



## Today's Webinar

- Key Features of Challenging Curriculum
- Examples from the Classroom
- Selecting and Writing Curriculum
- Resources and Next Steps



### In classrooms today...

- The need for clarity concerning exemplary curricula for advanced learners continues to be a priority.
- Even with nationwide revisions of state standards, "teachers will need to continue to devise lesson plans and tailor instruction to the individual needs of the students in their classrooms" (CCSSO, 2010, p. 4)

#### **Challenging Curriculum**

What do we know about high quality curriculum for gifted and talented learners?

Best practices that stand out as critical to student achievement tend to center around:

- Selection of learning strategies that enable students to construct meaning;
- Implementation of practices that are planned, deliberate, and explicit;
- Balancing surface knowledge and deep understanding;
- Using ongoing assessment to identify and eliminate misconceptions.

(Hattie, 2009)

#### **Challenging Curriculum**

The Annual Curriculum Awards Competition has been a part of the NAGC since 1996. The awards were designed to highlight high quality curriculum and instruction to meet the needs of all learners.

Over the last five years, the NAGC Curriculum Studies Network has embarked on a project to tighten the wording and criteria of the selection rubric in order to match the most current understanding of high quality curriculum.

#### Key Features of Challenging Curriculum

- I. Nature of differentiation
- II. Opportunities for Talent Development
- III. Clarity of Objectives
- IV. Nature of Objectives
- V. Evaluation Components
- VI. Learning Activities
- VII. Instructional Strategies

- VIII. Student Products
- IX. Resources and Engagement
- X. Alignment of Curricular Components
- XI. Evidence of Effectiveness
- XII. Ease of Use by Other Educators

NAGC Curriculum Studies Network Revised Rubric, 2014

#### Differentiation

Activities and assignments that accommodate the learning needs of high achieving students are explicitly described. These include adjustments to content, process, product based on student readiness, interest, and learning profile throughout the unit.

# **Curriculum Compacting**

Name it

#### **Prove it** Replace it **Content or Skill** Method of documenting Identify what student(s) proficiency may do if compacted out of content or skill

instruction



 An example of curriculum compacting in the classroom could be as simple as providing all students in a math class with the opportunity to do the "5 hardest first." The math teacher would select five problems that really provide evidence that the student understood the skills or concepts in the lesson. If students were willing and able to do those five problems correctly, they would not have to do the rest of the assignment. Students who finished early could pursue an engaging independent project or task that would extend or enhance what was being learned in the classroom.

#### Opportunities for Talent Development

The unit uses multiple opportunities for talent spotting, uses data from these activities to drive future instruction AND includes student self-reflection on how tasks impacted their learning/perception of self as a learner.



In one Science, Technology, Engineering, and Math (STEM) magnet school, teachers in the primary grades designed one of their first units in STEM to give students opportunities for talent development, but also to identify students with strengths in those fields. For this unit, it was important that the students understand that:

- We interact and improve the world around us through inquiry and problem solving.
- There are particular skills, knowledge, and tools that are associated with STEM.
- STEM prepares us for the 21st Century and enables us to be lifelong learners.
- STEM provides a framework for solving everyday problems to improve the quality of life.
- As a part of the unit, kindergarten and first grade students could choose one way
  to communicate what they know about STEM and what it means to them.
   Students could choose from the following products: a song, a slideshow to be
  shown on the school's welcome screen, a welcome letter to new students, or an
  advertisement for the school.

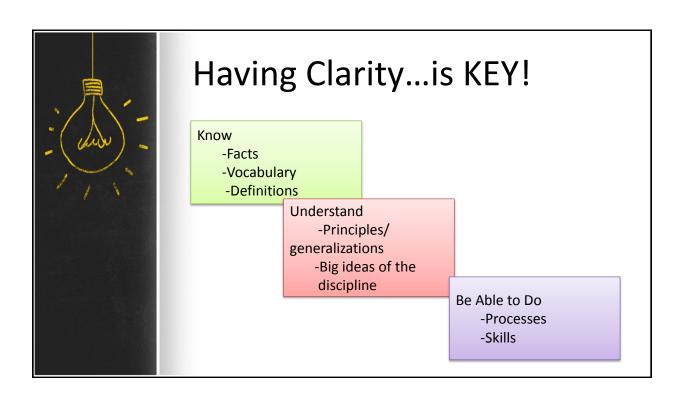
# Clarity of Goals Objectives are clearly stated, specific, and unambiguous.



An example of applying the notion of big ideas might be transforming a typical unit about state history into an exploration of how our study of state history reveals the identity of a particular place and people. Key goals for such a unit might be:

- Culture helps us to understand ourselves as both individuals and members of various groups.
- Our identity is shaped by the actions we take, the traits that help define who we are, and the choices that we make.
- The study of state history reveals the *identity* of a particular place and people.
- Humans seek to understand their historical roots and to locate themselves in time.
- Public historians use a set of tools and methods in their research to profile, chronicle, and communicate about the history of people.
- The study of history helps people see change over time.
- The perspective of the historian impacts the interpretation of history.

Beasley, J. G. (2011). Preserving our identity: Learning about the history of our State. In M. B. Imbeau (Ed.). *Parallel Curriculum Units for Grades K-5* (pp 153-194). Thousand Oaks, CA: Corwin Press.



#### **Know**

 Various regions of the state, including how their characteristics and physical environments affect human activity.

#### Give students curriculum that promotes thinking

#### **Understand**

- The study of state history reveals the identity of a particular place and people.
- Public historians use a set of tools and methods in their research to profile, chronicle, and communicate about the history of people.
- Humans seek to understand their historical roots and to locate themselves in time.
- Interconnections between state characteristics, culture, and physical environment create state identity.

#### Do

- Plan and make a written, oral, or visual presentation for a planned purpose and audience.
- Identify and communicate about the lives of people who helped build our state.
- Make connections between past and present using primary and secondary sources.
- Analyze primary and secondary sources.
- Retells historical stories about the community using a variety of sources: maps, photo histories, newspapers, and letters
- Use creative and critical thinking skills to plan and create products that reveal understanding
- Identify tasks that require a coordinated effort and work with others to complete those tasks.

#### **Evaluation**

The assessment model includes at least three different evaluation measures including, for example, student portfolios, observational checklists of student behaviors, product evaluation, or self or peer evaluation. Assessment data is used to monitor student growth, provide student feedback, allow for student self-reflection, or to differentiate content or instruction.



- A teacher getting ready to teach a unit on argumentative writing may want to pre-assess students find out how his or her students organize their writing and whether they can use the structure of their writing to convey their opinion based upon evidence.
- During the pre-assessment, the teacher may ask the class to write on one side of the page and defend a particular perspective in the form of a paragraph and on the other side of the page identify topic ideas that interest them. Through the pre-assessment the teacher is not only gathering data on the students' writing skills, but also what interests them so that the teacher can choose assignments that attend to student readiness and interest.

# **Learning Activities**

Learning activities within the unit provide opportunities for student centered, problem based/real world application learning.



Performance tasks can provide one type of learning activity that can be a rich context for student exploration. An example from a fourth grade unit on state history provided students with an opportunity to "Make History Public." The following is the example of the task:

 Our state is getting ready to open a museum that will celebrate our state's history. For our project, you will take on the role of creating a museum exhibit that communicates to others the identity of our state. Each of you will have a chance to apply for a position at the museum: museum curator, public historian, exhibit designer, or museum docent. Together you will design one exhibit that you feel symbolizes our state identity.

## **Instructional Strategies**

Instructional strategies require students to apply concepts and methodologies to address a real world problem.



Perspective taking is an instructional strategy that challenges gifted students and exhibits the criteria of critical and creative thinking that you should consider when selecting instructional methods for gifted learners. Abstract thinking, dealing with multiple perspectives, crafting an argument, and critical and creative thinking and employing methods of persuasion are required when students engage with this method of instruction.

 For example, in a science class, half of the students might be asked to take a pro-stem cell research stance, while the other half would take the opposite stance. They would conduct research, evaluate available data, and formulate and deliver convincing arguments; then students would be asked to switch sides and take the opposite perspective, researching, evaluating, and crafting arguments.

### **Products**

The author describes different kinds of student products or open-ended assignments, including the development of student driven creative products, or the development of products related to real-world applications or problem solving.



 One meaningful product assignment, portfolios for art and writing courses, often show evidence of student growth over time and build in a piece that asks students to reflect and selfevaluate. Self-assessment is an important component of a highquality product for gifted students.

#### Resources

Students engage with resources that are authentic to the discipline/field of the unit. Students find and use appropriate resources to answer questions and solve problems authentic to the discipline/field of the unit.



 An example of accessing resources is found in a Parallel Curriculum Model unit called "Experience Poetry." The unit includes interviews with poets about the writing process and requires students to analyze them as primary sources so that students can understand what inspires poets. Varied resources were used, including audio files/readings of poems, poetry texts at several levels of challenge, film clips, musical selections, and photos. These resources were strategically employed to reinforce the concepts, principles, and skills the unit was designed to address.

# Curricular Alignment

The curriculum unit is clearly sequenced, is aligned to support learners, and provides options for increasing rigor and challenge to meet students' different learning needs.



#### Ask An Expert

In our groups today, the class will be finding out how an ecologist would organize animals for study. They will work in groups to create proposals for the study. Just like a real scientist, they will need to include the cost of field research.

Our rationale: This activity is designed to mirror a scientist seeking funding for research so the group needs to include those elements a scientist would include in a proposal such as a rationale and estimated costs of the research. Scientists are concerned about making sure that they persuade an organization that their research will further the study of ecology. They will create a rationale for the study based on their learning about adaptations and biodiversity and the need for both in order for a desert biome to thrive.

All groups will receive a "grant proposal" worksheet, pencils, and a variety of pictures of animals from the desert. Guidance for an authentic research question will vary.

Possible examples of research questions:

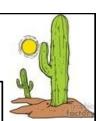
What can we do to preserve the habitat of\_\_\_\_?
How does this animal adapt to its changing environment?

As the culminating activity for this unit will be the "research conference" that each group will attend to present the findings from their funded research. Parents and students are all invited to the conference presentations on the last day.

# Selecting and Writing Curriculum

When selecting and writing curriculum remember....

RIGOR does not equal HARD.



# Selecting and Writing Curriculum

Find resources and exemplars that can guide your selection or curriculum writing.

- If selecting curriculum, is there evidence that it has been used before? And,
- How easy is it to pick up and use?

# Curriculum Studies Website

- http://nagccurriculumnetwork.weebly.com
- http://www.nagc.org/get-involved/nagcnetworks-and-special-interestgroups/networks-curriculumstudies/network-awards



