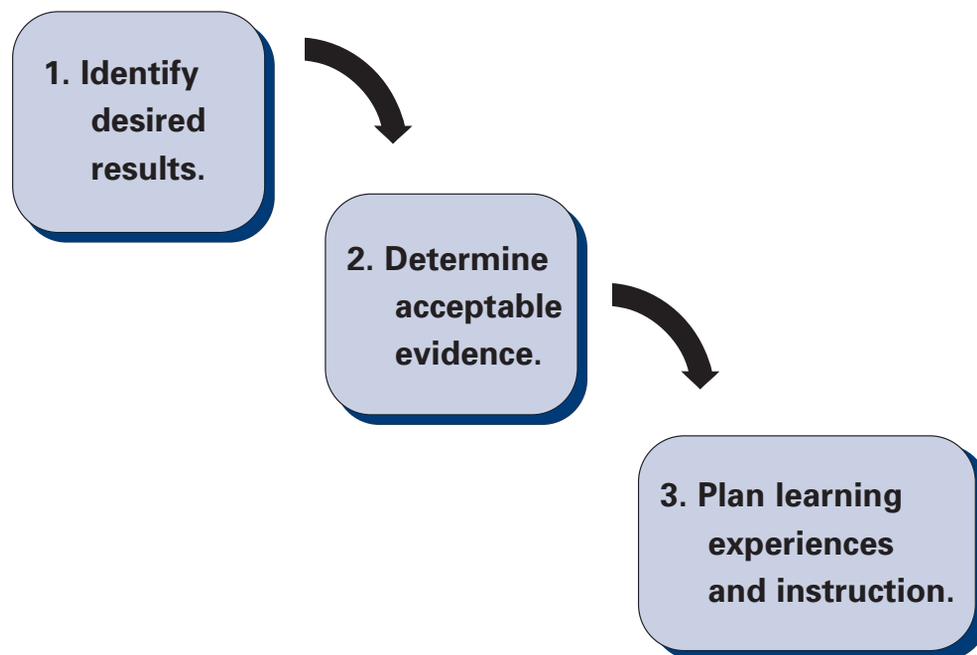


UbD: Stages of Backward Design



The backward design approach consists of three general stages:

Stage 1. Identify Desired Results. In Stage 1 we consider the goals. What should students know, understand, and be able to do? What big ideas are worthy of understanding and implied in the established goals (e.g., content standards, curriculum objectives)? What “enduring” understandings are desired? What provocative questions are worth pursuing to guide student inquiry into these big ideas? What specific knowledge and skills are targeted in the goals and needed for effective performance?

Stage 2. Determine Acceptable Evidence. In the second stage we consider evidence of learning. How will we know if students have achieved the desired results and met the content standards? How will we know that students *really* understand the identified big ideas? What will we accept as evidence of proficiency? The backward design orientation suggests that we think about our design in terms of the collected assessment evidence needed to document and validate that the desired results of Stage 1 have been achieved.

Stage 3. Plan Learning Experiences and Instruction. With identified results and appropriate evidence of understanding in mind, it is now time to finalize a plan for the learning activities. What will need to be taught and coached, and how should it best be taught, in light of the performance goals? What sequence of activity best suits the desired results? In planning the learning activities, we consider the *WHERE TO* elements (described later) as guidelines. Those guidelines can be summed up in a question: How will we make learning both engaging *and* effective, given the goals and needed evidence?

1-Page Template

Stage 1—Desired Results	
Established Goals:	G
Understandings: <i>Students will understand that . . .</i>	U
Essential Questions:	Q
<i>Students will know . . .</i>	K
<i>Students will be able to . . .</i>	S
Stage 2—Assessment Evidence	
Performance Tasks:	T
Other Evidence:	OE
Stage 3—Learning Plan	
Learning Activities:	L

1-Page Template with Design Questions

Introduction

Stage 1

Stage 2

Stage 3

Peer review

Exercises

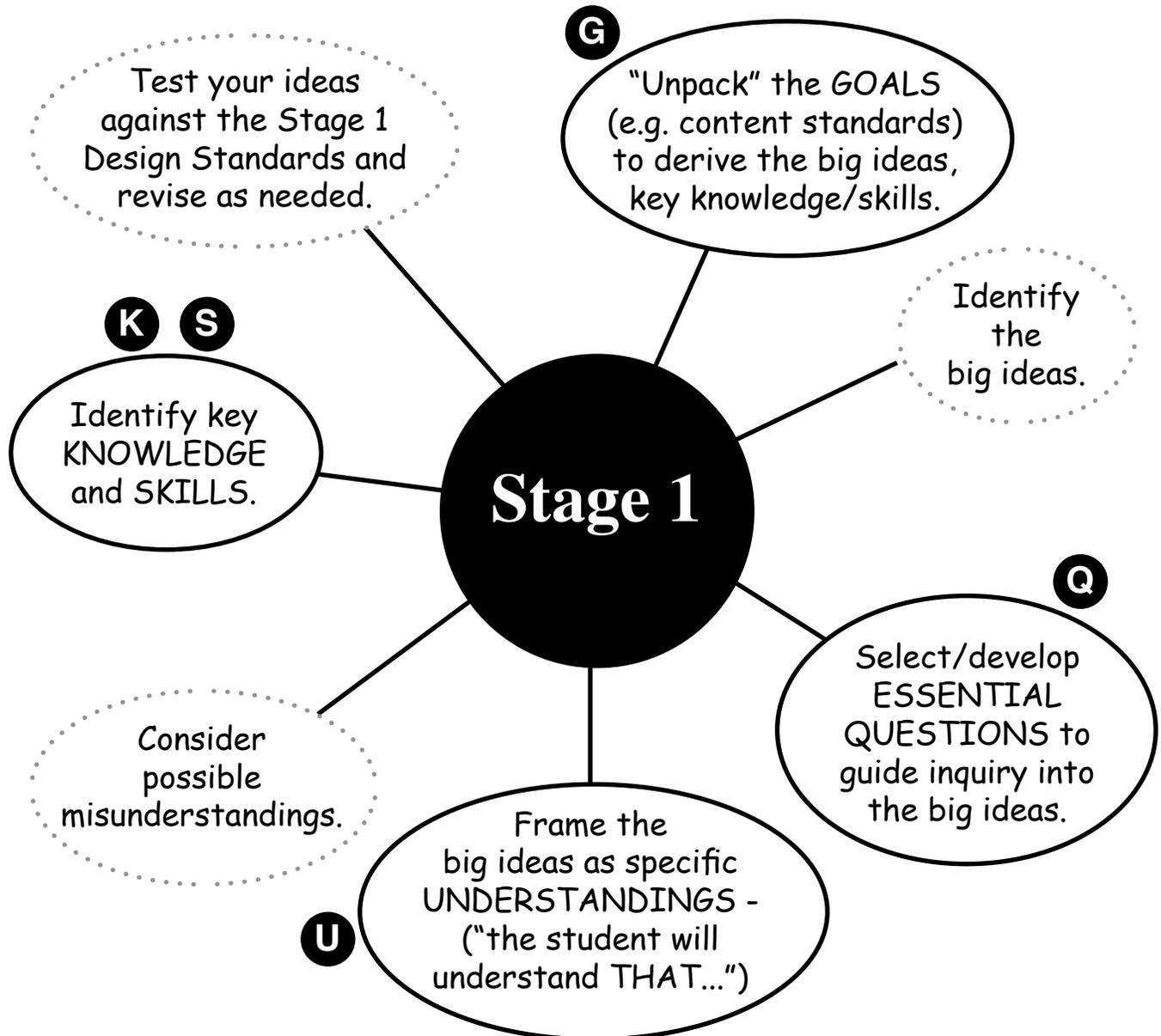
Process sheets

Glossary

Stage 1—Desired Results	
<p>Established Goals: G</p> <ul style="list-style-type: none"> What relevant goals (e.g., content standards, course or program objectives, learning outcomes) will this design address? 	
<p>Understandings: U</p> <p><i>Students will understand that . . .</i></p> <ul style="list-style-type: none"> What are the big ideas? What specific understandings about them are desired? What misunderstandings are predictable? 	<p>Essential Questions: Q</p> <ul style="list-style-type: none"> What provocative questions will foster inquiry, understanding, and transfer of learning?
<p>Students will know . . . K</p> <ul style="list-style-type: none"> What key knowledge and skills will students acquire as a result of this unit? What should they eventually be able to do as a result of such knowledge and skill? 	<p>Students will be able to . . . S</p>
Stage 2—Assessment Evidence	
<p>Performance Tasks: T</p> <ul style="list-style-type: none"> Through what authentic performance tasks will students demonstrate the desired understandings? By what criteria will performances of understanding be judged? 	<p>Other Evidence: OE</p> <ul style="list-style-type: none"> Through what other evidence (e.g., quizzes, tests, academic prompts, observations, homework, journals) will students demonstrate achievement of the desired results? How will students reflect upon and self-assess their learning?
Stage 3—Learning Plan	
<p>Learning Activities: L</p> <p>What learning experiences and instruction will enable students to achieve the desired results? How will the design</p> <p>W = Help the students know Where the unit is going and What is expected? Help the teacher know Where the students are coming from (prior knowledge, interests)?</p> <p>H = Hook all students and Hold their interest?</p> <p>E = Equip students, help them Experience the key ideas and Explore the issues?</p> <p>R = Provide opportunities to Rethink and Revise their understandings and work?</p> <p>E = Allow students to Evaluate their work and its implications?</p> <p>T = Be Tailored (personalized) to the different needs, interests and abilities of learners?</p> <p>O = Be Organized to maximize initial and sustained engagement as well as effective learning?</p>	

Stage 1: Key Design Elements

In Stage 1, designers consider the following elements. A variety of examples and design tools are provided to assist. **Note:** *There is no required sequence to the design process – designers can enter at any point. However, all of the design elements should be considered.*

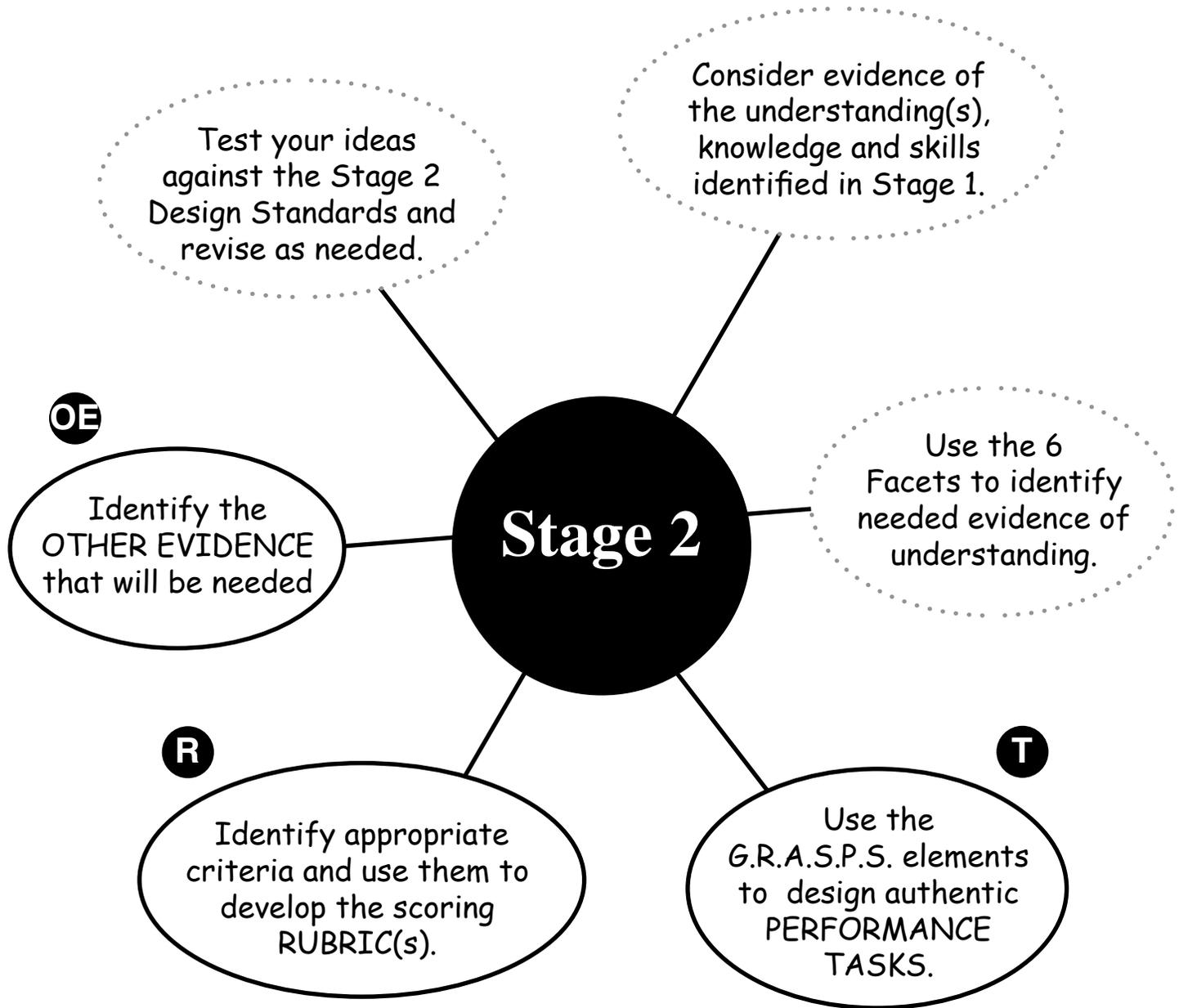


Essential Questions for Stage 1

- What should students leave able to do, on their own (transfer)?
- What understandings about key ideas should they leave with?
- What do Content Standards imply for learning goals - i.e. what should students know and be able to do, given the content targeted?
- What big ideas should anchor and organize the content, framed as Essential Questions? What do common/predictable misunderstandings suggest what the desired understandings ought to be?

Stage 2: Key Design Elements

Consider the following elements as you identify the evidence needed to determine the extent to which the desired results (Stage 1) have been achieved. A variety of examples and design tools is provided to assist.

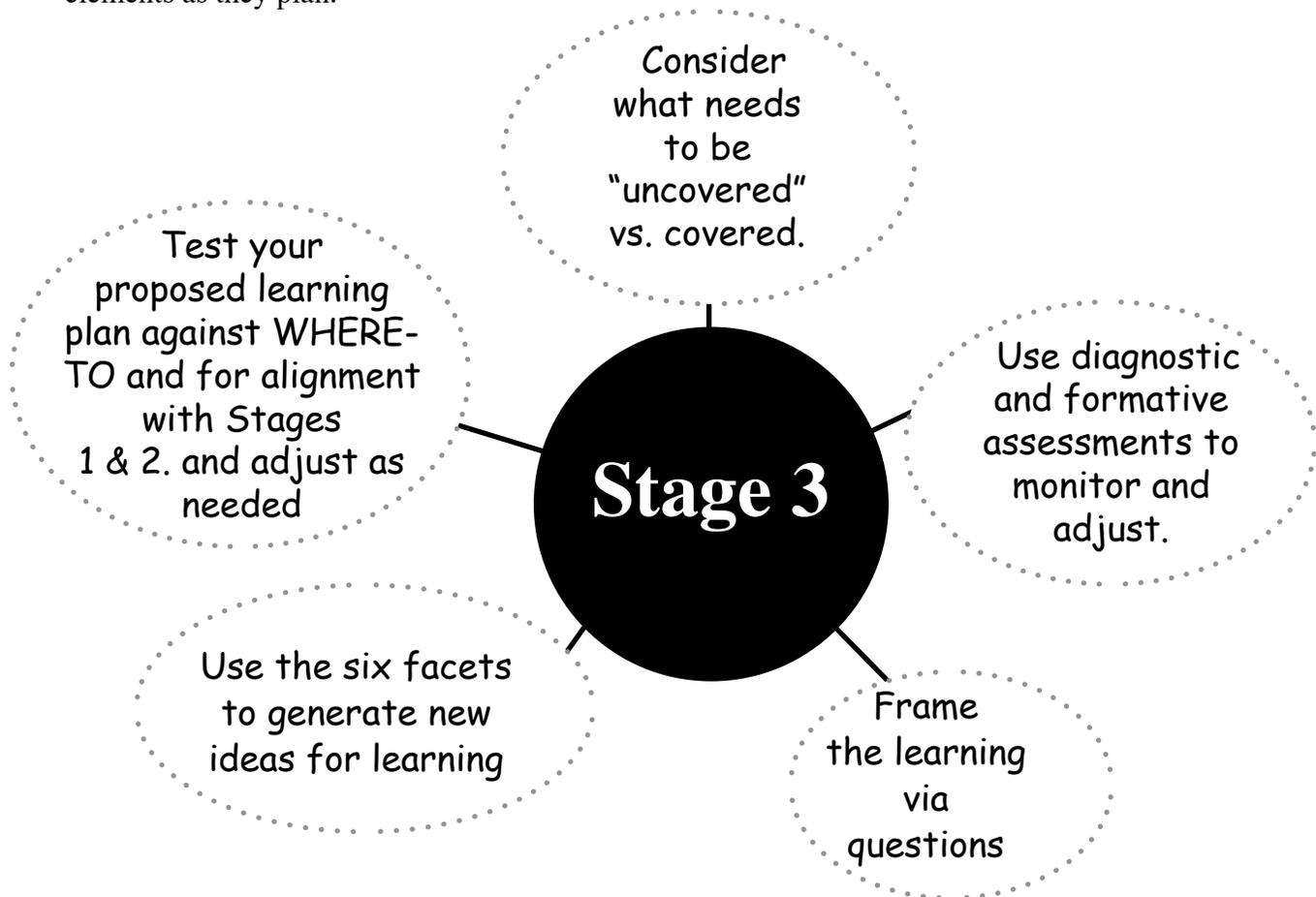


Essential Questions for Stage 2

- What evidence must be collected and assessed, given the Desired Results of Stage 1?
- What is evidence of understanding (as opposed to recall)?
- What important transfer tasks should anchor the assessment since transfer is the essence of understanding?
- What criteria should be used to assess work related to the Desired Results, not just the particulars of the task?

Stage 3: Key Design Elements

Consider the following as you develop the learning plan, mindful of the desired results identified in Stage 1 and the needed evidence in Stage 2. There are a variety of ways to “teach for understanding,” and UbD is compatible with many instructional frameworks. Regardless of the instructional approach and specific teaching techniques, designers are encouraged to consider the W.H.E.R.E.T.O. elements as they plan.



Essential Questions for Stage 3

- What can I do to make the work maximally engaging and effective?
- If the “content” is the answer, then what were the original questions?
- What content should we cover? What content needs to be “uncovered”?
- When should the “basics” come first? When should they be on a “need to know” basis?
- When should I teach, when should I coach, and when should I facilitate student “discovery”?
- How do I know who and where the learners are?
- What should I do if they *already* know/ can do? What should I do if they don’t?
- In order to truly meet the standard, what should they be able to do *independently* (transfer)? What should I be doing to make them more independent and able to transfer?

Title: "You Are What You Eat" Subject/Course: Health
 Topic: nutrition Grade(s): 5-7 Designer(s): Bob James

Stage 1 – Desired Results

Established Goal(s) G

Standard 6 - Students will understand essential concepts about nutrition and diet.
 6, a - Students will use an understanding of nutrition to plan appropriate diets for themselves and others.

Understanding(s) U

Students will understand that...

- The USDA Food Pyramid presents relative guidelines for nutrition.
- Just because food tastes good, doesn't mean it is good for you.
- Dietary requirements vary for individuals based on age, activity level, weight, and overall health.
- Healthful living requires an individual to act on available information about diet even if it means breaking comfortable habits.

Essential Question(s): Q

- What is healthful eating?
- To what extent are you a healthy eater?
- Could a healthy diet for one person be unhealthy for another?
- Why are there so many health problems in the modern world caused by poor nutrition despite all of the available information?

Students will know...

- key terms - protein, fat, calorie, carbohydrate, cholesterol, etc.
- types of foods in each food group
- USDA Pyramid guidelines
- variables influencing nutritional needs

K

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

S

Stage 2 – Assessment Evidence

Performance Task(s) *Summary in G.R.A.S.P.S. form* T

You Are What You Eat - Students create an illustrated brochure to teach younger children about the importance of good nutrition for healthful living,

Camp Menu - Students develop a 3-day menu for meals and snacks for an upcoming Outdoor Education camp experience. They write a letter to the camp director to explain why their menu should be selected (by showing that it meets the USDA Food Pyramid recommendations, yet tasty enough for the students).

Key Criteria:

- accurate application of nutritional concepts
- clear and thorough explanation

Other Evidence Quizzes - on vocabulary, food groups, USDA Food Pyramid Prompt - Describe two health problems that could arise as a result of poor nutrition and explain how these could be avoided. OE

2-page Template (1)

Stage 3 – Learning Plan

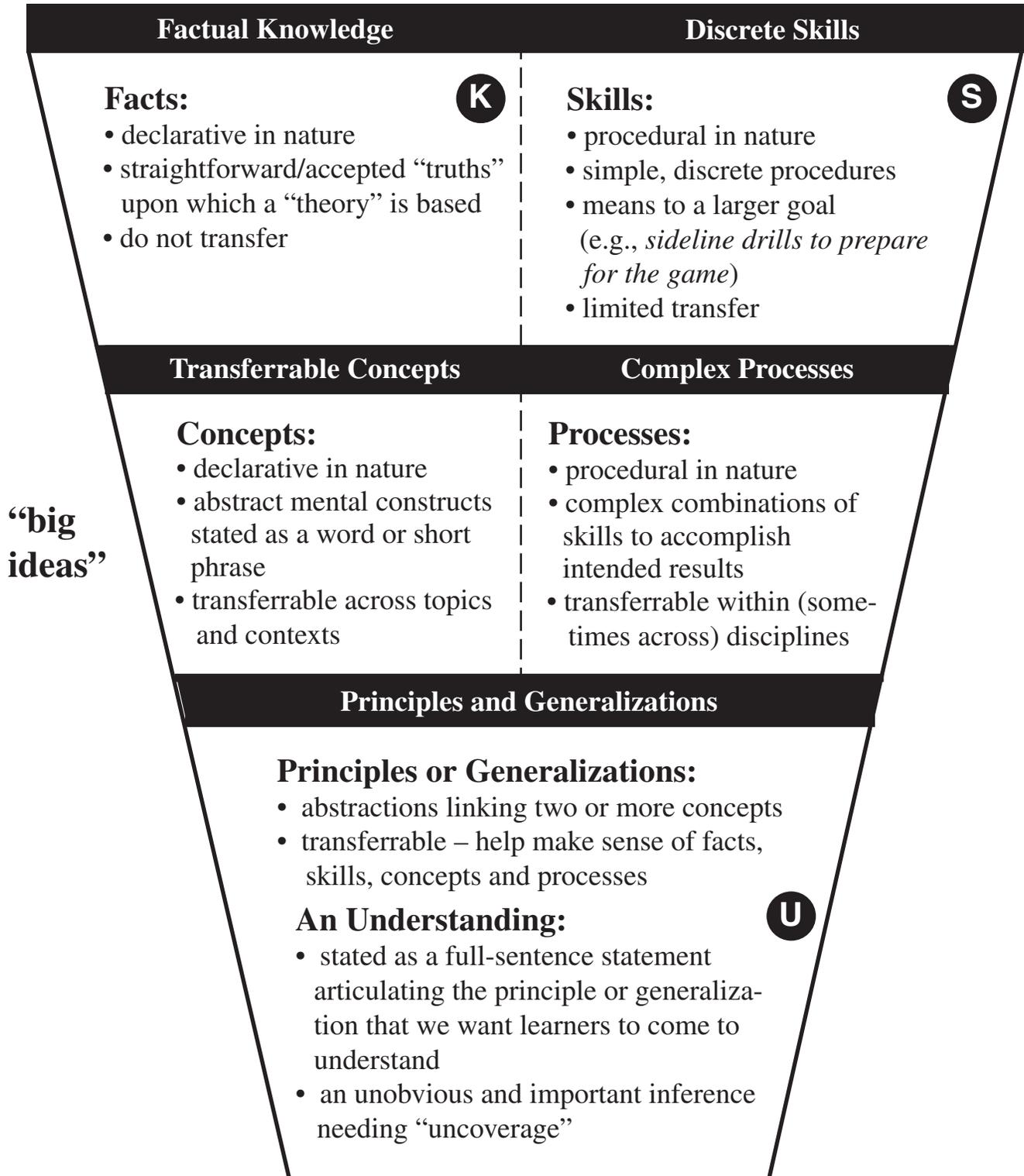
Learning Activities:

(samples)

L

1. Begin with an entry question (Can the foods you eat cause zits?) to hook students into considering the effects of nutrition on their lives. **M**
2. Introduce the essential questions and discuss the culminating unit performance tasks (Chow Down and Eating Action Plan). **M**
3. Note: Key vocabulary terms are introduced as needed by the various learning activities and performance tasks. Students read and discuss relevant selections from the Health textbook to support the learning activities and tasks. As an on-going activity students keep a chart of their daily eating and drinking for later review and evaluation. **A**
4. Present concept attainment lesson on the food groups. Then, have students practice categorizing pictures of foods accordingly. **M**
5. Introduce the Food Pyramid and identify foods in each group. Students work in groups to develop a poster of the Food Pyramid containing cut-out pictures of foods in each group. Display the posters in the classroom or hallway. **A**
6. Give quiz on the Food groups and Food Pyramid (matching format). **E**
7. Review and discuss the nutrition brochure from the USDA. Discussion question: Must everyone follow the same diet in order to be healthy? **A M**
8. Working in cooperative groups, students analyze a hypothetical family's diet (deliberately unbalanced) and make recommendations for improved nutrition. Teacher observes and coaches students as they work. **M T**
9. Have groups share their diet analyses and discuss as a class. **M**
(Note: Teacher collects and reviews the diet analyses to look for misunderstandings needing instructional attention.)
10. Each student designs an illustrated nutrition brochure to teach younger children about the importance of good nutrition for healthy living and the problems associated with poor eating. This activity is completed outside of class. **M T**
11. Show and discuss the video, Nutrition and You. Discuss the health problems that result from poor nutrition. **A**
12. Students listen to, and question, a guest speaker (nutritionist from the local hospital) about health problems caused by poor nutrition. **A**
13. Students respond to written prompt: Describe two health problems that could arise as a result of poor nutrition and explain what changes in eating could help to avoid them. (These are collected and graded by teacher.) **A**
14. Teacher models how to read and interpret food label information on nutritional values. Then, have students practice using donated boxes, cans and bottles (empty!). **A**
15. Students work independently to develop the 3-day camp menu. **T**
16. At the conclusion of the unit, students review their completed daily eating chart and self assess the "healthfulness" of their eating. Have they noticed changes? Improvements? Do they notice changes in how they feel and/or their appearance? **M T**
17. Students develop a personal "eating action plan" for healthful eating. These are saved and presented at upcoming student-involved parent conferences. **T**
18. Conclude the unit with student self evaluation regarding their personal eating habits. Have each student develop a personal action plan for their "healthful eating" goal. **M T**

Structure of Knowledge – Definitions of the Elements



UbD Design Standards

Stage 1—To what extent does the design focus on the big ideas of targeted content?

Consider: Are . . .

- The targeted understandings enduring, based on transferable, big ideas at the heart of the discipline and in need of uncoverage?
- The targeted understandings framed by questions that spark meaningful connections, provoke genuine inquiry and deep thought, and encourage transfer?
- The essential questions provocative, arguable, and likely to generate inquiry around the central ideas (rather than a “pat” answer)?
- Appropriate goals (e.g., content standards, benchmarks, curriculum objectives) identified?
- Valid and unit-relevant knowledge and skills identified?

Stage 2—To what extent do the assessments provide fair, valid, reliable and sufficient measures of the desired results?

Consider: Are . . .

- Students asked to exhibit their understanding through authentic performance tasks?
- Appropriate criterion-based scoring tools used to evaluate student products and performances?
- A variety of appropriate assessment formats used to provide additional evidence of learning?
- The assessments used as feedback for students and teachers, as well as for evaluation?
- Students encouraged to self-assess?

Stage 3—To what extent is the learning plan effective and engaging?

Consider: Will the students . . .

- Know *where* they're going (the learning goals), *why* the material is important (reason for learning the content) and *what* is required of them (unit goal, performance requirements and evaluative criteria)?
- Be *hooked*—engaged in digging into the big ideas (e.g., through inquiry, research, problem solving, and experimentation)?
- Have adequate opportunities to *explore* and *experience* big ideas and receive instruction to *equip* them for the required performances?
- Have sufficient opportunities to *rethink*, *rehearse*, *revise* and *refine* their work based upon timely feedback?
- Have an opportunity to *evaluate* their work, reflect on their learning, and set goals?

Consider: Is the learning plan . . .

- Tailored* and flexible to address the interests and learning styles of all students?
- Organized* and sequenced to maximize engagement and effectiveness?

Overall Design—To what extent is the entire unit coherent, with the elements of all three stages aligned?