Understanding by Design

Unit Planning Session

Christ the Teacher Catholic Schools

"Centered in Faith … Creators of Hope … Founded in Love"

September 20, 2007

Introduction

- To begin with the end in mind means to start with a clear understanding of your destination. It means to know where you're going so that you better understand where you are now so that the steps you take are always in the right direction.

Covey, S. (1989). The 7 Habits of Highly Effective People, p.98.

UBD Process

- The UBD process may seem cumbersome and even more difficult upon the first attempt to use it.

- Adage: “Everything that is worthwhile in life requires work.”

UBD Process *con't*

- The process is really quite simple: begin with the end in mind, identify evidence of quality products and/or performances, and focus engaging learning experiences on the desired results.

UBD End Result Is …

- Units are efficient and effective in producing deep understanding instead of units which result in little in-depth learning, or units that are "fun", but result in little learning.

Backward Design

- The Backward Design Model has three stages:
  - Identify the desired results.
  - Determine acceptable evidence.
  - Plan learning experience and instruction.

Outline for the Session

- Focus for Learning *15 minutes*
- Big Ideas *20 minutes*
- Essential Skills *15 minutes*
- Essential Questions *20 minutes*
- Faith Integration *5 minutes*
- Culminating Performance Task *20 minutes*
- Assessment Tasks *20 minutes*
- Lesson Plan Sequence and WHERE *40 minutes*
- Assessment Task Plan *20 minutes*

Focus for Learning

- The focus for learning states what students should be able to do with the knowledge and skills acquired in the unit.

- The focus for learning frames the content Outcomes/Indicators as performance Outcomes/Indicators.

Focus for Learning Examples

- Students will demonstrate an understanding of the sculptural processes of casting, constructing, and forming by casting and creating a mask.

- Students will demonstrate an understanding of color schemes, adding text and graphics by creating and sharing a PowerPoint about their favorite things.

Focus for Learning Examples *con't*

- Students will demonstrate an understand of body and spatial awareness by applying the concepts of self-space, general-space, levels, shapes, pathways, directions, and speed in a variety of movement activities.

- The focus for the writing unit is for students to understand story elements (plot, setting, and characters). Students will use this understanding to write descriptively to engage young readers and produce a children's books that encompasses this knowledge and understanding.

Take 10 minutes to fill in the focus for learning in your selected unit.

The Big Ideas

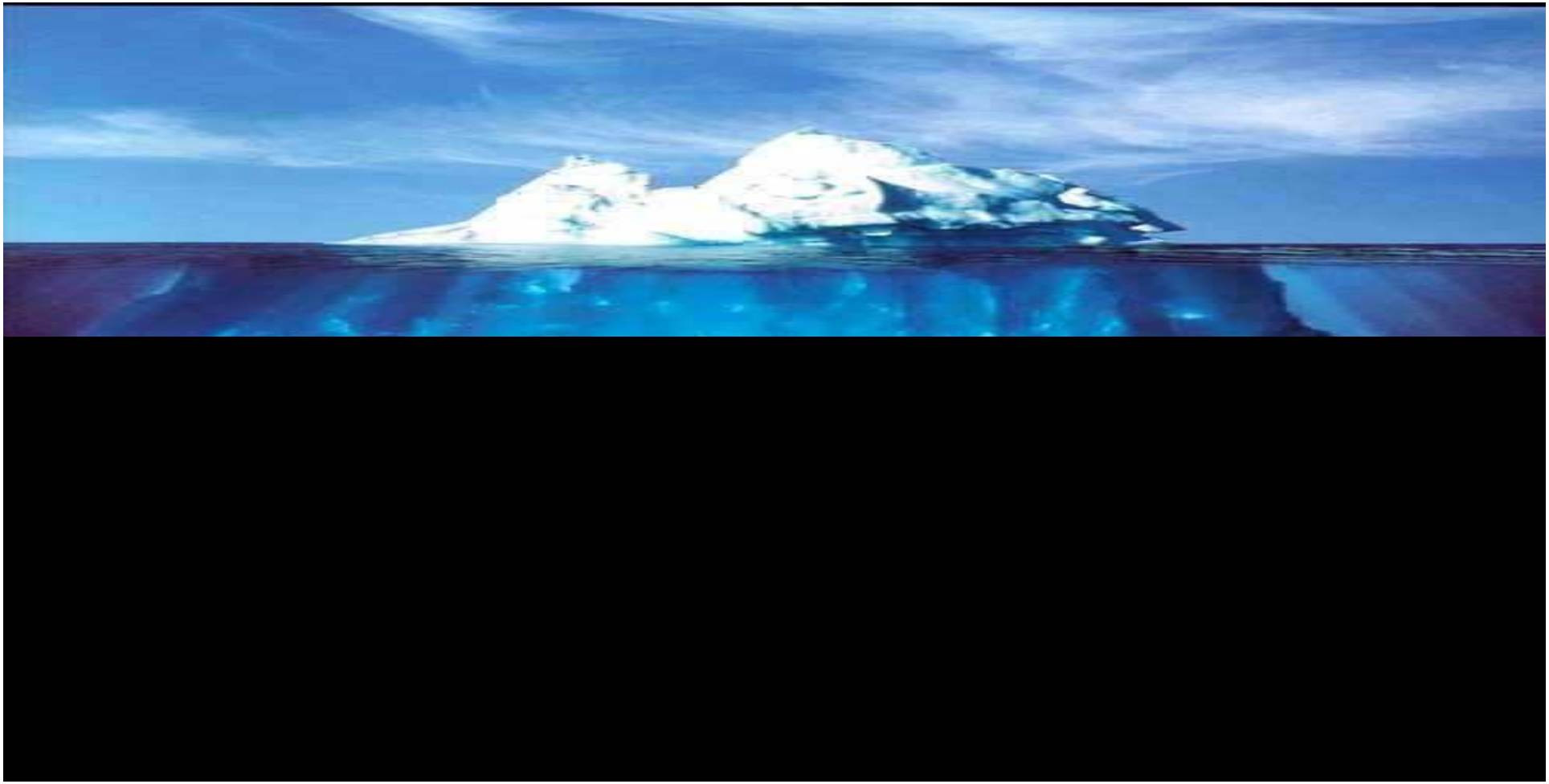
- What will the students remember for:
  - 40 seconds?
  - 40 minutes?
  - 40 years?

The 40 years are the BIG IDEAS!

The Big Ideas *con't*

- A **Big Idea** is:
  - the 'moral of the story' of the unit-an important inference the learner is helped to draw
  - transferable to other lessons, subjects, contexts
  - usually not obvious, may be counter-intuitive-and therefore prone to misunderstanding
  - an insight, not a truism
  - makes sense of otherwise discrete facts-it "connects the dots"
  - a specific generalization, full sentence proposition: the student will understand THAT...

You've got to go below the surface...




to uncover the
really ‘big ideas.’

The Big Ideas Examples

- Students will understand that: 1) Storytelling is as old as language itself and serves a vital function in societies. 2) Rhythm and repetition facilitate memorization. 3) Young children learn more effectively when they can associate words with pictures.

- Students will understand that …
  - Each of us has talents that God has given us. He wants us to practice them and develop them.
  - Larger games are based on smaller, very important skills.
  - There are different types of locomotion.
  - There are different ways to send a ball to another person.
  - There are different ways to receive a ball from another person.

The Big Ideas Examples *con't*

- Clarity in spoken language enhances communication.

- Students will understand that some numerals represent the exact desired value; others represent only an approximation of the desired value.

The Big Ideas Examples *con't*

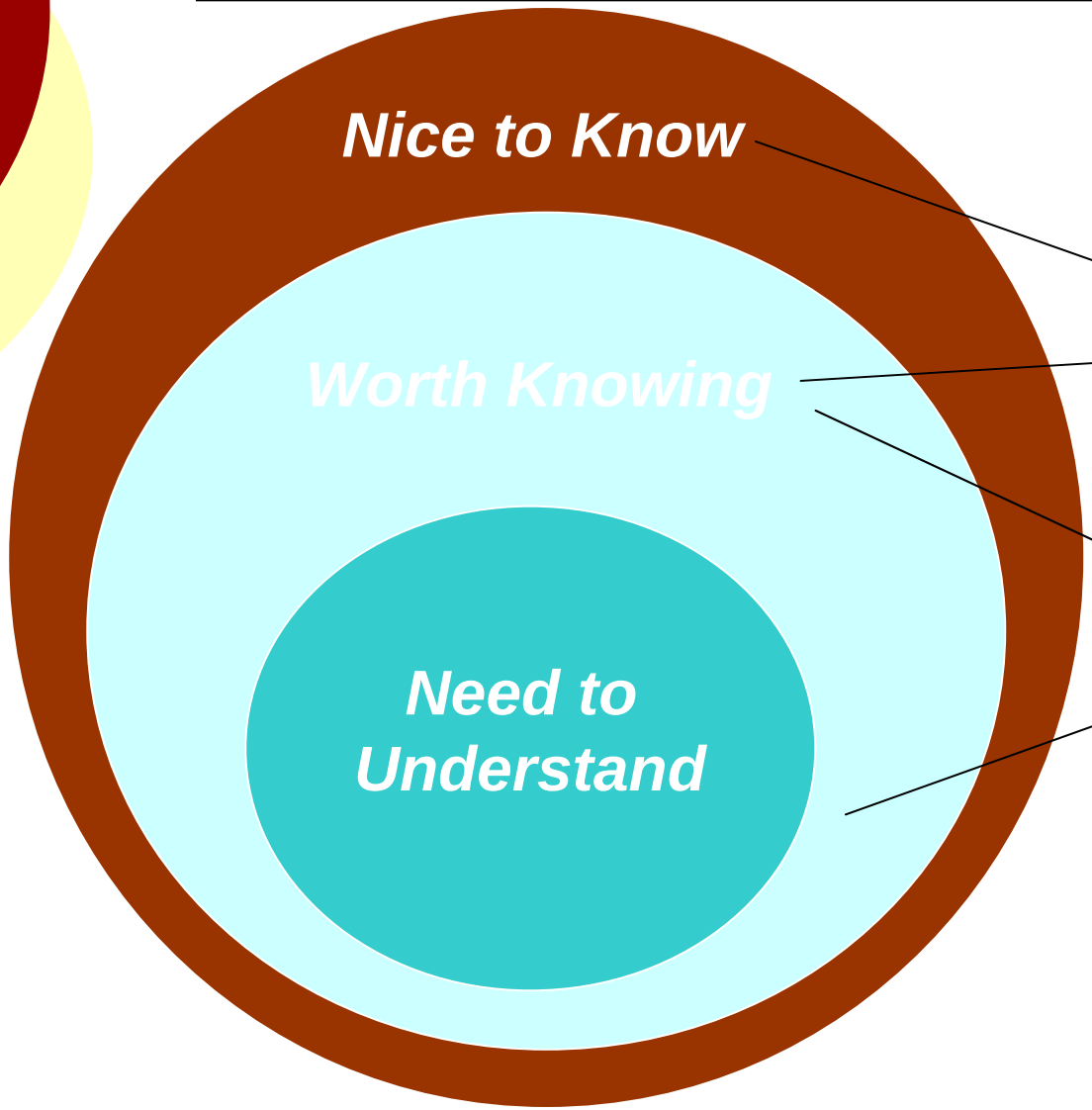
- Students will learn how magnets are used and how they help us.
- The students will be able to explain the relationship between the location of the poles and the strength of the magnetic field near the poles.
- Basic number facts are the building blocks for most computations.

Take 15 minutes to fill in the Big Ideas in your selected unit.

The Essential Skills

- Essential skills:
  - State what students should know and be able to do as a result of the unit.
  - Targeted knowledge and skills can be of three different kinds:
    - Refer to the building blocks for the desired understanding.
    - Refer to the knowledge and skills stated or implied in the goals.
    - Refer to the ‘enabling’ knowledge and skills needed to perform the complex assessment task,

What is Essential?



Assessment Types

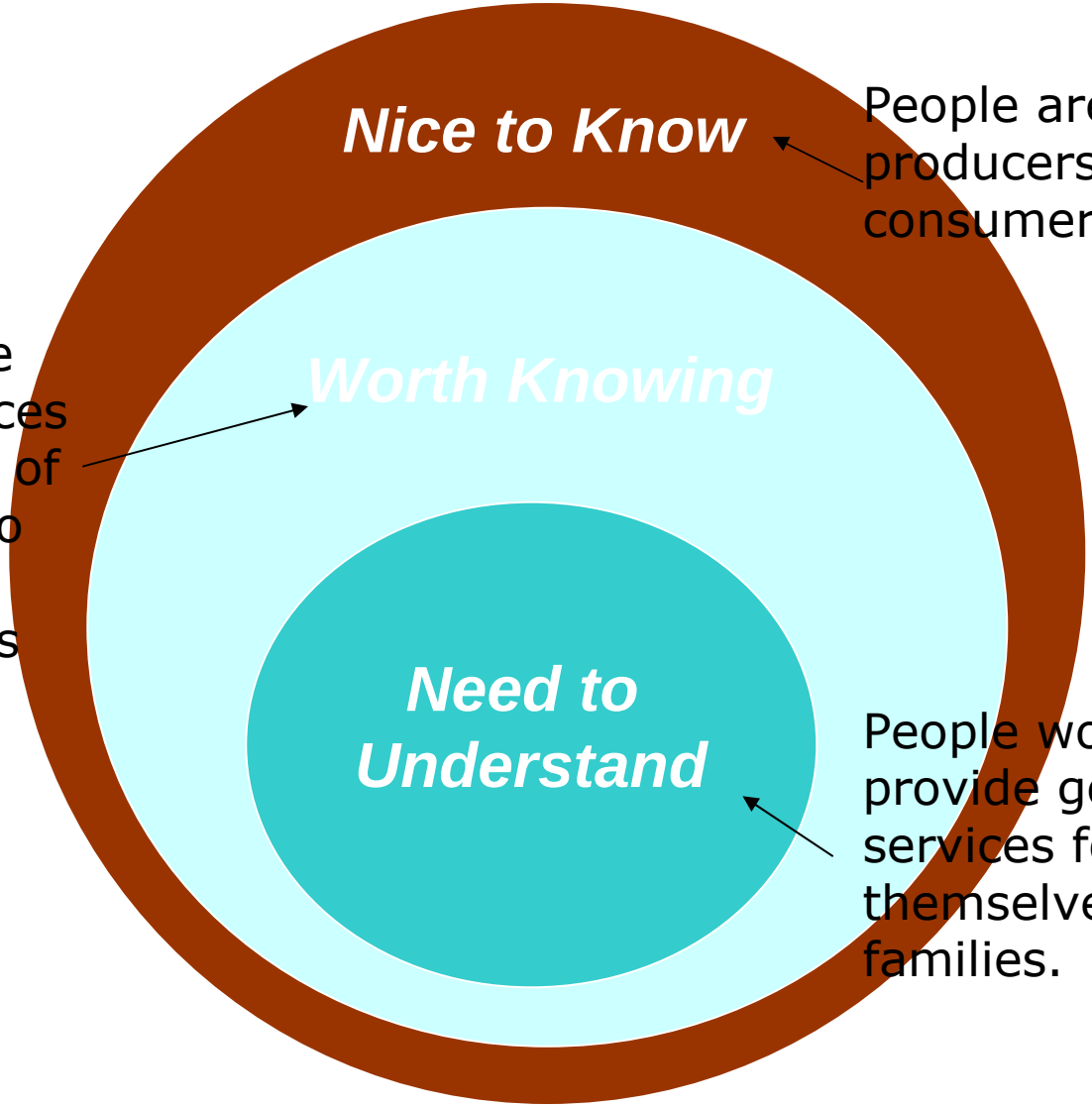
Traditional Tests and Quizzes

- paper-pencil
- selected-response
- constructed-response

Performance Tasks and Projects

- open-ended
- authentic
- complex

What is Essential? *Con't*



People are both producers and consumers.

In the North America people can make choices about the type of work they do to earn money to purchase goods and services.

People work to provide goods and services for themselves and their families.

The Essential Skills Examples

- The students will be able to:
  - Read and interpret nutrition information on food labels.
  - Analyze diets for nutritional value.
  - Plan balanced diets for themselves and others.
  - Explain the food pyramid guidelines.

The Essential Skills Examples *con't*

- Throughout this unit, the essential skills are:
  - narrative writing
  - using the writing process
  - oral reading for a variety of audiences
  - producing illustrations

Take 5 minutes to fill in the essential skills in your selected unit.

The Essential Questions

- The Essential Questions:
  - Are arguable and important to argue about.
  - Are at the heart of the subject.
  - Recur in professional work, adult life, as well as classroom inquiry.
  - Raise more questions-provoking and sustaining engaged inquiry.
  - Often raise important conceptual or philosophical issues.

Essential vs. Leading Questions

- Essential Questions
  - Asked to be argued
  - Designed to "uncover" new ideas, views, lines of arguments.
  - Set up inquiry, heading to new understandings.
- Leading Questions
  - Asked as a reminder to prompt recall
  - Designed to 'cover' knowledge
  - Point to a single, straightforward fact-a rhetorical question.

The Essential Questions Examples

- What makes a good reader?
- What characteristics are common in villains?
- What does it mean to be a good friend?
- Do heroes always prevail?
- What does it mean to thirst for knowledge?

The Essential Questions Examples

- What purpose does storytelling have in society?
- How do various body systems interact?
- How can we prove that cells make up living things? If we're all made of cells, why don't we look alike?
- Why did some pioneers survive and prosper while others did not?

Take 10 minutes to fill in the essential questions in your selected unit.

Faith Integration

- Education in a Catholic school ensures the Catholic faith permeates all curricula and everything done in the school.

- Examples of this permeation include teaching science in the context of the Catholic view of stewardship, incorporating the Church's teachings on social justice into social studies, or drawing out Catholic values in the study of literature.

Faith Integration Examples

- In their investigation of propaganda, students will learn how it contradicts the teachings of Jesus Christ.
- God has given each of us talents. What can we do to to better develop these talents?
- God has blessed us with our own body. What are some things that we can do to help keep our bodies healthy for years to come? What are some things that we should avoid in order to keep our bodies healthy?
- Each of God's children has different talents. We need to respect that some people are able to succeed at different things more quickly than others are.
- God wants us to share our gifts and talents with others. How can we share our gifts and talents with those younger than us?

Take about 3 minutes to fill in the faith integration in your selected unit.

Culminating Task

- A culminating performance task is a complex scenario that provides students an opportunity to demonstrate what they know and are able to do concerning a given concept.
- Follow the *GRASPS* framework.
- Use the 6 Facets of understanding.

GRASPS

GRASP Task Design Prompts		
Goal Your task is … The obstacles to overcome are …	The goal is to …	The problem or challenge is …
Role You are …	You have been asked to …	Your job is to …
Audience Your clients are …	The target audience is …	You need to convince …
Situation The context you find yourself in is …	The challenge involves dealing with …	
Product, Performance, and Purpose You will create _____ in order to …	You need to develop _____ so that …	
Standards and Criteria for Success Your performance needs to … Your product must meet the following standards …	Your work will be judged by …	

GRASPS Examples

- G *Your goal is to create a larger than life model of a butterfly and write and illustrate a book with fiction and non-fiction sections about your butterfly.*
- R *You are the teacher. Your job is to teacher preschools about butterflies.*
- A *Your target audience is the pre-school class who we will invite to our classroom to learn about butterflies.*
- S *Your challenge is to teach pre-school students about butterflies by performing your book.*
- P *You will act out your book using your butterfly model.*
- S *Your book and performance will be judged by you, your teacher and two of your peers using the student rubric.*

6 Facets and Ways of Demonstrating Understanding

Explanation asks students to tell the "big idea" in their own words, make connections, show their work, explain their reasoning, and induce a theory form data.

- Explain/teach
- Give examples of
- Make connections with
- Describe how
- Prove/verify

Interpretation requires the student to make sense of stories, art works, data, situations, or claims. Interpretation also involves translating ideas, feelings, or work done in one medium into another.

- Interpret
- Make sense of
- Provide an apt analogy for
- Show the importance or meaning of

Application asks students to use their knowledge and skill in a new situation.

- In a new situation, apply
- Show or demonstrate
- Use in the context of
- Design/invent

6 Facets and Ways of Demonstrating Understanding

Perspective is demonstrated when the student can see things from different points of view, articulate the other side of the case, see the big picture, recognize underlying assumptions, and take a critical stance.

- Analyze
- See from the point of view of
- Compare and contrast
- Critique
- Show how it fits into the historical context

Empathy – The ability to get inside another person's feelings and worldview. Intellectual imagination is essential to understanding, and it manifests itself not only in the arts and literature, but more generally through the ability to appreciate people who think and act differently from us. The goal is not to have students accept the ways of others, but to help them better understand the diversity of thought and feeling in the world; that is to develop their capacity to walk in someone else's shoes.

- Walk in the shoes of
- Experience directly and see
- Reach a common understanding concerning
- Consider the seemingly odd view

Self-Knowledge – The wisdom to know one's ignorance and how one's patterns of thought and action inform as well as prejudice understanding. It is important to require students to self-assess their past as well as their present work. It is only through self-assessment that we gain the most complete insight into how sophisticated and accurate students' views are of the tasks, criteria, and standards they are to master.

- Recognize your prejudice about
- Identify the lens through which you view
- See how your habits influence how you approach
- Explain how you came to understand

Culminating Task Examples

- Students produce their own Big Book, applying all the knowledge and skills they have acquired. This will require several class periods. Depending on access and arrangements made by the teacher, students will read and present their Big Books to an audience of K-3 students.

Culminating Task Examples *con't*

- Students will choose two countries and research the record high and low temperatures for those countries as well as the high and low elevations for them. This information will be used to create a presentation (Power Point) demonstrating to their class how to find the difference in positive and negative integers.
- It is important to know who we are and where we come from. What impact have you made on your family, your friends, your world so far? What impact do you hope to make on your family, your friends, your world in the future? Create a PowerPoint that contains slides using all the times of your life; past, present and future that will be presented to the class.

Take 15 minutes to develop the culminating task for your unit.

Assessment Tasks

- Types of Assessment
  - Assessment **As** Learning: student self-assessment
  - Assessment **For** Learning: practice for the game
  - Assessment **Of** Learning: game day

Assessment Tasks *con't*

- ***Diagnostic tasks*** provide an understanding of the prior knowledge and skills that a student brings to the unit.
- ***Formative tasks*** are the building blocks that prepare students so they can succeed at the culminating task.
- ***Summative tasks*** allow students to demonstrate their achievement of the enduring understandings addressed in the unit.
- Each set of assessment tasks should include an appropriate balance of written, performance, and oral tasks (i.e., **write, do, say**).

Take 15 minutes to develop the assessment tasks for your unit.

Unit Instruction Plan

- The learning activities should be derived from the goals and planned assessments to ensure the alignment of the plan and the effectiveness of the activities.

- The learning activities should reflect the teaching approach that is logically required by the goals, not the teaching approach that is most comfortable for or familiar to the teacher.

WHERE Element – student view

- Each lesson should include one coded entry with the appropriate initials of the WHERE element.
- **W** Where are we going? Why are we going there? In what ways will we be evaluated?
- **H** How will you hook and engage my interest?
- **E** How will you equip me for success?
- **R** How will you help me revise, rethink, refine, rehearse and revisit what I am learning?
- **E** How will I self-assess and self-express?

“W” Element – Teacher View

- Questions for the Teacher – How will you help students know where they are headed and why (e.g., major assignments, performance tasks, and criteria by which the work will be judged)?

- Responses from the Teacher
  - Post essential questions on the board.
  - Review the rubric for the camp menu performance task and evaluate sample menus of previous years.
  - Print handouts that specify the performance requirements, deadlines, checklists, and rubrics.

“H” Element – Teacher View

- Questions for the Teacher – How will you hook students through engaging and thought provoking experiences (e.g. issues, oddities, problems, and challenges) that point toward big ideas, essential questions, and performance tasks?

- Responses from the Teacher
  - Begin a unit with a problem-based learning mystery (e.g., the seafarer’s disease [scurvy] that cleared up once fresh fruit and vegetables were eaten).
  - Challenge students to react to the statement, “If food is good for you, it must taste bad.”

“E” Element – Teacher View

- Questions for the Teacher – What events, real or simulated can students experience to make the ideas and issues real? What learning activities will help students explore the big questions? What instructions are needed to equip students for the final performance?

- Responses from the Teacher
  - Explore such ideas as surveying the healthy eating habits of different ethnic groups; searching the web for nutrition advice; and researching correlations between diet, academic and athletic performance.
  - Equip students with skills in survey writing, oral interviews, and research, including searching the Internet.

“R” Element – Teacher View

- Questions for the Teacher – How will you cause students to reflect and rethink, dig deeper into the core idea? How will you guide students in rehearsing, revising, and refining their work based on feedback and self-assessment?
- Responses from the Teacher
  - Ask students to work in groups to: evaluate different diets for nutritional balance; reflect on their family’s eating and cooking habits; and propose changes (if needed) to their family’s diet.

“E” Element – Teacher View

- Questions for the Teacher – How will students exhibit their understanding about their final performance products? How will you guide them in self-evaluation to identify the strengths and weaknesses in their work and set future goals?
- Responses from the Teacher
  - Students self-assess their work on the key performance tasks (illustrated nutrition brochure and camp menu).
  - Students create a nutritional action plan for themselves and their family to promote healthy living.

Take 40 minutes to develop the instructional plan for your unit.

Culminating Assessment Task Plan

- Explain the culminating task in detail:
  - Description of the task
  - Big Ideas and Essential Skills
  - Curriculum Outcomes/Indicators
  - Assessment strategy, tool and criteria
  - Technology Integration
  - Accommodations
  - Cross-curricular integration

Take 20 minutes to develop the culminating assessment task plan for your unit.

Conclusion

"The soul of teaching has to do with meaning. The trick is to tie the facts and skills to their deeper meaning in human experience."

Kieran Egan, *An Imaginative Approach to Teaching*, © 2005, p. 211