be creative in the conversation but avoid too much filler.

Learning Profile Strategy: Thinking Caps

Strategy Summary

Thinking caps (Tomlinson & Sousa, 2014) is a variation of Edward DeBono's *Six Thinking Hats*, a strategy developed for problem-solving discussions in the business world. Students use various thinking caps to discuss an issue, question, or problem. For example, ideas for a school- or classroom-level change, the best design for an experiment, or whether an author's argument is convincing. The goal of thinking caps is to arrive at a set of agreed-upon solutions or conclusions related to the topic at hand. Students participate in the discussion wearing one of five caps.

Blue Cap	Yellow Cap	Green Cap	Orange Cap	Red Cap
Values facts, information, and data	Intuitive; trusts his/her feelings or gut; concerned with the feelings of others	Imagines possibilities; thinks creatively; looks for innovative solutions	Thinks practically; brings people together to solve the problem	Looks for problems and flaws (red flags) in suggestions; cautious

Differentiation Connection

Differentiation of Content	Differentiation of Process
<ul style="list-style-type: none"> Students take in (i.e., watch, read, hear) different information and ideas prior to the discussion. Teachers conduct different small-group thinking caps discussions focused on various topics or issues. 	<ul style="list-style-type: none"> Students volunteer for the thinking caps that they want to wear. They stay in the cap for the duration of the discussion or switch caps mid-discussion. Teacher pairs or groups students heterogeneously or homogeneously by thinking cap strength to come up with a solution or complete a task.

Design Guidelines

1. Begin with a central idea, key question, or understanding goal for all students to discuss or problem solve.
2. Decide which thinking caps to use. Use only the caps that fit the topic and purpose.
3. Have students meet in similar-cap partnerships for brief discussion before participating in mixed-cap discussion.

Implementation Guidelines

- ☑ **Introducing thinking caps.** Give context for thinking caps by discussing the meaning of the phrase put on your thinking cap, including the idea that there are different kinds of thinking that people can do, especially when it comes to solving a problem. Provide a brief overview of each thinking cap and have students brainstorm friends, family members, and characters or figures who best show each kind of thinking.

☑ **Managing thinking caps.** Strategies for managing thinking caps include the following:

- Have students make caps from colored paper to wear during discussion to help remember their roles.
- Use thinking caps first in whole-class discussion, with all students wearing the same cap, to model the purpose of each one. A fishbowl model or concentric circles structure can also be used to introduce and model the thinking caps working together.
- The sound bites below can also be copied on colored paper and used to train or remind students about what each role involves.

Blue Cap	One fact we know is.... The numbers show that.... The information says.... According to [the story, the author, the article]....
Yellow Cap	I'm feeling like.... I feel that.... I wonder how ____ would feel about.... My gut says....
Green Cap	What about this idea? Here is a new thought.... I can imagine.... One possibility is....
Orange Cap	In real life.... I see a connection between.... That would work because.... What ____ is saying makes sense with....
Red Cap	Red flag! That's a good idea, but what about...? One problem I see is.... We should be careful about....

Thinking Cap Examples

Thinking caps inquiries and discussions are applicable across disciplines for goals such as:

- ☐ Investigating or probing a current issue
- ☐ Exploring an essential question
- ☐ Generating a solution to a problem
- ☐ Interpreting data, findings, or results
- ☐ Analyzing causes and effects
- ☐ Designing an experiment
- ☐ Making the case for or against an idea
- ☐ Debating the merits or themes of a text

Examples of questions related to the subject-specific topics follow:

<p>ELA</p> <ul style="list-style-type: none"> • How effectively does the author...? • What course of action should this character follow? • What are the strengths and weaknesses of...? • What is the author really trying to say about...? • Is power corrupts the theme of the text? • Whose fault is/it when...? • How faithful was the film to the book? Does it matter? 	<p>History/Social Science</p> <ul style="list-style-type: none"> • How justified was the decision to...? • Who were/are the winners and losers in...? • What might've happened to [this people group, that civilization, that settlement]? • What is the historical evidence for and against...? • How will future generations judge...? • Do these documents support the conclusion that...?
<p>Sciences</p> <ul style="list-style-type: none"> • How can science be used to change people's minds about...? • Do these results make sense? Can they be replicated? • What would the next version of this design look like? • Given this scientific law/principle, why...? • Can science solve the problem of...? To what extent? • If science can..., should it? Where are the lines? 	<p>Mathematics</p> <ul style="list-style-type: none"> • What are all the ways this problem can be solved? Is there a best way? • How should these data be represented graphically? • Is this proof correct? Where are the flaws? • When wouldn't that strategy work? How do we know? • To what real-life situations would this apply? • What is the relationship between...?

Learning Profile Strategy: Visual/Auditory/Kinesthetic-Tactile (VAK)

Strategy Summary

VAK describes three modes for taking in, processing, and absorbing information. Input associated with each one follows:

- **Visual:** text, numbers, images, graphics, models, videos, flowcharts, diagrams, tables, re-enactments
- **Auditory:** voice, audio and video recordings, speeches, lectures, interviews, music, rhymes/chants
- **Kinesthetic-Tactile:** skits, mimes, games, experiences, demonstrations, manipulatives, hand-on models/materials, movement

In the absence of disability or impairment, all people take in information and ideas in these ways.

Differentiation Connection

Differentiation of Content	Differentiation of Process	Differentiation of Product
Content is adjusted for VAK preferences (e.g., presented with visuals, through voice [teacher's, someone else's], and/or through a hands-on activity).	Instructional delivery or tasks incorporate materials or questions that ask students to evaluate through looking, through listening, or through doing, feeling, or experiencing.	Tasks provide product options that are associated with VAK preferences. For example, students are asked to express what they have learned through visuals, audio recording, or acting it out.

Design Guidelines

There are three main ways to use VAK in planning:

- **VAK (multi-modal) lessons.** In this approach, teachers consider the ways they might incorporate visual, auditory, and kinesthetic-tactile models and experiences through instruction. A lesson on the equal sign might start with a tactile experience like putting counting cubes on a balance scale, saying and hearing the equations they model out loud, and then seeing or writing those equations.
- **VAK (multi-modal) tasks.** A task that all students do and incorporates some combination of visual, auditory, or kinesthetic means of taking in or expressing ideas is best thought of as a *multi-modal* task, rather than a differentiated task. For example, if students are asked to make a list of important facts about a famous person after reading a picture book and watching a short video on the person, the task infuses visual and auditory learning, but it is not differentiated.
- **VAK (differentiated) tasks.** Using VAK to create differentiated tasks involves planning three versions of the task that are united by common learning goals (KUDs): one visual, one auditory, and one kinesthetic.

The chart below shows examples of how students can acquire, make sense of, and express content in visual, auditory, or kinesthetic-tactile ways.

Examples	Visual	Auditory	Kinesthetic Tactile
Acquiring and making sense of content or skills	<ul style="list-style-type: none"> • Reading or seeing text, numbers, or images • Watching a video • Examining a graph, table, flowchart, or diagram • Writing words down/taking notes • Using pictures/logos to see key ideas 	<ul style="list-style-type: none"> • Hearing explanations, stories, narratives • Hearing/watching audio/video recordings • Listening to a speech or interview • Hearing key ideas and vocabulary repeated 	<ul style="list-style-type: none"> • Playing a game • Manipulating or exploring a physical or virtual model • Enacting a skit • Participating in a simulation • Seeing/using props • Sorting and classifying (physically or virtually) • Moving during learning

	<ul style="list-style-type: none"> Analyzing before and after examples 		
Expressing/ Producing	<ul style="list-style-type: none"> Creating or selecting visual images or products to depict/explain ideas Making a timeline 	<ul style="list-style-type: none"> Writing rhyme, song, chant, spoken word Delivering an explanation, speech, presentation (live, via recording) 	<ul style="list-style-type: none"> Creating a game Making a model Writing and delivering a skit Giving a hands-on demonstration

Implementation Guidelines

- ☑ **Labeling students.** Research does not support the idea of diagnosing learners as visual, auditory, or kinesthetic, or that students must be taught in a certain style to maximize their achievement. All teachers should consider various ways that content might be presented in visual, auditory, or kinesthetic-tactile modes.
- ☑ **Learning goals and VAK.** When giving visual, auditory, and kinesthetic options for acquiring or making sense of content, take care that students are targeting the same KUDs. If it seems like students who engage with a visual option, for example, are getting more, less, or something different, consider whether the lesson or task should be differentiated.

VAK Examples

Topic: Adding and Subtracting Positive & Negative Integers

Clothespin Football: A Multi-Modal Game <i>Created by Jessica Hockett and Chris Short</i>	
Skill	Adding and subtracting numbers with fluency
Object	To score goals at either end of a number line by adding and subtracting numbers
Materials and Assembly	In each plastic bag: <ul style="list-style-type: none"> One die and one stack of played cards (face cards removed). Two clothespins (Option: teacher or students decorate with team colors or logos) One laminated number line (0–20), folded at 10. Set of directions and referee card
Number of Players	One to five students. Options: <ul style="list-style-type: none"> <input type="checkbox"/> One player: Play against self with one or two clothespins; aim to reach goal and score <input type="checkbox"/> Two players: Play against each other, first to reach goal wins OR play for a certain length of time <input type="checkbox"/> Two players + referee: Third student is referee.

	<input type="checkbox"/> Two teams of two players + referee: Students on a team take turns rolling and reason together to check accuracy of operation; can be played with or without a referee.
VAK Connection	<p>This game has visual, auditory, and kinesthetic elements. The die, face cards, and number line provide visual reinforcements and representations of number and place value. The requirement for students to say the operation aloud is an auditory element. Using the die, place cards, and clothespin movement are kinesthetic components that make the minds-on aspect the skill hands-on.</p> <p>The variations also offer different ways for the teacher or students to adjust the game for interest, learning preference, or readiness.</p>

Are you ready for some football???

Clothespin Football Directions

1. Place each clothespin on 10 to start.
2. Choose to play with a die or playing cards.
3. Player 1 says "add" or "subtract" to choose an operation. Player rolls die or draws a card and moves that number of places on the number line. Turn ends with Player saying the operation out loud.
4. Player 2 does the same thing for his or her turn.
5. Winner is the first player to get to or pass 0 or 20 "scores". This person can be the winner, or you can play "football style," for a set amount of time with points for each "touchdown."

VARIATIONS

(backside of directions card)

If you choose to use any of these variations, decide BEFORE you start to play. Make sure all players and the Ref (if there is one) know and agree!

- ☐ Players choose their goal (0 or 20) and score only when reaching their goal.
- ☐ Players choose to add or subtract AFTER rolling.
- ☐ Player rolls two dice or draws two cards, chooses to add or subtract those numbers, and then chooses to add or subtract the sum or difference to the number where the clothespin is placed.
- ☐ Use a -10 to 10 or -20 to 20 number line.
- ☐ **Super Challenge!** Use a -10 to 10 or -20 to 20 number line with a red die & green die to represent a negative number (red) and a positive number (green). Add numbers for the operation sum. Then, add the sum to the number where the clothespin is placed.

The Ref

Are you The Referee? Here's your job:



- ✓ Make sure each player says the operations out loud before moving a clothespin.
- ✓ Check the accuracy of each operation.
- ✓ Make sure that each player moves the correct number of places.
- ✓ Confirm that a goal has been scored.
- ✓ Be the scorekeeper.




Topic: Poem

Analysis




Context: This is a set of visual, auditory, and kinesthetic experiences for analyzing or making sense of a poem. The example is “Oranges” by Gary Soto, but the prompts are transferable to many poems. Teachers can incorporate these ideas alongside sets of text-dependent questions, assign or have students select prompts for partner-/small-group discussions, offer prompts for journal responses, set-up stations at which students take in and express their thinking about the poem in a variety of ways, or organize tasks into a choice board or learning menu format.

Poem: “Oranges” by Gary Soto	
Visual Experiences 	Taking it In <ul style="list-style-type: none"> • Watch a video of the poem. Are the images similar to what you see in your mind? What would you change or do differently based on your interpretation of the poem? • Look at the poem without reading every word. What do you notice about the poem’s shape? About what letters, letter combinations, or words appear most often in the poem? About what or how punctuation is used in the poem? Think about how those things affect the meaning of the poem. Expressing/Producing <ul style="list-style-type: none"> • What is the most visually powerful line in (or part of) the poem? Why do you say so? Make a case. • Select images (from a teacher-provided folder, from print or online sources) to accompany or help convey the story/experience in this poem. • Draw what you see in your mind’s eye when you read this poem. Then, explain your drawing (orally or in writing) using the poem itself. Compare your drawing with someone else’s.
Auditory Experiences 	Taking it In <ul style="list-style-type: none"> <input type="checkbox"/> Whose or what voice(s) do you hear narrating the poem? Who is the person (e.g., adult/child, male/female, older/younger)? <input type="checkbox"/> Record and listen to yourself read the poem. What sounds or ideas do you hear? Note the rhythm and any repetition (of sounds, of ideas). <input type="checkbox"/> Listen to a recording of someone else read the poem. What sounds different or new to you? What are you hearing (or seeing) now that you did not before? Expressing/Producing <ul style="list-style-type: none"> <input type="checkbox"/> Set this poem to music (your own melody or one from another song). Be ready to explain your choice.

	<input type="checkbox"/> Use sounds that you record or capture and/or sound files online to create a sound backdrop for the poem. These can be sounds played in the background for a dramatic reading of the poem or sounds that convey the story or experience in the poem without the words.
Kinesthetic Experiences 	<p>Taking it In</p> <input type="checkbox"/> Cut out the lines in the poem. Try rearranging them in different ways. What do you notice about the kinds of words the poet uses? <input type="checkbox"/> Switch the order of the stanzas in the poem. Does the meaning of the poem change? What do you now see or understand about the poem? <p>Expressing/Producing</p> <input type="checkbox"/> Create a new version of the poem with rearranged lines and words or phrases. Compare your version to the original. How are they similar and different? Share your version with a peer to see if they agree. <input type="checkbox"/> Act out the poem, either alone or with others. Use simple props if you would like (and if they are available). Be ready to explain your interpretation to an audience.

Topic: Historically Significant Addresses and Speeches

Context: Across standards in ELA and history/social science, students are asked to analyze and understand historically significant addresses and speeches, such as Lincoln's *Gettysburg Address*, King's *I Have a Dream*, Roosevelt's *Four Freedoms*, and others. This table shows possible tasks for students to learn about, read, listen, and make sense of these or other seminal texts. Either the teacher or students can select from these possibilities to design a multi-model sequence or a set of differentiated tasks.

Visually	Aurally/Orally	Kinesthetic-Tactile
		
<ul style="list-style-type: none">Analyzing draft versions of the addressInspecting and comparing transcribed text with the actual document (or with another document)Evaluating features of the original and/or written documentColor-coding the address according to a given schemeUsing emoji or hashtags as logographic cues (Beers, 2003) when reading the addressSelecting or creating images/visuals to complement the addressMaking a flowchart or visual representation of the address	<ul style="list-style-type: none">Hearing self or peers read the address aloudListening to audio recordings of the address (e.g., by an actor/professional, of when it was delivered)Watching a video about or related to the addressSelecting and listening to music that could be associated with the address (e.g., music from the time period, music that fits the themes)Recording oneself reading all or portions of the addressAdapting/updating the language in the address for the contemporary ear	<ul style="list-style-type: none">Selecting and organizing concrete symbols or artifacts related to the addressRearranging or selecting (e.g., using scissors, using copy/paste on an electronic device) words, phrases, or sections from the address to find patterns, detect themes, and see new meaningActing out all or parts of the addressUsing mime or movement to express or interpret the narrative or themes of the addressEditing the address to fit given constraints

See learning menus section of this handbook for an example that applies some of these ideas to a menu on George Washington's 1796 Farewell Address.

Learning Profile Strategy: Multiple Intelligences (MI)

Summary

Multiple Intelligences (MI) refers to a theory developed by Howard Gardner. According to the theory, human intelligences comprise at least eight capacities:

Verbal Linguistic	Logical Mathematical	Musical Rhythmic	Visual Spatial
Ability to perceive and generate spoken or written language	Ability to appreciate and use numerical, abstract, and logical reasoning to solve problems	Ability to create, communicate, and understand meanings made out of sound	Ability to perceive, modify, transform, and create visual and/or spatial images
Bodily Kinesthetic	Interpersonal	Intrapersonal	Naturalistic
Ability to use all or part of one's body to solve problems or fashion products	Ability to recognize, appreciate, and contend with the feelings, beliefs, and intentions of other people	Ability to understand oneself, including emotions, desires, strengths, and vulnerabilities, and to use such information effectively in regulating one's own life	Ability to distinguish among critical features of the natural environment

Gardner says that all normally developing people have these abilities to one extent or another and will achieve some levels of skill in each one, even though some people will accomplish more than others in each intelligence area. There are several strategies that can be used to plan classroom instruction and assessments using MI: entry points (described earlier in this handbook), **8 Ways** and **The Profiler** (described below).

Differentiation Connection

Differentiation of Content	Differentiation of Process	Differentiation of Product
The materials, text, or information can fit the intelligence type. For example: <ul style="list-style-type: none">Sets of numbers/data (L/M)Narrative accounts (V/L)Written or recorded interviews (Inter)	Each of the intelligences draws on different kinds of thinking processes for taking in and making sense of content. For example: <ul style="list-style-type: none">Manipulating language (V/L)Using body movements (B/K)	Using products in tasks that employ, require, or are associated with each intelligence. For example: <ul style="list-style-type: none">Maps (V/S)Rhymes/chants (M)Pantomime (B/K)Cause-effect chart (L/M)Oral retelling (V/L)

- | | | |
|---|--|---|
| <ul style="list-style-type: none"> • Diary entries (Intra) • Photographs/Images (V/S) | <ul style="list-style-type: none"> • Talking with or about others (Inter) • Analyzing facts (L/M) • Visualizing (V/S) | <ul style="list-style-type: none"> • Diary entry (Intra) • Skit (Inter) |
|---|--|---|

Design Strategy: 8 Ways (Armstrong, 2009)

This strategy is a direct translation of the MI framework. The teacher identifies the topic or goal(s) to be taught or assessed and then uses the eight intelligences as filters through which to consider different ways students might show their understanding. It isn't necessary to use all eight intelligences. Refer to the full model to brainstorm ideas, and then develop and select only those that best fit the goals, timeframe, and students.

Intelligence	Associated Verbs	Example Task Starter	ELA Example using characters in <i>The Great Gatsby</i>
Verbal-Linguistic	Read about, write about, talk about, listen to	In your own words, write/talk about...	...what makes Gatsby a tragic figure?
Logical-Mathematical	Quantify, think critically about, analyze, compare, experiment with	Make a comparisons between... On a scale of 1–10, how...	...Nick and Gatsby. ...self-centered is Daisy? Why do you say so?
Visual-Spatial	See, draw, visualize, color, mind-map, depict, make a metaphor/analogy	Draw a quick sketch that shows...	...what Daisy wants most.
Bodily-Kinesthetic	Build, act, touch, dance, move, pantomime	Act how you think...	...Daisy should tell Tom about her and Gatsby.
Musical-Rhythmic	Sing, rap, listen to, compose, express, lyricize, make a musical comparison about	Compose a rhyme or short song using a familiar tune that...	...captures Nick's feelings about Jordan.
Interpersonal	Teach, instruct, collaborate on, interact with	Collaborate with a partner to decide...	...whether the risks Gatsby took were worth it.
Intrapersonal	Connect to own life, make personal choices about, reflect, self-evaluate	Describe in a few words your personal feelings about...	...times when you act and feel like Nick.

Intelligence	Associated Verbs	Example Task Starter	ELA Example using characters in <i>The Great Gatsby</i>
Naturalistic	Connect/compare to living things and natural phenomena	Decide which animal is most like...	...Tom.

Design Strategy: The Profiler (Doubet & Hockett, 2015)

The profiler associates each multiple intelligence with a profession or real-world endeavor. The teacher considers what a person in that job does and designs a task that puts the student in that role, using the associated skills to address a challenge or solve a problem related to the content and learning goals. The idea is to generate two to four substantive and engaging options that make sense for the grade level and topic—not to offer eight tasks. Teachers can use the names of these or other related occupations, or simply consider these occupations to generate task or prompt ideas.

Writer Storyteller Commentator Comedian Editor <i>Verbal-Linguistic</i>	Architect Designer Photographer Map Maker <i>Visual-Spatial</i>	Analyst Engineer Statistician Lawyer Detective <i>Logical-Mathematical</i>	Actor Builder Choreographer Mime Coach/Player <i>Bodily-Kinesthetic</i>
Listening, speaking, writing, storytelling, explaining, teaching, using humor, convincing, analyzing, using language, grasping syntax and semantics	Understanding charts and graphs, strong sense of direction, sketching, painting, creating visual metaphors, designing objects, interpreting visuals	Problem solving, classifying and categorizing, finding relationships among abstract concepts, handling long chains of reasoning and data	Dancing, physical coordination, sports, hands-on experimentation, using body language, crafting, acting, miming, building, moving
Lyricist Composer Performer Musician <i>Musical-Rhythmic</i>	Poet/Songwriter Artist Blogger Memoirist/Essayist <i>Intrapersonal</i>	Counselor Mind-reader Tour guide Host (Talk Show, Party) <i>Interpersonal</i>	Ranger Botanist Conservationist Zookeeper <i>Naturalistic</i>
Singing, playing musical instruments, whistling, recognizing and remembering tonal patterns, composing, understanding tonal	Recognizing personal strengths and weaknesses, reasoning, awareness of and ability to evaluate thinking and feelings,	Seeing things from other perspectives, listening, communicating, empathizing, conflict resolution, understanding others'	Recognizing, observing, collecting, organizing, sorting, classifying, and caring for elements of nature; noticing

and rhythmic structure	understanding role with others	feelings, motivations, and intentions	changes in environment
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Implementation

- ☑ **Student choice.** Let students choose from MI tasks or give students the task that matches their preferences on a simple survey. As a general rule, students should work with their preferred intelligence task when content or skills are new or when the task is an assessment. When content or skills are more familiar, the teacher might ask students to work with a task outside their comfort zone.
- ☑ **Labeling the tasks.** Using the formal names of each intelligence with students isn't necessary, but doing so can help students understand that abilities and strengths are varied. Label the tasks with the student-friendly name or other engaging terms that elevate the status of all task options, or simply number the tasks.
- ☑ **Management.** Bring students together in same-task pairs or groups and/or mixed task pairs or groups to share their work. Follow with a whole-class discussion to synthesize key ideas.

The Profiler Examples

Topic: Evaluating Scientific Claims about a Product

Learning Goals (KUDs)

Know

- A scientific *claim* is a testable statement or conclusion that answers an initial question.
- *Empirical evidence* is information gathering through observation or experimentation.

Understand

- Valid scientific claims are supported by credible and relevant empirical evidence.
- Scientific claims about the performance of a product can be explicit or implicit.





Do

- Make an argument that supports or refutes the advertised performance of a device, process, or system based on empirical evidence concerning whether or not the technology meets relevant criteria and constraints.

Context: In this activity, teacher displays an advertisement for a device or product related to the scientific processes or systems that students have been studying. The ad can be real and make accurate claims, be real but make misleading claims, or be a parody ad, like this [one](#). Students analyze the ad in partners using the following questions:

- What does the ad claim that the device/product can do?
- What do these claims imply about the device/product, scientifically?
- What evidence would we need in order to decide whether these claims are true?

The teacher provides related evidence and/or gives students guidance for locating such evidence (i.e., online, in the textbook). Alone or in partners, students select a profiler task through which to make their argument about the advertisement.

 <p>Editor Imagine that this ad is a <i>draft</i> version. You're the marketing editor and are reviewing the ad before it goes to print. Based on your analysis of the ad's scientific claims, argue for or against printing this ad. Cite empirical evidence and use valid reasons to support your argument. If revisions are warranted, propose some. Write directly on or annotate the ad to support your written explanation.</p>	 <p>Lawyer You are a lawyer who works for the company that is going to publish this ad. Your job is to review it and make sure that the ad refrains from making false claims (especially the kind that could lead to lawsuits). Based on the empirical evidence you've analyzed, are the ad's claims valid? Write an argument that supports it or refutes it.</p>
 <p>Blogger You write product reviews for a popular science blog. Does <i>this</i> product do what the ad claims? Write a review that's based on the empirical evidence you've analyzed and on your (imagined) experience with the product. Your goal is to help your reader make an informed decision about whether to believe the claims the ad is making.</p>	 <p>Environmentalist You are the president of an environmental organization. A fellow member saw this ad and sent you an email saying that this product is harmful to the environment, and insists that the organization call for a boycott of the company. Write a response to her that is based on your analysis of the evidence related to the ad's claims. Be clear, and be respectful.</p>

Topic: Measures of Central Tendency

(Adapted from Doubet & Hockett (2015). ASCD reprint permission needed)

Learning Goals (KUDs)

Know

- Differences between *mean, median, and mode*
- How to calculate measures of central tendency





Understand

- All numeral data sets have a middle known as central tendency.
- There is more than one way to measure and describe central tendency; each measure reveals something different about the data set.

Do

- Analyze and apply the differences between mean, median, and mode.
- Determine when and how to use mean, median, and mode.

Context: Students select one task to demonstrate their understanding of central tendency. They share drafts of their work in mixed-task groups and revise based on peer feedback.

 <p>Songwriter <i>(Musical-Rhythmic)</i></p> <p>An educational website has hired you to 1) choose a popular tune that would appeal to middle schoolers and 2) create accompanying lyrics that would help students remember what mean, median, and mode are and when it might be best to use each one.</p>	 <p>Cartoonist <i>Visual-Spatial, Linguistic)</i></p> <p>Draw humorous cartoon story in which the mean, median, and mode of set of data (as numbers) are discussing how and when they would be most useful. Your characters should engage in arguments about which measure of central tendency is the best and why.</p>
 <p>Newspaper Staff <i>(Visual-Spatial/Logical Mathematical)</i></p> <p>Choose a set of data about your school (absenteeism, school lunch purchases, etc.) and create a series of graphs depicting the mean, median, and mode of the data to better illustrate the issue to students, teachers, admin, and parents. Your captions should explain what each (mean, median, and mode) can and cannot depict.</p>	 <p>Diarist <i>(Intrapersonal)</i></p> <p>Write an entry reflecting on your week and the decisions you made/conversations you had. Discuss a situation in which you had to use each (mean, median, and mode) in order to make decisions or to help others do so. Be sure to discuss your thought process—how you knew when to use each mode.</p>

Topic: Conflicting Information in News Articles

Learning Goals (KUDs)

Know

- The difference between *bias*, *perspective*, and *emphasis*
- Structure and purpose of *inverted pyramid*
- 5Ws of news reporting






Understand


- All news is reported from a certain perspective.
- Wise consumers of news compare, question, and attempt to reconcile different accounts of the same event.

Do

- Analyze a case in which two or more texts provide conflicting information on the same topic.
- Identify where the texts disagree on matters of fact or interpretation.

Context: All students read three teacher-provided news articles, each of which provides a different (and/or conflicting) account of the same event(s). Students work in pairs to identify the five W's (who, what, where, when, why, how) as presented in each article using a graphic organizer. Then, students select one of the profiles for re-reading and processing the articles independently or in same-profile pairs or trios. Students then meet in mixed-role groups to distill their ideas about where the articles agree and disagree and what questions each one's coverage raises.

Profile	As You Re-Read
 <p>Journalism Professor <i>Focus on the structure and order of the content</i></p>	Dissect the order in which the content is organized/presented in each article (what comes first, next, etc.) Determine how or if each article uses the inverted pyramid style and if they use it similarly or differently.
 <p>Fact-Checker <i>Focus on what does & doesn't sound factual</i></p>	Distinguish statements and phrases that are factual from those that are not. Use different-colored highlighting to keep track and visualize. Star anything that sounds like speculation or conjecture.
 <p>Detective <i>Focus on bias in presentation or emphasis</i></p>	Detect signs of biased presentation in each article—in the headlines, images, and body. Look for red flags such as loaded language, use of slang, exaggerations, and understatements.
 <p>Linguist <i>Focus on specific kinds of word choices</i></p>	Pay special attention to the verbs and adjectives that each article uses to describe the same things. Underline the verbs and circle the adjectives if it's helpful. Note the differences of the strength or tone of the words.
 <p>Mathematician <i>Focus on numbers</i></p>	Note any numbers or quantities that each article uses. This might include percentages, dates, or references to research findings, data, dates, sizes,

	time, levels, amounts, or degrees. Consider whether there is more than one way to state these.
 <p>Ombudsman <i>Focus on integrity of information</i></p>	Inspect the articles for language that seems misleading, unwise, or not as cautious as it could be. Also, mark statements or information that come from a questionable, unnamed, or unclear sources.

Topic: Differences in Perspective

Learning Goals (KUDs)

Know

- Similarities and differences in the two perspectives under study
- Relevant facts and terms

Understand

- Understanding different perspectives informs and shapes our own perspective.
- Perspective is developed and refined through knowledge, experience, and other people.

Do

- Evaluate different perspectives on a topic, issue, text, etc.
- Identify and articulate a perspective relative to perspectives examined.

These learning goals are intentionally broad. Additional or different goals would vary by content focus.

Context: Students work with a partner to show differences in the perspectives or views of two contemporary or historical figures, politicians, scientists, artists, religious figures/leaders, characters in a literary text, entities, or adherents to a particular school of thought or philosophy. After their products in small- or whole-group, the class discusses similarities and differences among their representations of the different perspectives. In closing, students do a quick write of their *own* perspective—based on what they’ve learned and understand to this point.





Podcast Host & Guest (Interpersonal, Verbal-Linguistic)

Plan/write and record a lively, engaging five- to seven-minute podcast segment that informs an audience of your peers about the different perspectives of _____ and _____. As partners, you can be a host and a guest, or two guests. Either way, make the what and why of each perspective clear.



Playwright-Actors (Bodily-Kinesthetic, Verbal-Linguistic)

Write and dramatize a scene between _____ and _____ discussing their two different perspectives. Make sure your scene clearly shows what each person believes why. You’ll perform your scene for a peer audience who will guess who is who (or who has which perspective). Simple costumes and props optional.

 <p>Lyricists/Poets (<i>Musical-Rhythmic</i>) Write either one or two songs or poems that show the differences between the perspectives of _____ and _____. Include what each claimed or believed, and why, and be ready to perform/deliver your work to an audience of peers.</p>	 <p>Designers (<i>Visual-Spatial</i>) Show the differences in the perspectives of _____ and _____ as two design plans. Your plans could represent their thinking as two houses, two machines, two pieces of furniture, or something else. Write a clear explanation of your designs that you will present to an audience of peers.</p>
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Note: These tasks are written so that teachers can tailor them to specific content. Rather than focus on perspectives of two people or groups, the tasks can be modified to emphasize different perspectives on an issue, topic, solution, idea, etc. (versus people who have or hold those perspectives).




Topic: The Hero's Journey

(Based on a lesson by Holly Hertberg-Davis. Used with permission.)

Learning Goals (KUDs)

Know	Understand	Do
<ul style="list-style-type: none">• Elements of the classical hero's journey• Vocabulary related to heroic literature (e.g., <i>archetype</i>, <i>mentors</i>, <i>tricksters</i>, <i>allies</i>, <i>threshold guardians</i>)	<ul style="list-style-type: none">• Stories in similar genre follow a similar pattern and have comparable themes.• The hero's journey has elements that have remained constant and elements that have changed over time and across forms.	<ul style="list-style-type: none">• Translate or depict the hero journey.• Apply metaphorical thinking.• Interpret foundational literary concepts.

Context: Students have been studying heroic literature through various literary and informational texts, with a focus on the classically-defined hero's journey. They choose one of the tasks below to translate that journey to a contemporary, personal, or alternative context.

Profile	Task and Guidelines
Storyteller 	<ul style="list-style-type: none">• Create a short story in which the main character is forced into a heroic role for which he or she is not naturally well suited. The plot/conflict of your story should take the character through some version of the hero's journey.• Annotate your story to show the stages of the hero's journey.• Write a one to two-paragraph explanation of how your story reflects the classical hero's journey and/or a modified version of the cycle that you create to reflect your story.
Musicologist 	<ul style="list-style-type: none">• Select pieces of music from any genre that could be musical metaphor for the hero's journey. Aim for 10-15 minutes' worth of music.• Use the classical hero's journey as a lens through which to interpret the music. Visually depict the journey as conveyed in the music selections. You can modify the classical cycle as you see fit to reflect the musical journeys in each piece.• Write a one to two paragraph explanation of your depiction for <i>each</i> visual.
Film Critic 	<ul style="list-style-type: none">• Show how or if the classical hero's journey holds up in modern cinematic depictions.• Select two films that you believe represent heroic journey stories. (Check your film selections with your teacher first—certain films are too obvious and therefore off-limits.)• View the films. Visually depict the hero's journey as portrayed in the film. Modify the classical cycle as you see fit to reflect the journeys the heroes you've chosen. A one to two paragraph explanation of your depiction should accompany <i>each</i> visual, further revealing what (if any) modifications you made to the classical cycle and why.

Description:

- This is six groups of prompts for reading, analyzing, and/or discussing text, framed using profiler occupations.
- Prompts can be featured on role cards, be selected and displayed on a screen, or copied for students to put in a notebook or folder. Not all roles or prompts apply to all reading selections.
- The teacher (and/or student) should choose roles and prompts that are the best fit for the text and purpose. The specific standards with which individual prompts align vary based on how the prompts are tailored.

Mind-Reader



- ☐ What is this character thinking right now?
- ☐ What would this character say about...?
- ☐ What are the character's true motives?
- ☐ What does the author really want you to understand or "see" right now?
- ☐ What is the author's bottom line about...?
- ☐ Get inside the mind of the author to figure out...
- ☐ How is/are _____ feeling about....?
- ☐ How might another reader [with this background] view....?

Counselor



- ☐ What advice would you give the [author, character]?
- ☐ How should the conflict/situation/key questions/issues be resolved?
- ☐ Come up with insightful questions for _____ about....
- ☐ What would you say to [a character, the author] to motivate him/her to...?
- ☐ Make a prediction about what will happen if...
- ☐ Step into the shoes of...

Commentator



- ☐ As you read, use sticky notes to make give your own “color commentary” in the margins.
- ☐ Give a “play-by-play” account of...
- ☐ Capture the parts that you think best show...
- ☐ Let someone inside your mind as you read by...
- ☐ Give a overview or “bird’s eye view” tour of the text thus far. Bring the person who is just “tuning in” “up to speed” with the most important ideas, people, events, etc.

Private Investigator



- ☐ Look for clues about...
- ☐ Prove [or disprove] that...
- ☐ Gather evidence of...
- ☐ Argue for or against the idea that..
- ☐ Interrogate...
- ☐ Ask tough questions of [the author, the character, the text] about...
- ☐ Use reasoning to show the connection between...
- ☐ What words or phrases in the text *best* show...?

Editor



- ☐ Give feedback to the author about...
- ☐ Tell the author what you think about...
- ☐ What would you “fix,” change or do differently in this text/story? Why?
- ☐ What is the most (or least) powerful _____ in this text/story?
- ☐ How clear is...?
- ☐ Does the author do a “good job” of...?
- ☐ What do you notice about...?

Appendix: Differentiation Strategies and Examples

Differentiation Lesson-Planning Menu

Learning Goals		
Know Goals	Understand Goals	Do Goals
<ul style="list-style-type: none"> What facts, vocabulary, terms, concepts, and other information should students acquire? 	<ul style="list-style-type: none"> What insights, principles, big ideas, “a-has” should students to walk away with, no matter what? Start with “<i>Students will understand <u>that</u>...</i>” 	<ul style="list-style-type: none"> What skills should students attain (e.g., thinking skills, skills in the discipline, organizational skills)?
Pre /Formative Assessment Evidence		
<ul style="list-style-type: none"> What prompts/questions/problems will I use to discover where students are relative to the learning goals? 	<div> <input type="checkbox"/> Entry/Exit Ticket <input type="checkbox"/> Frayer Model </div> <div> <input type="checkbox"/> Survey <input type="checkbox"/> Graphic Organizer </div> <div> <input type="checkbox"/> Inventory <input type="checkbox"/> In-class activity </div> <div> <input type="checkbox"/> K-W-L <input type="checkbox"/> Notebook check </div> <div> <input type="checkbox"/> Observation notes <input type="checkbox"/> Self-assessment </div> <div> <input type="checkbox"/> Interview <input type="checkbox"/> Diagnostic assessment </div> <div> <input type="checkbox"/> Conferencing notes <input type="checkbox"/> Quick Quiz/Check-In </div> <div> <input type="checkbox"/> Homework <input type="checkbox"/> Test </div> <div> <input type="checkbox"/> Discussion <input type="checkbox"/> Project </div> <div> <input type="checkbox"/> Performance Task <input type="checkbox"/> Portfolio </div> <div> <input type="checkbox"/> Hand Signals <input type="checkbox"/> Other: _____ </div> <div> <input type="checkbox"/> Sticky Notes </div> <div> <input type="checkbox"/> White Board Response </div>	
Lesson Sequence		
Launch	How will I launch the lesson?	Potential DI Handbook Strategies
	This can involve <ul style="list-style-type: none"> Hooking students’ interest in the lesson topic, concept, or skill Setting the stage, or providing a meaningful context for the content Making connections to students’ prior knowledge and experiences, previous lessons, and/or an ongoing focus A problem or challenge can pose for students to think about Making explicit the lesson purpose or direction Posing an essential question 	<input type="checkbox"/> KWL <input type="checkbox"/> ThinkDots <input type="checkbox"/> Entry Points <input type="checkbox"/> Tri-Mind

Acquisition	<p>How students acquire content and skills?</p> <p>This can include:</p> <ul style="list-style-type: none"> • Modeling • Explaining • Revealing/Uncovering • Directing • Demonstrating • Conducting shared inquiry • Reading (shared, small-group, independent) • Playing video/audio 	<p><i>Potential DI Handbook Strategies</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Graphic Organizers <input type="checkbox"/> Role Cards: Looking Lenses <input type="checkbox"/> Stations <input type="checkbox"/> Jigsaw <input type="checkbox"/> Learning Menu <input type="checkbox"/> Contract <input type="checkbox"/> Agenda
Sense-Making & Practice	<p>How will students make sense of and practice the content and skills?</p> <p>This can include:</p> <ul style="list-style-type: none"> • Discussing • Gathering information • Guided or Independent Practice • Exploring • Investigating • Researching • Problem-Solving • Role-Playing 	<p><i>Potential DI Handbook Strategies</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> ThinkDots <input type="checkbox"/> Tiered Tasks <input type="checkbox"/> Graphic Organizers <input type="checkbox"/> Thinking Caps <input type="checkbox"/> Role Cards: Looking Lenses and Discussion Duties <input type="checkbox"/> Stations <input type="checkbox"/> Contract <input type="checkbox"/> Agenda <input type="checkbox"/> Jigsaw <input type="checkbox"/> Learning Menu <input type="checkbox"/> RAFT <input type="checkbox"/> TriMind <input type="checkbox"/> MI: 8 Ways, The Profiler <input type="checkbox"/> Interest Center <input type="checkbox"/> Choice Grid <input type="checkbox"/> VAK Tasks
Application and Transfer	<p>How will students apply or transfer what they've learned (In this lesson or a future lesson)?</p> <p>This can include</p> <ul style="list-style-type: none"> • Problem-Solving • Role-Playing • Designing • Producing 	<p><i>Potential DI Handbook Strategies</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Tiered Tasks <input type="checkbox"/> Learning Menu <input type="checkbox"/> Contract <input type="checkbox"/> Agenda <input type="checkbox"/> RAFT <input type="checkbox"/> TriMind <input type="checkbox"/> MI: 8 Ways, The Profiler <input type="checkbox"/> Choice Grid <input type="checkbox"/> VAK Tasks

Synthesis/Sharing	<p>Will you ask students to share or synthesize (i.e., bring together and make new meaning from) their work? What will they do?</p> <p>This can include:</p> <ul style="list-style-type: none"> • Partner, small-group, or whole-class discussion • Completing a new task • Responding to questions 	Closure	<p>How will you wrap up and bring the lesson to a satisfying close?</p> <p>This can include:</p> <ul style="list-style-type: none"> • Making a connection between what students have done in this lesson to real-world work, everyday life, upcoming lessons, etc. • Bringing the lesson back to the focus of or essential question driving the lesson • Giving students a chance to reflect or summarize • Assessing students (e.g., administering an exit ticket)
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Evidence of Student Learning

- What evidence of student learning will this lesson generate? What do you anticipate learning or being able to see from this **evidence**? Why? How will drive your decisions in the next lesson or future lessons?

Differentiation

WHAT in this Lesson is Differentiated	HOW this lesson is Differentiated	WHY are those things Differentiated?
<input type="checkbox"/> Content <input type="checkbox"/> Process <input type="checkbox"/> Product <input type="checkbox"/> Combination:	<input type="checkbox"/> Readiness <input type="checkbox"/> Interest <input type="checkbox"/> Learning Profile <input type="checkbox"/> Combination:	

Learning Goals as KUDs

What students should **k**now, **u**nderstand, and be able to **d**o as a result of a task, lesson, or unit?

Topic/Concept: _____ Subject: _____

Related Standards (Codes): _____

<u>K</u>now
<i>Students will acquire this knowledge:</i>
<u>U</u>nderstand
<i>Students will understand that...</i>
<u>B</u>e able to <u>d</u>o
<i>Students will be able to...</i>

Tiered Tasks

Topic: _____ **Grade Level:** _____ **Related Standards:** _____

Learning Goals (KUDs)		
Know	Understand	Do

Context:

Task 1







Task 2







Task 3 (if applicable)

Come Together:

Topic: _____ Grade-Level: _____ Related Standards: _____

Context

Set 1		
		
		

Set 2 (if applicable)		
		
		

Role Cards

Mind-Reader



Try to read or get inside
_____’s mind to figure out...

Connector



Connect _____ to/and
_____. How are they
related?

Clue-Finder



Look/listen for clues about...

Opinion-Giver



Agree or disagree?

Give reasons for your opinion.



Fortune-Teller



Look for clues or hints that might help us make predictions about...



Match-Maker



Find connections between _____
_____ and
_____.

How are they alike and different?



Detective



Capture the parts that best help us understand...



Defender



Agree or disagree? _____

Support your opinion with reasons.

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Philosopher

Analysis Role



Job:

Consider the “big picture”-- overall purpose, essential questions, & connections to important or lasting “truths.”

Lens:

Connect _____ to this idea/
concept/question: _____



Detective

Analysis Role



Job:

Inspect “the details” to arrive at reasonable, evidence-based conclusions.

Lens:

Search for “clues” about _____
_____ in order to decide
_____.



Lawyer

Analysis Role



Job:

Prove whether or not a certain allegation or assertion is true.

Lens:

Gather “evidence” that either supports or refutes
the following claim: _____



Director

Analysis Role



Job:

Identify parts that illuminate or bring to life a certain idea or aspect of the narrative or purpose.

Lens:

Capture or quote the “scenes,” moments, parts, or
ideas that you think shed the most light on
_____.



Psychologist

Analysis Role



Job:

Get “inside the mind of” someone (e.g., author/
speaker, character, figure) to discern motive or
purpose.

Lens:

Determine _____’s purpose in or
motive for _____.



Architect

Analysis Role








Job:

Evaluate how something (e.g., a text, an argument, a
speech) is designed—the structure, the word choice,
the syntax--how those elements influence each other
and work together to convey ideas.







Lens:

Evaluate _____ to figure out
_____.





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Bring Up Ideas 	Listen Respectfully 	Stay on Topic 
Ask for More Details 	Give Examples 	Think About Our Understanding 

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<ul style="list-style-type: none"> • “One thought I had was...” • “Another idea is...” • “What do you [the group] think about...?” 	<ul style="list-style-type: none"> • “I agree because...” • “I disagree because...” • “I heard you say _____. That connects to what _____ said because _____.” 	<ul style="list-style-type: none"> • “Does that relate to what we are discussing?” • “I think we’re off topic.” • “Let’s get back to our point.” 
<ul style="list-style-type: none"> • “What do you mean by that?” • “Could you give me another example?” • “I think I see your point. Can you say more?” 	<ul style="list-style-type: none"> • “On page __, it says.... I think that shows...” • “What do you think the author means by...?” • “This part is powerful because...” 	<ul style="list-style-type: none"> • “Are we lost?” • “Does this make sense to everyone?” • “What questions do we have?” 

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<h2 style="text-align: center;">Orchestrator</h2> <p>During Discussion:</p> <ul style="list-style-type: none"> BEGIN the discussion. Use the question(s) that have been has posted as a starting point. Make sure the discussion doesn't get off topic. Bring the discussion to a CLOSE when time is called. <p>Soundbites:</p> <ul style="list-style-type: none"> "Let's start by..." "Can we get back to...?" "What about...?" "Let's end by..." 	<h2 style="text-align: center;">Includer</h2> <p>During Discussion:</p> <ul style="list-style-type: none"> Make sure that all group members contribute to the discussion and feel included. <p>Soundbites:</p> <ul style="list-style-type: none"> "What do you think about that, _____?" "I agree/disagree with what you said, _____, because..." "I want to hear what _____ thinks..." "Wait, _____, I think you might have just interrupted _____." 
<h2 style="text-align: center;">Prober</h2> <p>During Discussion:</p> <p>Make sure that all group members back up their opinions, ideas, feelings, and observations by giving details, examples, and explanations.</p> <p>Soundbites:</p> <ul style="list-style-type: none"> "Can you give an example?" "Do you remember where that is/was? Can you show us?" "How is that related to what we read?" "That's interesting! How did you figure that out?" "What part is that from (or in)?" 	<h2 style="text-align: center;">Pacer</h2> <p>During Discussion:</p> <ul style="list-style-type: none"> Make sure that the discussion moves at a good pace. "Refresh" the discussion when you feel like it's lagging. <p>Soundbites:</p> <ul style="list-style-type: none"> "We've talked a lot about _____. Can we also talk about...?" "We have ____ more minutes, so let's also talk about..." "I'm also wondering about..." "Here's something else to think about..." "It sounds like we agree/disagree about..." 

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Agenda

Agenda for _____ **Day(s)** _____

With the Teacher



Meet for _____ at
_____ a.m./p.m.

Bring _____.

With a Friend



Friend: _____

☐ _____ at
_____ a.m./p.m.

☐ _____ at
_____ a.m./p.m.

Just Me!



When there's extra time...

☐ Finish _____

☐ Practice _____







☐ Start _____



Reminders:

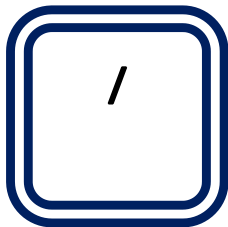


Agenda Cards

 Map Work Do: Due: <input type="checkbox"/> Done _____ Initials	 Math Games Do: Due: <input type="checkbox"/> Done _____ Initials
 Science Do: Due: <input type="checkbox"/> Done _____ Initials	 Writer's Workshop Do: Due: <input type="checkbox"/> Done _____ Initials
 Computers Do: Due: <input type="checkbox"/> Done _____ Initials	 Reading Do: Due: <input type="checkbox"/> Done _____ Initials

This Week's Agenda

CONFER WITH TEACHER



- ☐
- ☐
- ☐

COLLABORATE



- ☐
- ☐
- ☐

COMPLETE INDEPENDENTLY



- ☐
- ☐
- ☐

CONSUME OR PRODUCE (DOWNTIME TASKS)



- ☐
- ☐
- ☐

Task Contract

Name: _____ Focus: _____ Date(s): _____ Contract for _____

Directions:

Task:

Task:

Task:

Task:

I will work on my tasks...

I will work...

I will complete these tasks
by...


I will work hard and do my best! Your Name _____

I will help you do your best! Teacher _____



Super Stars Contract

Directions:

One-Star Tasks

	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>

Two-Star Tasks

	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>

TOTAL STARS: _____

Due on:

Monday	Tuesday	Wednesday	Thursday	Friday

Student

Teacher

Super Stars Contract with Activity Descriptions

Super Stars Contract for _____
Activity Descriptions

Directions:



Math Facts Contract

Name: _____ Timeframe: _____

Circle the operation(s) you will be practicing.

+ - x ÷

What number range will you work with? _____

Select the games you’re practicing.

- ☐
- ☐
- ☐
- ☐
- ☐
- ☐
- ☐
- ☐
- ☐

Game Write the name of the game you will play.	Tally Use tally marks to show how many times you did this.	Self-Assessment Make a face to show how helpful this game was to your learning the facts.
		☹
		☹
		☹

Student & Teacher Initials (when planned): _____

Student Signature (when completed): _____

Independent Reading Contract

Use the paper or e-version of this contract to plan and keep track of your independent reading. (Add rows based on your goal number.) You & I will access this during each reading conference.

My Goal for Number of Books Read This Year: _____

_____ *I will work hard to reach this goal!* _____ *I will work hard to support you!*

Required Genre			
<input type="checkbox"/> Graphic Novel Title & Author: My Rating:	<input type="checkbox"/> Mystery Title & Author: My Rating:	<input type="checkbox"/> Adventure Story Title & Author: My Rating:	<input type="checkbox"/> Sci-Fi/ Fantasy Title & Author: My Rating:
<input type="checkbox"/> Biography Title & Author: My Rating:	<input type="checkbox"/> Historical Fiction Title & Author: My Rating:	<input type="checkbox"/> Narrative Poetry Title & Author: My Rating:	<input type="checkbox"/> How-To Title & Author: My Rating:
Free Choice			
<input type="checkbox"/> Genre: Title & Author: My Rating:	<input type="checkbox"/> Genre: Title & Author: My Rating:	<input type="checkbox"/> Genre: Title & Author: My Rating:	<input type="checkbox"/> Genre: Title & Author: My Rating:
<input type="checkbox"/> Genre: Title & Author: My Rating:	<input type="checkbox"/> Genre: Title & Author: My Rating:	<input type="checkbox"/> Genre: Title & Author: My Rating:	<input type="checkbox"/> Genre: Title & Author: My Rating:

Thumbs-Up Homework

Thumbs-Up Homework

Assignment Name/Page Number(s): _____

Choose _____ thumbs' worth of items to do. You are required to do at least one Single Thumbs-Up item and one Double Thumbs-Up item.



Section/Item #s:

Total = _____



Section/Item #s:

Total = _____



Section/Item #s:

Total = _____

On the backside, explain any items you attempted but had trouble completing.

Thumbs-Up Homework

Assignment Name/Page Number(s): _____

Choose _____ thumbs' worth of items to do. You are required to do at least one Single Thumbs-Up item and one Double Thumbs-Up item.



Section/Item #s:

Total = _____



Section/Item #s:

Total = _____



Section/Item #s:

Total = _____

On the backside, explain any items you attempted but had trouble completing.

Jigsaw (Template A)







Topic: _____ Grade-Level: _____ Related Standards: _____

Learning Goals (KUDs)		
Know	Understand	Do
Home Group Launch		
Expert Group 1 Task	Expert Group 2 Task	Expert Group 3 Task
Home Group Synthesis Task		
Closure		

Jigsaw (Template B)

Topic: _____ Grade-Level: _____ Related Standards: _____

Learning Goals (KUDs)		
Know	Understand	Do

Inquiries:	
 Launch	
 Home Groups	
 Expert Groups	
 Home Group Sharing	
 Synthesis Task	
 Wrap-Up	

RAFT

Topic: _____ Grade-Level: _____ Related Standards: _____

Learning Goals (KUDs)		
Know	Understand	Do
Context:		

	Role	Audience	Format	Topic
1				
2				
3				
4				

Choice Grid

Topic: _____ Grade Level: _____ Related Standards: _____

Learning Goals (KUDs)		
Know	Understand	Do
Context:		

Choice 1 Directions	Choice 2 Directions
Choice 3 Directions	Choice 4 Directions

Learning Menu

Topic: _____ Grade Level: _____ Related Standards: _____

Learning Goals (KUDs)		
Know	Understand	Do

Appetizers:

Hooks that invite students into the menu (give them something to nibble on)

Main Dishes

Goal-aligned tasks that all students complete

Sides

Choice-based, goal-aligned tasks

Dessert

Choice-based, goal-aligned tasks

Learning Menu for a Central Text

Text: _____

Learning Goals (KUDs)		
Know	Understand	Do

Context:

Get Your Feet Wet <i>Do one or more to pique your interest and give you some background for the text.</i>
Dive In! <i>Complete all steps to read, analyze, and make sense of the text itself.</i>
Swim Around <i>Choose one task for comparing the text with another text.</i>
Step Out. <i>Choose one way to apply the text [to a context, to a challenge, etc.]</i>

Entry Points

TOPIC: _____ GRADE LEVEL: _____ Related Standards: _____

Context:		
Storytelling Task	Reasoning Task	Numbers Task
Think Big Task	Senses Task	Experience Task

Topic: _____ **Grade Level:** _____ **Related Standards:** _____

Learning Goals (KUDs)	
Know	<div>Understand</div> <div>Do</div>
Context:	
Analytical Task	
Practical Task	
Creative Task	

VAK Tasks

Topic/Skill: _____ **Grade Level:** _____ **Related Standards:** _____

Learning Goals		
Know	Understand	Do
Context:		
Visual Task	Auditory Task	Kinesthetic Task

Multiple Intelligences: Eight Ways

Topic:_____ **Grade Level:**_____ **Related Standards:**_____

Learning Goals (KUDs)		
Know	Understand	Do

Remember: You do not need to use all eight.

Verbal-Linguistic	Logical-Mathematical
Visual-Spatial	Bodily-Kinesthetic
Musical-Rhythmic	Interpersonal
Intrapersonal	Naturalistic

Multiple Intelligences: The Profiler

Topic: _____ Grade Level: _____ Related Standards: _____

Learning Goals (KUDs)		
Know	Understand	Do

Remember: You do not need to use all eight.

Verbal-Linguistic Writer Storyteller Commentator Comedian Editor	Visual-Spatial Architect Designer Photographer Map Maker	Logical-Mathematical Analyst Engineer Statistician Lawyer Detective	Bodily-Kinesthetic Actor Builder Choreographer Mime Coach/Player
Musical-Rhythmic Lyricist Composer Performer Musician	Intrapersonal Poet/Songwriter Artist Blogger Memoirist/Essayist	Interpersonal Counselor Mind-reader Tour guide Host (Talk Show, Party)	Naturalist Ranger Botanist Conservationist Zookeeper