Novi Atlas Style Guide

Overarching Question and Enduring Understandings

Definition - This question should hold several units of study together. The question should help students understand what multiple units of study in a particular subject have in common.

Bold Text - What types of lenses do social scientists use in investigating places and people?

Graphic Organizer

Definition - A "Unit Map" that translates the main idea of the unit of study into student-friendly language and easy-to-understand "chunks" or topics of content. The graphic organizer is read so that when students start reading the Unit Title followed by the words in the organizer, it should create a complete sentence. This helps students understand how the parts of the unit are connected.

Image File – Uploaded as a PNG, Gif, Jpeg, etc.

Unit Abstract

Definition - A one-paragraph description of the featured unit of study that characterizes the subject matter to be studied and states very generally what students are expected to learn and the types of learning activities that will be conducted to provide opportunities for learning.

Plain Text - Melody is fundamental to understanding music. In Kindergarten we lay the foundation for understanding melody, defined as the tune of a song, which is made up of pitches. Students use voices and pitched instruments (mallet instruments, keyboards, etc.) to sing and echo melodies and melodic patterns. Students can sing confidently in a large group. Students are introduced to the concept of pitch using the solfege syllables sol and mi. Students use invented or standard notation to read and transcribe melodic patterns using these pitches. Students can identify pitches as either high or low both aurally and through physical responses. Students use these pitches to improvise musical "answers" to musical "questions," and compose simple songs. Students experience melody in a variety of ways including performing music, playing music games, participating in listening activities and using technology.

Common Core Standards

Definition - The unit plan contains content expectations (intended learning outcomes), which represent academic disciplines and integrate knowledge with skills. Content expectations should be adapted from appropriate national, state, or local district content standards. Each content expectation should be tailored to the content of the unit and may have to be customized to fit the context of the unit rather than merely be repeated verbatim from the external standards document. For each content expectations there should be a number code linking it to the content standard(s) from which it is derived.

Unit Level Standards

Definition - (Optional) The unit plan contains common core standards (intended learning outcomes), which represent academic disciplines and integrate knowledge with skills. Unit level standards should be adapted from appropriate national content standards. Each unit level standard should be tailored to the content of the unit and may have to be customized to fit the context of the unit rather than merely be repeated verbatim from the external standards document. For each unit level standard there should be a number code linking it to the common core standard(s) from which it is derived.

Essential/Focus Questions

Definition - One to four questions to guide inquiry during the unit of study. The questions are problematic to the learner; there is not a single, correct, predetermined answer. A focus question is open-ended and divergent rather than closed and convergent. Each focus question should require construction of understanding of key concepts rather than mere reproduction of information by students. The answer to a focus question would have to be expressed in sentences or even paragraphs. Single words or short phrases would be insufficient.

Plain Text, Numbered -

- 1. What are the advantages and challenges of creating three dimensional artwork?
- 2. What is the process that transforms a two dimensional shape into a three dimensional form?
- 3. In what ways can various modeling materials be manipulated to create a successful sculpture?

Key Concepts

Definition - At most eight concepts would be listed. Each should be highly pertinent to the topic of the unit and appropriate to the developmental level of students. These concepts should be "powerful ideas" of major significance to a discipline, not merely new vocabulary terms. They are central ideas of the unit - the ones the teacher intends students to understand and use for a lifetime. Construction of an understanding of these concepts by students is a major learning priority of the unit. Students are expected to use these concepts when generalizing about the content of the unit.

Plain Text, Lower Case, Alphabetical – carbohydrates dehydration synthesis enzymes hydrolysis lipids macromolecules nucleic acids proteins

Assessment Tasks

Definition - All content expectations for a unit should be assessed. Each assessment task should assess at least one content expectation and preferably more than one. Fewer tasks are better than many. In parentheses following each task, the code number(s) of the content expectation(s) it assesses would be specified. Each task should be presented briefly, in one or two succinct sentences, and should be expressed as a task to be performed by students. Implicit in each task should be the actual product (discourse, performance, or tangible object) to be generated by students as a result of performing the task.

Plain Text, Numbered -

- Classify a given variety of plant life and explain in writing the characteristics that are passed on from parent to young (L.HE.02.13).
- Describe in writing, with illustrations, the growth and development of two plant species. Include the basic needs of each species within its environment (L.OL.02.22, S.IP.02.11, S.IA.02.13).
- 3. Create a scientific drawing of the life cycle of a seed plant (L.OL.02.22, S.IA.02.13).

Intellectual Processes

Definition - Ways of thinking that the students will be engaged in during the unit of study. Intellectual processes are those mental operations that enable one to acquire new knowledge, apply that knowledge in both familiar and unique situations, and control the mental processing that is required for knowledge acquisition and use. The intent of specifying the intellectual processes in a unit is to make the teaching of these processes explicit.

Plain Text, Upper Case, Alphabetical – Analyzing Comparing Contrasting Describing Observing Synthesizing

Lesson Sequence

Definition - The lesson plans are an expansion of the units of study and explicitly cite a sequence of activities, sample performance assessments, and applications beyond school in addition to specific grade level content expectations (elementary, middle, or high school) and key concepts. They are not meant to be an exhaustive set of lessons needed to teach a particular unit of study; rather they are meant to provide an example of how unit content might be taught. They can be adopted as is, adapted to local needs, or used to spark a teacher's own creativity.

Plain Text -

Lesson 4-1 - Multiples of Equal Groups

Lesson 4-2 - Multiplication Arrays

Lesson 4-3 - Equal Shares and Equal Groups

Lesson 4-4 - Division Ties to Multiplication

Lesson 4-5 - Multiplication Fact Power and Shortcuts

Lesson 4-6 - The Multiplication/Division Facts Table and Fact Families

Lesson 4-7 - Baseball Multiplication (Game)

Lesson 4-8 - Exploring Arrays and Facts (Explorations)

Lesson 4-9 - Estimating Distances with a Map Scale

Lesson 4-10 - A Coin Toss Experiment

Resources

Definition - A selected repertoire of high quality resources that would equip a teacher to teach the unit is listed here. It might include a portion of a textbook with its accompanying teacher's manual, a story, a video, a computer software program, a DVD, an Internet website, a sand table, costumes, a microscope, a script or musical score, manipulatives, photos, maps, an atlas... Also appropriate would be "homemade" teacherproduced materials, perhaps a learning activity written up by a local teacher, or a set of slides with narration - the possibilities are innumerable. Published works should be listed as bibliographic citations including, author, title, publisher, and copyright date. Actual pages or portions of a copyrighted work being recommended for use in teaching the particular unit should be specified. A citation should furnish sufficient information to enable a teacher to identify and locate the resource being cited.

Equipment/Manipulative

Magnifying glasses Variety of live plants

Student Resource

Gibbons, Gail. From Seed to Plant. New York: Holiday House, 1991.

Heller, Ruth. *The Reason for a Flower*. New York: Penguin Putnam Publishing Group, 1999.

Hewitt, Sally. Amazing Science: Plants. New York: Crabtree Publishing, 2008.

How Plants Grow. 100% Educational Videos. 1998. Discovery Education. 29 June



http://streaming.discoveryeducation.com/

Yolen, Jane. Welcome to the Green House. New York: G.P. Putnam's Sons, 1993.

Teacher Resource

Plant and Animal Life Cycles. Hudson, NH: Delta Education, 1988.

Science and Technology for Children. *Plant Growth and Development*. Burlington, NC: Carolina Biological Supply Company, 1997.