The Connecticut Common Core of Teaching (CCT) Rubric for Effective Teaching 2014

Evidence Guide
Illustrative Examples of Science 9-12

Sample evidence of teacher practice developed by Connecticut educators

CSDE
CONNECTICUT STATE
DEPARTMENT OF EDUCATION

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Connecticut Evidence Guides

A Supplemental Resource to the CCT Rubric for Effective Teaching 2014 and the CCT Rubric for Effective Service Delivery 2014

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- TEAM Mentors
- Teachers — all content areas/grade levels
- Service Providers
- Administrators/Observers
- Instructional Coaches

How can the CT Evidence Guides be used?

- To Prepare Educators
- To Induct Educators into the Profession
- To Coach for Professional Growth and Development
- To Generate Professional Conversations
- To Inform Observation

The *Connecticut Common Core of Teaching (CCT) — Foundational Skills and Competencies (1999),* revised and adopted by the State Board of Education in February 2010, establishes a vision for teaching and learning in Connecticut Public Schools. These standards identify the foundational skills and competencies that pertain to all educators, regardless of the subject matter, field or age group they teach. These competencies have long been established as the standards expected of all Connecticut educators. The *CCT Rubric for Effective Teaching 2014* and the *CCT Rubric for Effective Service Delivery 2014*[1] are fully aligned to those standards and represent the criteria by which educators are prepared, inducted, evaluated and supported throughout their careers.

Observation of educator performance and practice plays a critical role in the educator evaluation and support system. The Connecticut State Department of Education (CSDE) recognizes the importance of meaningful and authentic observations. The Guidelines for Educator Evaluation require that districts provide all evaluators with training and calibration in observation and evaluation and how to provide high-quality feedback. Additionally, evaluators must demonstrate proficiency in conducting evaluations on an ongoing basis.

Collecting objective evidence is essential in helping observers paint a fair and accurate picture of educators' strengths and areas for development. Observation criteria in the *CCT Rubric for Effective Teaching 2014*

1. The *CCT Rubric for Effective Service Delivery 2014* was developed for Student and Educator Support Specialists (SESS), who, by the nature of their job description, do not have traditional classroom assignments, but serve a "caseload" of students, staff and/or families. Student and Educator Support Specialists are referred to as service providers.

focus on the skills that can be directly observed either in the classroom or through reviews of practice. Similarly, the criteria in the *CCT Rubric for Effective Service Delivery 2014* focus on the skills that can be observed in the delivery of service.

Many educators have asked where **Domain 1 — Content and Essential Skills** fits within the *CCT Rubric for Effective Teaching 2014* and the *CCT Rubric for Effective Service Delivery 2014*. Educators are required to demonstrate content and pedagogical skills during their preparation programs. All teachers/service providers are expected to be skilled in common practices such as establishing respectful environments, planning for a range of learners, and engaging students in rigorous and relevant learning; however, how they actually navigate these tasks depends, in large part, on the specific content they teach or service they provide. Teaching requires an understanding of the content and of how learners typically engage with the content. Effective teachers know their content well and can skillfully merge their knowledge about the practice of teaching with their content expertise. Likewise, effective service providers know how to seamlessly integrate their professional knowledge with their ability to deliver their services. The CCT rubrics are designed to evaluate how well a teacher/service provider can use his or her pedagogical/professional knowledge to teach his or her content or deliver services.

To provide more guidance as to what the rubric continuums ***might*** look like in practice for both of the CCT rubrics, the CSDE in collaboration with the RESC Alliance and the Connecticut Association of Schools (CAS), convened multiple workgroups, comprised of teachers, service providers and building leaders throughout the summer of 2014. These workgroups developed grade-level and content-specific samples of observable student and teacher/service provider behaviors that ***might*** be seen or heard during an observation. These *CT Evidence Guides* are presented as a resource to give observers a sense of the content area/grade level being observed. Although they are trained to be effective observers, administrators may have to observe an educator in a content area, grade level, or setting that is outside of their own expertise. These guides are intended to provide a snapshot of sample evidence aligned to the four performance levels for each indicator within the **first three domains** of both of the CCT rubrics.

Please note, Connecticut Evidence Guides:

- **ARE NOT** to be used as a checklist of "look fors."
- **DO NOT** serve as a rubric for evaluation.
- **ARE NOT** an exhaustive list of teacher practices.

The *CT Evidence Guides* **ARE NOT** intended to represent comprehensive evidence, nor are they intended to be used as a checklist or as a rubric. Rather, the *CT Evidence Guides* have been created as a resource for teachers, service providers, mentors and administrators. The CSDE encourages districts to use the *CT Evidence Guides* as a tool for professional development and growth as well as guiding observations. These guides offer opportunities for valuable professional learning as educators work with one another to generate their own examples of evidence aligned to the respective rubric.

As the educator evaluation and support system evolves over time, so will the evidence provided in these guides. As such, the CSDE will be continually eliciting feedback from the field on the CT Evidence Guides to ensure that they are effective, relevant and useful. To provide feedback on any aspect of the CT Evidence Guides please use the following link: Feedback on the CT Evidence Guides.

If you have questions on the *CCT Rubric for Effective Teaching 2014*, please contact Claudine Primack, CSDE Education Consultant, at claudine.primack@ct.gov. For questions on the *CT Evidence Guides for the CT Rubric for Effective Service Delivery 2014*, please contact Kim Wachtelhausen, CSDE Education Consultant, at kim.wachtelhausen@ct.gov.

1: CLASSROOM ENVIRONMENT, STUDENT ENGAGEMENT AND COMMITMENT TO LEARNING

*Teachers promote **student engagement, independence** and **interdependence** in learning and facilitate a positive learning community by:*

Indicator 1a: Creating a positive learning environment that is responsive to and respectful of the learning needs of all students.

	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Rapport and positive social interactions	Interactions between teacher and students are negative or disrespectful and/or the teacher does not promote positive social interactions among students.	Interactions between teacher and students are generally positive and respectful and/or the teacher inconsistently makes attempts to promote positive social interactions among students.	Interactions between teacher and students are consistently positive and respectful and the teacher regularly promotes positive social interactions among students.	There is no disrespectful behavior between students and/or when necessary, students appropriately correct one another.
This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.	**SAMPLE EVIDENCE**			
	Student says, "I don't want to be in his lab group. He always messes up the data." Teacher does not respond to any disrespectful language between students.	Student says to another student, "I don't want to be your lab partner. You are too slow." Teacher responds, "We treat everyone with respect in this classroom. Everyone works at different speeds and we need to respect that." Later, when another student says to a classmate, "You always mess up the measurements," the teacher does not respond.	Student says to another student, "I can help you clean up your lab space." Teacher says, "Thank you, Jen, for helping Liz. If we all chip in, cleanup will go much more quickly."	Student says to another student "I like how you set up your experiment, but I've found that it helps me to label the beakers before I add the solutions."
	Teacher remains at desk and gestures for students to move away from his or her desk when they attempt to ask a question. Teacher ignores requests from lab groups asking for assistance.	Teacher gestures for a student to come to his or her desk when he or she raises their hand with a question but ignores other students exhibiting the same behavior. Teacher assists some lab groups but sighs or gives other lab groups an angry look when they also ask for assistance.	Teacher circulates among the different work groups in class, providing assistance as needed. When a student asks questions, teacher smiles and acknowledges the students. Teacher assists all lab groups. If more than one lab group is seeking assistance at once, the teacher acknowledges the other groups with a smile and responds "I will be right over to help your group when I am finished helping this group."	Students in each lab group listen to and help each other. Collaborative work is completed efficiently with each student being considerate and attentive of classmates in their group. Students in lab groups independently divide tasks and assist each other in those tasks.

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	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Rapport and positive social interactions	Interactions between teacher and students are negative or disrespectful and/or the teacher does not promote positive social interactions among students.	Interactions between teacher and students are generally positive and respectful and/or the teacher inconsistently makes attempts to promote positive social interactions among students.	Interactions between teacher and students are consistently positive and respectful and the teacher regularly promotes positive social interactions among students.	There is no disrespectful behavior between students and/or when necessary, students appropriately correct one another.
	Teacher does not refer to students by name or refers to them by the wrong name. Teacher does not ask students to share personal experiences related to the content	Teacher asks students to make a list of genetic disorders they are interested in learning about but plans to focus on colorblindness no matter what.	Teacher asks students to pick a genetic disorder that they are interested in. Students then complete a mini-research project focused on their individual area of interest.	As students work on a genetics lab, students share their family genetic history: “My mom and brother are colorblind, but my dad and I are not.”
	Teacher calls on the same three students. Teacher acknowledges the work of only one lab group. Teacher only assists one lab group.	When the same three students raise their hands, the teacher says, “Does someone else in class want to share their thoughts?” Then the teacher still calls on one of the three whose hands were raised. Teacher asks all students to share lab data but only writes the data from the “good” lab groups on the whiteboard.	When the same three students raise their hands, the teacher says, “How about someone else who we haven’t heard from yet?” Then the teacher instructs the students, “Turn and talk with your neighbor to share your thoughts before I call on someone to answer the question.” Teacher gives the students an opportunity to share their thoughts in an online forum/discussion board. Teacher has all students share data via a shared document (Google Doc, Excel spreadsheet, etc.).	Students respond to one another’s ideas using positive language: “That’s a great point,” “Your data looks different than mine…let’s see if we can figure out why.”

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	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Respect for student diversity	Does not establish a learning environment that is respectful of students' cultural, social and/or developmental differences and/or the teacher does not address disrespectful behavior.	Establishes a learning environment that is inconsistently respectful of students' cultural, social and/or developmental differences.	Maintains a learning environment that is consistently respectful of all students' cultural, social and/or developmental differences.	Acknowledges and incorporates students' cultural, social and developmental diversity to enrich learning opportunities.
This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.	**SAMPLE EVIDENCE**			
	Some materials only reflect stereotypes. Resources used present a single view on a social issue (i.e., bioethics topics). Female scientists/engineers are not depicted in resources.	Teacher provides the same resources for all students (same textbook, article, etc.). Adaptive technology is not used. Coverage of current science issues does not address them at a global level when applicable. For example, only weather patterns in the United States are discussed or only the use of GMOs in the United States is discussed.	Resources reflect various cultures. Materials (textbooks, videos, articles, etc.) are available in more than one language and at various reading levels. Adaptive technology is used. Materials reflect gender equality in science professions. Science issues are explored on a global level when applicable. Teacher has students research opposing viewpoints of a controversial issue.	Students bring in resources/materials from their own culture to share with the class. Classmates ask questions about resources. Materials produced in other countries are incorporated into the class.
	When discussing diseases and immunity, a student says, "My mother has lupus." A classmate responds, "No one cares." Teacher ignores the comment.	When discussing diseases and immunity, a student says, "My mother has lupus." Teacher asks the student to explain the disease to the class. Afterward, another student comments, "My aunt got West Nile virus." The teacher ignores the comment and continues the lesson.	When discussing diseases and immunity, a student says, "My mother has lupus." Teacher asks the student to explain the disease to the class. Afterward, another student comments, "My aunt got West Nile virus." The teacher asks the student to explain how the aunt contracted the virus.	Prior to a lesson on diseases and immunity, the teacher sends students home with the task of gaining information from their families on diseases they may know about from personal experiences. During class, the students discuss the different diseases and how they can be contracted.

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ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Respect for student diversity	Does not establish a learning environment that is respectful of students' cultural, social and/or developmental differences and/or the teacher does not address disrespectful behavior.	Establishes a learning environment that is inconsistently respectful of students' cultural, social and/or developmental differences.	Maintains a learning environment that is consistently respectful of all students' cultural, social and/or developmental differences.	Acknowledges and incorporates students' cultural, social and developmental diversity to enrich learning opportunities.
	Teacher says to a student, "I know you want to test the effect of acidity but you will test the effect of temperature because it is easier."	Student chooses to test the effect of acidity. Teacher says, "You can't test that," and offers no further suggestions or support. Other students are able to test the variables they are interested in. Student A asks to share his research via a PowerPoint and is allowed to do so. Student B asks to share his research via a PowerPoint and is told he has to do a poster.	Teacher explains that possible variables to test are based on their previous lab experiences (i.e., are they able to safely use the equipment). Each lab group is given three choices of variables to test based on their interests. Teacher gives students multiple options to demonstrate their learning. For example, students can choose whether to create an informational brochure, a poster, or a PowerPoint.	Students self-select lab groups based on their interests. In a lab setting, students propose relevant variables to test that are of interest to them. Students are able to choose how to demonstrate their learning.

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ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Environment supportive of intellectual risk-taking *This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.*	Creates a learning environment that discourages students from taking intellectual risks.	Creates a learning environment in which some students are willing to take intellectual risks.	Creates a learning environment in which most students are willing to take intellectual risks.	Students are willing to take intellectual risks and are encouraged to respectfully question or challenge ideas presented by the teacher or other students.
	SAMPLE EVIDENCE			
	When one student answers questions incorrectly, the students laugh and say, "That's a dumb answer!" The teacher does not respond. The teacher asks, "Who can give me an example of a way to produce electricity?" Students do not respond so teacher goes ahead and gives them the examples.	When one student shares a viewpoint that is different or answers a question incorrectly, the students laugh and teacher says, "It's OK, we all have different opinions/make mistakes sometime," and moves on with the lesson. The teacher asks, "Who can give me an example of a way to produce electricity?" The same four students who have answered all of the other questions raise their hands.	When one student proposes a different viewpoint, the teacher says, "Well, let's think about that for a minute. What evidence could we use to support Luke's claim that genetically modified organisms are beneficial?" The teacher asks, "Who can give me an example of a way to produce electricity?" Fifteen of the 20 students in class raise their hands to participate.	When a student shares a different viewpoint, another student says, "Luke, I see where you are coming from about the agricultural benefits, but have you thought about the ecological consequences of genetically modified organisms?" Student says, "In addition to fossil fuels, what about harnessing wind energy?" Another student responds, "Well, how would installing wind mills impact the native bird population? What about solar power?"

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ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
High expectations for student learning *This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.*	Establishes low expectations for student learning.	Establishes expectations for learning for some, but not all students; OR is inconsistent in communicating high expectations for student learning.	Establishes and consistently reinforces high expectations for learning for all students.	Creates opportunities for students to set high goals and take responsibility for their own learning.
	SAMPLE EVIDENCE			
	Teacher says, "Group 1, I will come over and explain the instructions for how to start calculating rate of change. Everyone else, plug this number when you get to that step"	Teacher says, "Groups 1 and 2, you need to figure out how to calculate rate of change. Groups 3 and 4, I'll give you the numbers when you get to that step."	Teacher says, "You can figure out rate of change. Remember what you have done in all of your classes. Take a look at your graph. What does rate of change look like on it?" Teacher says, "We can work on this together. What do you think the first step would look like?"	Student says, "Let's start figuring this out. I think we need to look at the graph first — does anyone else have an idea about how to calculate rate of change?" Student 2 says "I think I remember talking about this in my math class — let me look it up in my notes!"
	Teacher says, "Complete this worksheet on research skills. Make sure you fill in all the blanks."	Teacher says, "These research skills will help those of you going into science in college."	Teacher says, "Learning how to use your resources to research answers to common questions is an important skill for everyone — you all are capable of becoming better students."	Student says "I saw something on a website and was able to use our research skills to figure out if it was an accurate source or not!"
	Teacher assigns a grade with no comments. Students are not told how to improve.	Teacher provides relevant feedback. Grades are updated only at mid-marking and quarter end.	Students are directed to use published grade data to track their progress in the class. Teacher provides timely and relevant feedback; grades are updated on a bi-weekly basis.	Students set goal at the start of the year. Goals are reflected on at set intervals and adjusted as necessary based on performance data.

1: CLASSROOM ENVIRONMENT, STUDENT ENGAGEMENT AND COMMITMENT TO LEARNING

*Teachers promote **student engagement, independence** and **interdependence** in learning and facilitate a positive learning community by:*

Indicator 1b: Promoting developmentally appropriate standards of behavior that support a productive learning environment for all students.

	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Communicating, reinforcing and maintaining appropriate standards of behavior *This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.*	Demonstrates little or no evidence that standards of behavior have been established; and/or minimally enforces expectations (e.g., rules and consequences) resulting in interference with student learning.	Establishes standards of behavior but inconsistently enforces expectations resulting in some interference with student learning.	Establishes high standards of behavior, which are consistently reinforced resulting in little or no interference with student learning.	Student behavior is completely appropriate OR Teacher seamlessly responds to misbehavior without any loss of instructional time.
	SAMPLE EVIDENCE			
	Students leave aisles cluttered when moving to lab stations. Teacher does not address the issue.	Students move to lab stations. Multiple students leave chairs and bags in aisles. Teacher reminds class to push in chairs and store bags. Some students fix the issue and some do not. Teacher does not bring attention to it again.	Students are focused on their lab investigations. A student has not pushed in her chair and has her bag in the aisle. Teacher reminds her of safety. Student moves her chair and bag.	Student says to another student "Oops, you forgot to move your bag under your desk — let me do it for you this time!"
	Students do not put on their goggles.	Teacher asks students to put on goggles at the start of the lab period. Teacher reminds class as a whole several times when some students continue to ignore the rule.	Teacher says, "Lab group 1 has all their safety gear on and is ready to start!" Teacher points to head to remind students to put goggles on their eyes instead of on their heads.	Student gets goggles for lab group and reminds partners to put them over their eyes as opposed to on top of head. When student in group moves them to top of head, another group member points to them. Student replaces them over the face.
	Teacher/student trips over bags and chairs blocking class aisles. Teacher does not correct students or ask them to fix the problem.	Teacher calls attention to a student "I see your chair is in the aisle, please push it in." Other students have chairs out and the teacher says nothing.	Teacher says, "I saw several people without their goggles on, and with items on the floor. This is opposite of what is in the safety contract and can result in serious injury. Let's talk about what we can do to remind ourselves to push in chairs and keep the aisles clear." Students generate a method of remembering to clear aisles before a lab.	Teacher announces move to lab stations. Students independently get up, get safety gear, push in chairs and push bags under desk, keeping aisles clear and easily accessible.

1: CLASSROOM ENVIRONMENT, STUDENT ENGAGEMENT AND COMMITMENT TO LEARNING

*Teachers promote **student engagement, independence** and **interdependence** in learning and facilitate a positive learning community by:*

Indicator 1b: Promoting developmentally appropriate standards of behavior that support a productive learning environment for all students.

	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Promoting social competence and responsible behavior	Provides little to no instruction and/or opportunities for students to develop social skills and responsible behavior.	Inconsistently teaches, models, and/or reinforces social skills; does not routinely provide students with opportunities to self-regulate and take responsibility for their actions.	When necessary, explicitly teaches, models, and/or positively reinforces social skills; routinely builds students' capacity to self-regulate and take responsibility for their actions	Students take an active role in maintaining high standards of behaviors OR Students are encouraged to independently use proactive strategies[5] and social skills and take responsibility for their actions.
This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.	**SAMPLE EVIDENCE**			
	While discussing controversial topics, students argue with each other. Student says, "That's stupid and wrong!" Teacher does not intervene or respond.	Teacher does not provide language for students who disagree on controversial topics. Teacher intervenes after poor language/communication and says, "Don't respond like that — you know better!"	Teacher introduces language for how to approach controversial topic. Teacher provides topics for practice using protocol and appropriate language.	Students use appropriate language for how to disagree with each other independently. Students monitor each other, and will remind each other to be respectful.
	Half the class is prepared. Teacher stops lesson, and punishes the entire class for being unprepared. All students are required to complete an extra assignment.	Teacher praises the boys for being prepared but does not recognize the girls for the same behavior.	Teacher says, "I know you were late, but thank you for settling in quickly and getting ready to work!"	Student says to student who was late, "We are on page 6 in lecture 1, you can find it on the teacher's website." A late student says, "Thank you for letting me know."

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*Teachers promote **student engagement, independence** and **interdependence** in learning and facilitate a positive learning community by:*

Indicator 1c: Maximizing instructional time by effectively managing routines and transitions.[6]

ATTRIBUTES	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
				In addition to the characteristics of **Proficient**, *including one or more of the following:*
Routines and transitions appropriate to needs of students *This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.*	Does not establish or ineffectively establishes routines and transitions, resulting in significant loss of instructional time.	Inconsistently establishes routines and transitions, resulting in some loss of instructional time.	Establishes routines and transitions resulting in maximized instructional time.	Teacher encourages and/or provides opportunities for students to independently facilitate routines and transitions.
	SAMPLE EVIDENCE			
	Students move from a whole class discussion into collaborative groups in five minutes. The teacher takes another five minutes to distribute materials. The lesson is not completed	Students move from a whole class discussion into collaborative groups in two minutes. The teacher has one student from each group distribute materials while the other students are still moving into groups. Some groups take longer to get started.	Students move from a whole class discussion into collaborative groups. It takes one minute for groups to organize themselves at their stations. The teacher has one student from each group distribute materials while the other students are still moving into groups.	Students move from a whole class discussion into collaborative groups. It takes 45 seconds for groups to organize and begin working at their stations. Materials are already waiting for the students at their stations so they begin working immediately.
	The teacher says, "It's time to turn in your homework." Student says, "Where should we put it?" Some students wander without a clear purpose.	Teacher says, "It's time to turn in your homework." Some students immediately put their homework in an inbox, while another student asks, "Where should we put it?"	Teacher says, "It's time to turn in your homework." The students put their homework in an inbox.	As students enter the classroom, they put their homework in the inbox. Students remind their peers entering to remember to put their homework in the inbox.
	Teacher receives phone call regarding change to the assembly schedule. Teacher does not share information with students. Students start talking to one another about the assembly and why they haven't yet left the classroom. Teacher says, "We're not going to the assembly now. Get out a book to read, and I'll find you something else to do."	Teacher receives phone call regarding change to the assembly schedule. Teacher says, "The assembly has been postponed. Here's what we're doing next. Let's get back to work."	Teacher receives phone call regarding change to the assembly schedule. Teacher announces, "Students, the assembly has been moved to tomorrow. As a result, we are going to complete our pre-laboratory work today so during the next class we can complete our experiment."	Teacher receives phone call regarding change to the assembly schedule. Teacher announces, "Students, the assembly has been moved to tomorrow." A student says, "Why don't we finish our pre-laboratory work today so we can carry out our experiment during the next class?"

2: PLANNING FOR ACTIVE LEARNING

*Teachers plan instruction to **engage students in rigorous and relevant learning** and to **promote their curiosity about the world at large** by:*

Indicator 2a: Planning of instructional content that is aligned with standards, builds on students' prior knowledge and provides for appropriate level of challenge for all students.

	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Content of lesson plan is aligned with standards	Plans content that is misaligned with or does not address the Common Core State Standards and/or other appropriate Connecticut content standards	Plans content that partially addresses Common Core State Standards and/or other appropriate Connecticut content standards.	Plans content that directly addresses Common Core State Standards and/or other appropriate Connecticut content standards.	Plans for anticipation of misconceptions, ambiguities or challenges and considers multiple ways of how to address these in advance.
This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.	**SAMPLE EVIDENCE**			
	Teacher lists all the Connecticut Core and/or Connecticut Science Framework standards in the lesson plan.	Some of the Connecticut Core and/or Connecticut Science Framework standards listed in the plan support the content of the lesson, but other standards listed are not addressed in the lesson content.	Teacher has identified the specific Connecticut Core and/or Connecticut Science Framework standards that will be addressed in the content of the lesson. All lesson activities are designed to improve student understanding of the standards.	Teacher has carefully selected the Connecticut Core and/or Connecticut Science Framework standards for the lesson content based on student needs; all lesson activities and planned assessments are aligned to the specific standards.
	The lesson objective is to "Formulate a testable hypothesis and demonstrate logical connections between the scientific concepts guiding the hypothesis and the design of the experiment." Teacher plans to have students identify independent and dependent variables.	The lesson objective is to "Identify independent and dependent variables in a planned investigation. Students will also identify controls and constants in the investigation" (Connecticut Science Framework D INQ.5). Teacher plans small and whole group discussions to determine the variables and create data tables. Teacher does not plan for instruction on how to identify constants.	The lesson objective is to "Identify independent and dependent variables, in a planned investigation. Students will also identify controls and constants in the investigation" (Connecticut Science Framework D INQ.5). Teacher plans to demonstrate a simple pendulum and will illustrate how one factor can be held constant while others are controlled or measured. Small and whole groups will discuss and share their thoughts, create data tables, and conduct their experiments.	The lesson objective is to "Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic" (Connecticut Science Framework D INQ.10), (CCSS.ELA-LiteracyRST.11-12.8). Following the experiment on the pendulum, the teacher will have students research how clock design has changed over time and present their findings.

2: PLANNING FOR ACTIVE LEARNING

*Teachers plan instruction to **engage students in rigorous and relevant learning** and to **promote their curiosity about the world at large** by:*

Indicator 2a: Planning of instructional content that is aligned with standards, builds on students' prior knowledge and provides for appropriate level of challenge for all students.

	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Content of lesson appropriate to sequence of lessons and appropriate level of challenge *This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.*	Does not appropriately sequence content of the lesson plan.	Partially aligns content of the lesson plan within the sequence of lessons; and inconsistently supports an appropriate level of challenge.	Aligns content of the lesson plan within the sequence of lessons; and supports an appropriate level of challenge.	Plans to challenges students to extend their learning to make interdisciplinary connections.
	SAMPLE EVIDENCE			
	The teacher plans for students to read about energy sources in their textbooks. Next, the students will design Rube Goldberg devices. Lesson plan does not reference any standards.	The lesson objective is for students to explore various sources of energy, with a focus on advantages and disadvantages of each (Connecticut Science Framework 9.3). Teacher plans to assign students a text reading about energy sources. Students will write a summary of what they learned using their new vocabulary words. Reading does not include information about advantages and disadvantages of any of the energy sources.	The lesson objectives are for students to explore various sources of energy, with a focus on advantages and disadvantages of each (Connecticut Science Framework 9.3). Next the teacher will have students conduct online research sources they use in their daily lives. Students then do online research collecting information needed for them to choose one ideal source for human use. Whole groups share the pros and cons of each source and determine the big idea.	The teacher plans for students to extend the lesson to determine the big idea that "Various sources of energy are used by humans and all have advantages and disadvantages" (Connecticut Science Framework 9.3) by reading an article on the economics of green energy and answer questions (Connecticut Science Framework: Scientific Literacy).
	Day 5 in a five-day series of lessons on acid rain pollution; the teacher plans for students to answer questions about pH values.	Day 3 in a five-day series of lessons on acid rain pollution; the teacher plans for students to answer questions about pH values.	Day 1 in a five-day series of lessons on acid rain pollution; the teacher plans for students to complete a planned investigation on pH values. Following an understanding of the pH scale, students will move on to conduct a laboratory experiment testing acid rain corrosion on buildings and structures.	Day 5 in a five-day series of lessons on acid rain pollution; the teacher plans for students to create a PowerPoint or spreadsheet document that illustrates the economic effect of acid rain pollution on the fishing industry.

2: PLANNING FOR ACTIVE LEARNING

*Teachers plan instruction to **engage students in rigorous and relevant learning** and to **promote their curiosity about the world at large** by:*

Indicator 2a: Planning of instructional content that is aligned with standards, builds on students' prior knowledge and provides for appropriate level of challenge for all students.

	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Content of lesson appropriate to sequence of lessons and appropriate level of challenge	Does not appropriately sequence content of the lesson plan.	Partially aligns content of the lesson plan within the sequence of lessons; and inconsistently supports an appropriate level of challenge.	Aligns content of the lesson plan within the sequence of lessons; and supports an appropriate level of challenge.	Plans to challenges students to extend their learning to make interdisciplinary connections.
	The teacher plans to lecture on biopolymers and have the students copy notes from the board.	Teacher plans to lecture. Students will take guided notes. Comprehension questions will be embedded in the lecture.	Teacher plans for students to use information about biomolecules to build 3D models of biopolymers.	Teacher plans to have student read two articles on the topic of application of biopolymers in culinary chemistry and healthy lifestyle. Next, the students will articulate connections between science and the related subject.

2: PLANNING FOR ACTIVE LEARNING

*Teachers plan instruction to **engage students in rigorous and relevant learning** and to **promote their curiosity about the world at large** by:*

Indicator 2a: Planning of instructional content that is aligned with standards, builds on students' prior knowledge and provides for appropriate level of challenge for all students.

	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Use of data to determine students' prior knowledge and differentiation based on students' learning needs *This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.*	Uses general curriculum goals to plan common instruction and learning tasks without consideration of data, students' prior knowledge or different learning needs.	Uses appropriate, whole class data to plan instruction with limited attention to prior knowledge and/or skills of individual students.	Uses multiple sources of appropriate data to determine individual students' prior knowledge and skills to plan targeted, purposeful instruction that advances the learning of students.	Plans for students to identify their own learning needs based on their own individual data.
	SAMPLE EVIDENCE			
	The teacher plans a lesson on stoichiometry. No pre-assessment or prior data was reviewed.	The teacher plans a lesson based solely on previous year's assessment and test data.	The lesson is planned based on prior assessment data, pre-assessment data, current formative assessments and observations of student needs.	Teacher plans for students to use their success criteria to reflect on their progress and determine the next steps.
	The teacher follows textbook and pacing guide to plan lesson. The teacher does not make any adjustments to the plan.	The teacher plans to use one activity for all students to teach stoichiometry.	The teacher plans to have one group complete an activity on stoichiometry that will help them better understand the fundamental concepts, while another group will complete a lab experiment applying the concepts and providing further challenge.	The teacher plans to provide a choice of several different stoichiometry activities and labs for students to select.

2: PLANNING FOR ACTIVE LEARNING

*Teachers plan instruction to **engage students in rigorous and relevant learning** and to **promote their curiosity about the world at large** by:*

Indicator 2a: Planning of instructional content that is aligned with standards, builds on students' prior knowledge and provides for appropriate level of challenge for all students.

	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Literacy strategies	Plans instruction that includes few opportunities for students to develop literacy skills or academic vocabulary.	Plans instruction that includes some opportunities for students to develop literacy skills or academic vocabulary in isolation.	Plans instruction that integrates literacy strategies and academic vocabulary.	Designs opportunities to allow students to independently select literacy strategies that support their learning for the task.
This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.	**SAMPLE EVIDENCE**			
	Teacher plans to provide students with a list of key vocabulary and definitions before beginning the topic of global warming.	Teacher plans to provide students with a list of key vocabulary to define before beginning the topic of global warming.	Teacher plans for students to read several articles about global warming and plans to have students write an explanation using all key vocabulary. After all students have written their explanations, they will discuss them in small groups.	Teacher plans for students to select reading from several articles about global warming and plans to have students complete a project of their choice to demonstrate their understanding of the topic.
	Teacher plans to have students copy definitions for independent and dependent variable.	Teacher plans to have students use technology resources to determine the definitions of independent and dependent variable.	Teacher plans to have students identify the independent and dependent variables of an experiment	Teacher plans to have students write a problem statement that they are interested in exploring (including the independent and dependent variables in their statement).
	Teacher plans to provide students with a preview of vocabulary about climate change. A handout that includes words and definitions is prepared. Teacher plans to provide a handout that explains how to write a problem statement.	Teacher plans to provide students with a task of defining vocabulary words about climate change using their textbook or technology resources. Teacher plans to have students write a problem statement about a demonstration lab.	Teacher plans to provide students with a task of using vocabulary words in an essay the students write about climate change. Teacher plans to have students write a lab report about an experiment they carried out.	Teacher plans to have students create a graphic organizer (format is student choice) before writing an essay on climate change using the vocabulary words. Teacher plans to have students present their laboratory findings (and all necessary experimental information) in a format of their choice instead of a traditional lab report.

2: PLANNING FOR ACTIVE LEARNING

*Teachers plan instruction to **engage students in rigorous and relevant learning** and to **promote their curiosity about the world at large** by:*

Indicator 2b: Planning instruction to cognitively engage students in the content.

	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Strategies, tasks and questions cognitively engage students	Plans instructional tasks that limit opportunities for students' cognitive engagement.	Plans primarily teacher directed instructional strategies, tasks and questions that provide some opportunities for students' cognitive engagement.	Plans instructional strategies, tasks and questions that promote student cognitive engagement through problem-solving, critical or creative thinking, discourse or inquiry-based learning and /or application to other situations.	Plans to release responsibility to the students to apply and/or extend learning beyond the learning expectation.
This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.	**SAMPLE EVIDENCE**			
	Teacher gives students lab questions. Questions can be answered without completion and/or understanding of the laboratory activity.	Teacher gives students lab questions. Most answers are stated explicitly in the lab write-up. Students are asked to write a paragraph summarizing their results.	Teacher gives students questions that are designed to guide their investigations, and lead students to a deeper understanding of the laboratory concept. Students are asked to write an in-depth conclusion at the end of their lab investigation. Teacher gives students a rubric and an exemplar conclusion to guide their writing process.	Students are asked to identify future avenues for investigation based on their conclusions. Teacher has students write a scientific paper (similar in style to a scientific journal article) based on their results, and has students take on roles of editor for each other's papers.
	Teacher plans lab investigation on effect of pineapple enzyme on gelatin gelling. Students are given a checklist of directions and complete the list of steps the same day it was given.	Students are given the lab investigation the day before. A pre-lab quiz is given that asks students to recall the steps of the investigation.	Students are given a problem — does pineapple affect gelatin? Students must identify a mechanism of action of enzyme provided, and are asked to design an investigation to solve the problem. Teacher approves investigation for safety only. Class combines data on shared Google spreadsheet.	After completing the initial investigation, students are asked to create investigations to discover the optimal temperature, optimal pH, and optimal salinity of pineapple enzyme. Students then create a scientific paper and present it in multimedia formats.

2: PLANNING FOR ACTIVE LEARNING

*Teachers plan instruction to **engage students in rigorous and relevant learning** and to **promote their curiosity about the world at large** by:*

Indicator 2b: Planning instruction to cognitively engage students in the content.

	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Instructional resources and flexible groupings support cognitive engagement and new learning. *This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.*	Selects or designs resources and/or groupings that do not cognitively engage students or support new learning.	Selects or designs resources and/or groupings that minimally engage students cognitively and minimally support new learning.	Selects or designs resources and/or flexible groupings that cognitively engage students in real world, global and/or career connections that support new learning.	Selects or designs resources for interdisciplinary connections that cognitively engage students and extend new learning.
	SAMPLE EVIDENCE			
	Teacher does not use student groups; instruction is only at whole class level.	Teacher selects groups where one group member does the majority of group work.	Planned groups are based on student learning needs, skill level, interest surveys, etc.	Planned groups are based on content area strengths/interests, student learning needs, skill level, interest surveys, etc.
	Teacher selects text that is at the middle school level for an Advanced Placement course	Teacher selects a single, level-appropriate text to introduce new topic.	Teacher selects resources to introduce a new concept: current events, informational texts, websites, multimedia digital tools. Teacher's plan includes texts with a range of complexity	Teacher plans for students to make their own interdisciplinary connections by providing time for independent self-directed reading.

2: PLANNING FOR ACTIVE LEARNING

*Teachers plan instruction to **engage students in rigorous and relevant learning** and to **promote their curiosity about the world at large** by:*

Indicator 2c: Selecting appropriate assessment strategies to monitor student progress.

	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Criteria for student success	Does not plan criteria for student success; and/or does not plan opportunities for students to self-assess.	Plans general criteria for student success; and/or plans some opportunities for students to self-assess.	Plans specific criteria for student success; and plans opportunities for students to self-assess using the criteria.	Plans to include students in developing criteria for monitoring their own success.
This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.	**SAMPLE EVIDENCE**			
	Teacher's plan states "Students will draw the carbon cycle." In the plan, under assessment, nothing is listed. Teacher's plan states "Students will read and talk about a specific scientific experimental design."	Teacher plans specific questions related to the lesson but does not determine acceptable responses/likely unacceptable responses. For example, the teacher may ask how carbon is cycled back into the atmosphere but only assumes one correct answer for the question and/or does not specify how many examples constitute a correct response. For example, the teacher asks students to name controlled variables or weaknesses in the experimental procedure but may only identify some of the variables or weaknesses as correct responses; teacher doesn't anticipate other possible correct answers.	Teacher plans specific questions related to the lesson and determines a range of acceptable responses and likely unacceptable responses. For example, the teacher asks students to identify processes that may increase carbon dioxide levels in the atmosphere and recognizes that there will be multiple correct answers and that students will need to support their answers by referencing the carbon cycle. For example, the teacher determines multiple controlled variables and weaknesses that constitute a correct response/incorrect response. Students may use the lab rubric to self-assess their answers.	Teacher provides students with sample diagrams of the carbon cycle and has the students come up with a list of questions about the cycle and/or similarities between the diagrams; students identify the key components of the carbon cycle in order to generate an exemplar depiction. Teacher provides students with scientific experimental designs of varying quality. Students assess which designs should serve as exemplars and justify their choices with evidence from the samples analyzed.
	Teacher plans to have students hand in their responses when they have answered the questions. The only criterion is task completion. For example, students collect data in a lab without any analysis of the data.	Teacher tells the students that after they have collected the data they must graph it.	Teacher tells the students that after they have collected and graphed their data, they must analyze it for trends/how it relates to their hypothesis. Teacher communicates that students must use their data to support or refute their initial hypothesis.	Teacher has students generate criteria for effective graphs, data analysis, and experimental design. Students use their criteria in a peer review exercise in which they constructively critique each group's lab results/experimental design.

2: PLANNING FOR ACTIVE LEARNING

*Teachers plan instruction to **engage students in rigorous and relevant learning** and to **promote their curiosity about the world at large** by:*

Indicator 2c: Selecting appropriate assessment strategies to monitor student progress.

	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Criteria for student success	Does not plan criteria for student success; and/or does not plan opportunities for students to self-assess.	Plans general criteria for student success; and/or plans some opportunities for students to self-assess.	Plans specific criteria for student success; and plans opportunities for students to self-assess using the criteria.	Plans to include students in developing criteria for monitoring their own success.
	Teacher plans to have students turn in their work at the end of class.	Teacher plans time for students to evaluate their work based on limited criteria such as a checklist of lab report components. For example, students may simply check to see that their lab report includes a procedure but are not required to assess the quality of the procedure.	Teacher plans time for students to self-assess their lab reports based on the already shared department rubric. Self-assessment occurs prior to the submission of the assignment.	Teacher plans time for students to peer review each other's lab reports. Students then use feedback from their peers in order to self-assess their responses and revise their work if necessary, based on the agreed-upon student generated criteria.

2: PLANNING FOR ACTIVE LEARNING

*Teachers plan instruction to **engage students in rigorous and relevant learning** and to **promote their curiosity about the world at large** by:*

Indicator 2c: Selecting appropriate assessment strategies to monitor student progress.

	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Ongoing assessment of student learning *This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.*	Plans assessment strategies that are limited or not aligned to intended instructional outcomes.	Plans assessment strategies that are partially aligned to intended instructional outcomes OR strategies that elicit only minimal evidence of student learning.	Plans assessment strategies to elicit specific evidence of student learning of intended instructional outcomes at critical points throughout the lesson.	Plans strategies to engage students in using assessment criteria to self-monitor and reflect upon their own progress.
	SAMPLE EVIDENCE			
	End-of-unit test will be given after the unit is complete.	Teacher plans to use basic questions to assess general understanding of the topic. For example, students may use clicker response systems to anonymously vote as to whether or not they understand a concept. Questions are typically looking for yes/no responses (Do you understand how a bond is formed between 2 atoms?). Teachers may also just ask to see a show of hands as to who understands the day's lesson.	Teacher administers a unit pre-test and analyzes the data to inform instructional planning within that unit. Throughout the unit, the teacher frequently assesses students understanding of the unit through subsequent CFA's, online polling tools, exit slips, writing prompts, etc.	Students self-assess their understanding of the unit concepts via a reflective journal entry or as part of an online discussion forum (i.e., Edmodo).
	A final lab report is submitted, which serves as the only assessment for the lab activity.	In a lab setting, the teacher may check-in with the lab groups to make sure that the procedure is designed correctly/being followed correctly.	Teacher observes and monitors the different steps of a lab activity (the design process, experimental set-up, data collection, analysis) in order to assess student learning during different phases of the experimental design process. For example, students may have to submit experimental designs (and receive feedback on them) before setting up the experiment. Data may be shared with the teacher before analysis occurs in order for the teacher to assess the validity of the data collection methods and redirect if necessary.	Students use the science department lab rubric to analyze their lab reports. They then articulate in writing the strengths of their lab design/report and/or areas of weakness where they need additional support and practice.

3: INSTRUCTION FOR ACTIVE LEARNING

*Teachers plan instruction to **engage students in rigorous and relevant learning** and to **promote their curiosity about the world at large** by:*

Indicator 3a: Implementing instructional content for learning.

	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Instructional purpose	Does not clearly communicate learning expectations to students.	Communicates learning expectations to students and sets a general purpose for instruction, which may require further clarification.	Clearly communicates learning expectation to student and sets a specific purpose or instruction and helps student to see how the learning is aligned with Common Core State Standards and/or other appropriate Connecticut content standards.	Students are encouraged to explain how the learning is situated within the broader learning context/curriculum.
This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.	**SAMPLE EVIDENCE**			
	Teacher hands out articles to students, asks them to read them.	Teacher says, "Today you are going to read articles about GMOs. By the end of the class you will understand at least two different viewpoints."	Teacher says, "Yesterday we learned about genetically modified organisms. Today we are going to look at two articles on the topic. One is from a scientific journal; the second is a press release from a company that produces GMOs. You will read both articles and meet in groups to discuss the credibility and validity of both sources. Choose the article that you think is the most credible and write a paragraph explaining why you chose that one." (CT Science Framework D INQ.2) Read, interpret, and examine the credibility and validity of scientific claims in different sources of information. (CCSS.ELA-LITERACY.RST.9-10.8) Assess the extent to which the reasoning and evidence in a text support the author's claim or a recommendation for solving a scientific or technical problem.	Teacher says, "Using prior knowledge, design an investigation to test the validity of the article authors' claims." Students provide investigation designs that include descriptions of expected results. (CCSS.ELA-LITERACY.RST.9-10.9) Compare and contrast findings presented in a text to those from other sources (including their own experiments), noting when the findings support or contradict previous explanations or accounts.

3: INSTRUCTION FOR ACTIVE LEARNING

*Teachers plan instruction to **engage students in rigorous and relevant learning** and to **promote their curiosity about the world at large** by:*

Indicator 3a: Implementing instructional content for learning.

	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Content accuracy *This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.*	Makes multiple content errors.	Makes minor content errors.	Makes no content errors.	Invites students to explain the content to their classmates.
	SAMPLE EVIDENCE			
	Teacher reverses definitions of independent and dependent variables.	Teacher correctly defines independent and dependent variables, but gives an incorrect example of each.	Teacher says, "In a well-designed, scientifically valid, experiment, you will have at least two variables. One will be the independent variable; another will be the dependent variable." The independent variable is what you manipulate and change in the experiment, for example, if you change the amount of enzyme added to a reaction, or if you change the mass of an object. The dependent variable changes in response to the changes you made to the dependent variable, for example, the amount of product produced in a reaction."	Teacher has students partner up and gives them possible lab-based scenarios. Student groups work to independently synthesize definitions of both independent and dependent variables. Students then refine definitions as a larger class.

3: INSTRUCTION FOR ACTIVE LEARNING

*Teachers plan instruction to **engage students in rigorous and relevant learning** and to **promote their curiosity about the world at large** by:*

Indicator 3a: Implementing instructional content for learning.

	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Content progression and level of challenge *This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.*	Presents instructional content that lacks a logical progression; and/or level of challenge is at an inappropriate level to advance student learning.	Presents instructional content in a generally logical profession and/or at a somewhat appropriate level of challenge to advance student learning.	Clearly presents instructional content in a logical and purposeful progression and at an appropriate level of challenge to advance learning of all students.	Challenges students to extend their learning beyond the lesson expectations and make cross-curricular connections.
	SAMPLE EVIDENCE			
	Teacher says, "Yesterday we talked about ecology; today we are going to discuss Charles Darwin. Everyone will get an excerpt from *On the Origin of Species*. I want you to explain Darwin's ideas based on this text."	Teacher says, "Yesterday we talked about early evolutionary theories. Today we are going to discuss Charles Darwin and his specific theory of natural selection. After we discuss it in class, you will work in small groups to answer questions, and then you will take a quiz next class."	Students complete a "Do Now" that assesses level of understanding of Darwin's theory of natural selection. Based on results, teacher groups students into three levels. Students are given differentiated tasks with increasing levels of complexity which identifies the main tenets of Darwin's theory of evolution. At the end of the session, students are asked to paraphrase the information learned into accurate but simpler terms. Teacher will assess understanding based on writing samples. (CCSS.ELA-LITEARACY.RST.11-12.2) Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.	Students are provided a list of current issue topic areas related to evolution. Students select one area to research further. Students then present in a format of their choosing (multimedia, for example) how their area demonstrates Darwin's principles.

3: INSTRUCTION FOR ACTIVE LEARNING

*Teachers plan instruction to **engage students in rigorous and relevant learning** and to **promote their curiosity about the world at large** by:*

Indicator 3a: Implementing instructional content for learning.

	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Literacy strategies	Presents instruction with few opportunities for students to develop literacy skills or academic vocabulary.	Presents instruction with some opportunities for students to develop literacy skills and/or academic vocabulary.	Presents instruction that consistently integrates multiple literacy strategies and explicit instruction in academic vocabulary.	Provides opportunities for students to independently select literacy strategies that support their learning.
This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.	**SAMPLE EVIDENCE**			
	Student says, "I don't understand the word, I cannot read this assignment." Teacher says, "We will talk about vocabulary later. I know this will be difficult."	Teacher gives vocabulary lists to students, either with definition, or with directions to use textbook glossary.	Teacher explains/defines terms as they come up in class material, and uses them in context throughout class. Teacher uses root words to help students deduce meaning of terms. For example, teacher helps students define meaning of "polymer" by defining "poly" and "mer" and asking students to synthesize definition in context of class material.	Students are asked to read text in class, and generate definitions of vocabulary in small groups. Students will then demonstrate their understanding of terms by creating graphic aids that show the terms in context. For example, students draw out a chain of polymers, demonstrating their understanding of the term polymer.

3: INSTRUCTION FOR ACTIVE LEARNING

*Teachers plan instruction to **engage students in rigorous and relevant learning** and to **promote their curiosity about the world at large** by:*

Indicator 3b: Leading students to construct meaning and apply new learning through the use of a variety of differentiated and evidence-based learning strategies.

	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Strategies, tasks and questions	Includes tasks that do not lead students to construct new and meaningful learning and that focus primarily on low cognitive demand or recall of information.	Includes a combination of tasks and questions in an attempt to lead students to construct new learning, but are of low cognitive demand and/or recall of information with some opportunities for problem-solving, critical thinking and/or purposeful discourse or inquiry.	Employs differentiated strategies, tasks and questions that cognitively engage students in constructing new and meaningful learning through appropriately integrated recall, problem solving, critical and creative thinking, purposeful discourse and/or inquiry. At times, students take the lead and develop their own questions and problem solving strategies.	Includes opportunities for students to work collaboratively to generate their own questions and problem-solving strategies, synthesize and communicate information.
This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.	**SAMPLE EVIDENCE**			
	Students are asked to recall the independent and dependent variables from a previous lab.	Students are asked to identify the problem statement and write a hypothesis for an upcoming lab.	Students are asked to gather, analyze, organize and interpret information to solve a problem.	Students are asked to design an experiment to solve a problem. Students generate their own questions.
	After doing a demonstration, the teacher explains how it worked.	After doing a demonstration, the teacher asks the students to explain what they observed.	After doing a demonstration, the teacher asks the students to write an explanation of what happened and why.	The students use the text and/or technology to research the concepts behind the demonstration.

3: INSTRUCTION FOR ACTIVE LEARNING

*Teachers plan instruction to **engage students in rigorous and relevant learning** and to **promote their curiosity about the world at large** by:*

Indicator 3b: Leading students to construct meaning and apply new learning through the use of a variety of differentiated and evidence-based learning strategies.

	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Instructional resources and flexible groupings	Uses resources and/or groupings that do not cognitively engage students or support new learning.	Uses resources and/or groupings that minimally engage students cognitively and support new learning.	Uses resources and flexible groupings that cognitively engage students in demonstrating new learning in multiple ways, including application of new learning to make interdisciplinary, real world, career or global connections.	Promotes student ownership, self-direction and choice of resources and/or flexible groupings to develop their learning.
This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.	**SAMPLE EVIDENCE**			
	The teacher consistently has students work individually. Students read the textbook and answer questions.	The teacher places students in groups to complete an activity. Students discuss what happened.	Teacher arranges students in heterogeneous groups. Students complete an activity and discuss it with their group. Students then switch groups (jigsaw) to exchange ideas about their learning. Students write an explanation of the concepts.	Student groups select a topic to explore. They then design and implement a strategy to solve a problem within that topic. Students regroup and present their findings.

3: INSTRUCTION FOR ACTIVE LEARNING

*Teachers plan instruction to **engage students in rigorous and relevant learning** and to **promote their curiosity about the world at large** by:*

Indicator 3b: Leading students to construct meaning and apply new learning through the use of a variety of differentiated and evidence-based learning strategies.

	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Student responsibility and independence	Implements instruction that is primarily teacher-directed, providing little or no opportunities for students to develop independence as learners.	Implements instruction that is mostly teacher directed, but provides some opportunities for students to develop independence as learners and share responsibility for the learning process.	Implements instruction that provides multiple opportunities for students to develop independence as learners and share responsibility for the learning process.	Implements instruction that supports and challenges students to identify various ways to approach learning tasks that will be effective for them as individuals and will result in quality work.
This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.	**SAMPLE EVIDENCE**			
	Teacher reads an article and explains the meaning of the article aloud in class.	Teacher reads an article aloud in class. Within collaborative groups, students identify the major concepts.	Students are given a choice of topics to explore. Within collaborative groups, they research their topic and present their findings to the class, with each person contributing to the project.	Students choose a topic to teach to the class. Students in the group determine who will complete what sections of the research on the topic. The lesson includes a presentation (PowerPoint, Prezi, etc.), activity and assessment.

3: INSTRUCTION FOR ACTIVE LEARNING

*Teachers plan instruction to **engage students in rigorous and relevant learning** and to **promote their curiosity about the world at large** by:*

Indicator 3c: Assessing student learning, providing feedback to students and adjusting instruction.

	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Criteria for student success	Does not communicate criteria for success and/or opportunities for students to self-assess are rare	Communicates general criteria for success and provides limited opportunities for students to self-assess.	Communicates specific criteria for success and provides multiple opportunities for students to self-assess.	Integrates student input in generating specific criteria for assignments.
This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.	**SAMPLE EVIDENCE**			
	Teacher assigns students to write a lab report but does not provide a rubric or an exemplar for guidance.	Teacher verbalizes the expectations for success on a lab report but does not provide a rubric, exemplar, or format guide.	Teacher provides and discusses an appropriate lab report rubric for guidance. Exemplars are shared with students.	Students write a self-reflection that is submitted with their lab report.
	Teacher says, "Put your completed lab report in the bin."	Teacher says, "Before you turn in your lab report, be sure to check it over."	After each component of the lab report is written, students are asked to check and revise their work before writing the next component.	Students use their rubric to grade themselves.

3: INSTRUCTION FOR ACTIVE LEARNING

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Indicator 3c: Assessing student learning, providing feedback to students and adjusting instruction.

	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Ongoing assessment of student learning	Assesses student learning with focus limited to task completion and/or compliance rather than student achievement of lesson purpose/objective.	Assesses student learning with focus on whole-class progress toward achievement of the intended instructional outcomes.	Assesses student learning with focus on eliciting evidence of learning at critical points in the lesson in order to monitor individual and group progress toward achievement of the intended instructional outcomes.	Promotes students' independent monitoring and self-assess, helping themselves or their peers to improve their learning.
This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.	**SAMPLE EVIDENCE**			
	Teacher walks around and checks a worksheet for completion.	The teacher asks the class, "Did everyone understand the worksheet?" Students nod their heads and the teacher moves on.	Teacher checks in with each student or group and asks questions to check students' understanding.	Students ask their peers for help and check each other's understanding.

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	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Feedback to students	Provides no meaningful feedback or feedback lacks specificity and/or is inaccurate.	Provides feedback that partially guides students toward the intended instructional outcomes.	Provides individualized, descriptive feedback that is accurate, actionable and helps students advance their learning.	Encourages peer feedback that is specific and focuses on advancing student learning.
This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.	**SAMPLE EVIDENCE**			
	Teacher says, "Your procedure needs work."	Teacher says, "Your procedure needs more specific details."	Teacher says, "Your procedure needs more specific details so someone else would be able to replicate your experiment exactly."	Students exchange procedures they have written to peer edit.
	Student says, "I don't understand what to do." Teacher says, "Reread the directions."	Student adds details to one step of the procedure but doesn't know what else to revise	Student fills in the missing details so the experiment can be replicated.	Students use the peer edit to revise their procedures.

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	BELOW STANDARD	DEVELOPING	PROFICIENT	EXEMPLARY
ATTRIBUTES				*In addition to the characteristics of* **Proficient**, *including one or more of the following:*
Instructional adjustments	Makes no attempts to adjust instruction.	Makes some attempts to adjust instruction that is primarily in response to whole-group performance.	Adjusts instruction as necessary in response to individual and group performance	Students identify ways to adjust instruction that will be effective for them as individuals and results in quality work.
This sample evidence is not comprehensive nor is it intended to be used as a checklist during an observation. It is intended to illustrate what evidence for this attribute might look like at the various performance levels.	**SAMPLE EVIDENCE**			
	A student group asks for help, "We are not sure how to get started with the problem." Teacher tells the group, "Do the best you can and move on."	The teacher re-explains the problem. Once most students become proficient the teacher announces, "We can move on to the next activity."	The teacher notices that the students have a good understanding of the problems and moves on to the next topic rather than continue with more practice work. The teacher notices that a small group is still struggling with the problem and pairs the students with peers who can support their learning needs before moving on to the next topic.	Teacher asks students to give feedback on which instructional strategies worked well, which did not work well, and what other strategies might work. The teacher reflects on the feedback to incorporate new strategies in the upcoming lessons.