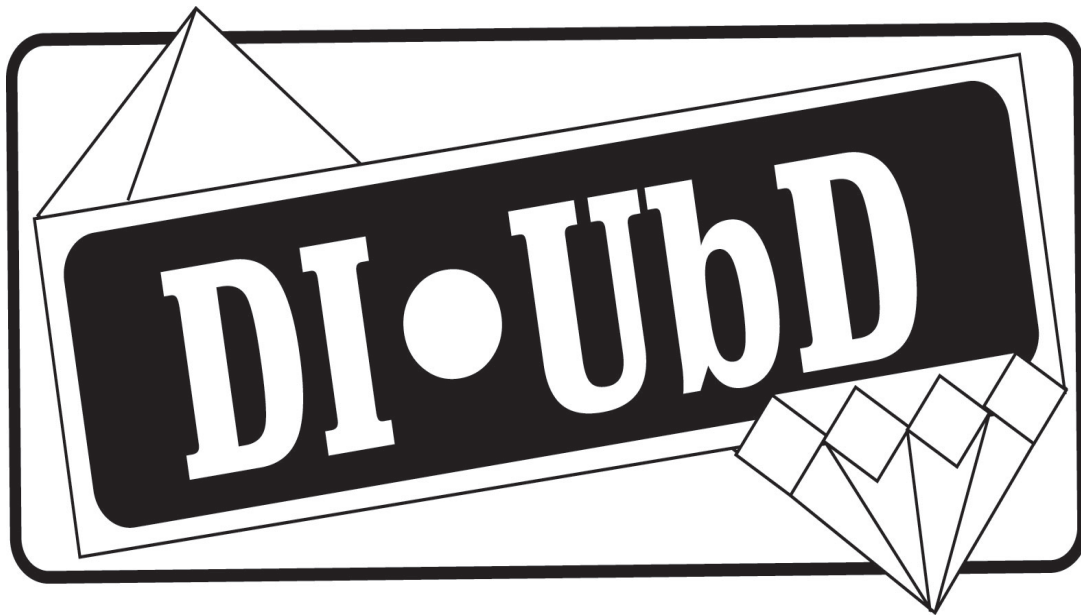


Connecting Content and Kids:
Integrating
Understanding by Design
and
Differentiated Instruction



presented by

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Key Understandings about...

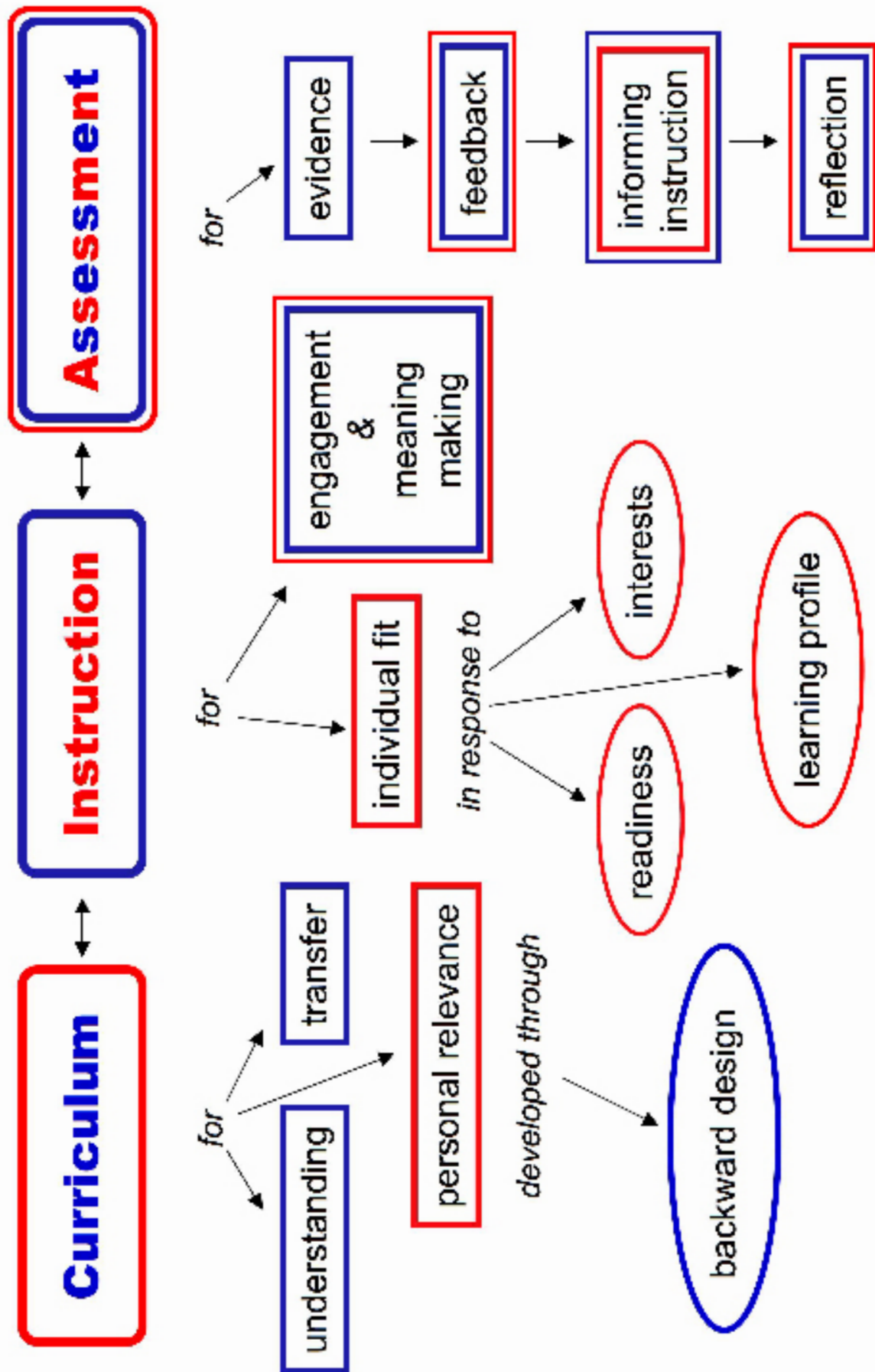
-- Understanding by Design --

1. A primary goal of education is the development and deepening of student understanding to enable transfer of knowledge and skills.
2. Effective curriculum development reflects a three-stage design process called “backward design.” This process helps to avoid the twin problems of “textbook coverage” and “activity-oriented” teaching.
3. Content needs to be “unpacked” to identify the big ideas worth understanding and the essential questions worth uncovering.
4. Evidence of student understanding is revealed when students apply (transfer) knowledge and skills within authentic contexts.
5. Six facets of understanding – the capacity to explain, interpret, apply, shift perspective, empathize, and self-assess – serve as indicators that students understand.
6. Understanding cannot be simply transmitted by “telling”. It must be actively “constructed” in the mind of the learner.
7. Regular reviews of curriculum and assessment designs, based on design standards, provide feedback for improving curricular effectiveness.

-- Differentiated Instruction --

1. Learners differ in terms of their readiness (background knowledge, skills and experiences), learning profile (culture, gender, and preferred style) and interests. Learning is enhanced when these differences are acknowledged and addressed.
2. Effective differentiation is rooted in a solid curriculum.
3. The classroom environment builds a context for learning and influences the results. When students feel affirmation, affiliation, a sense of contribution, growing autonomy, and a sense of accomplishment, their learning potential is enhanced.
4. To learn well, each student needs success at increasing levels of challenge, and scaffolded learning experiences to ensure persistent growth.
5. Diagnostic (pre-) assessments are essential to reveal differences in students’ readiness, learning profiles, and interests. Pre-assessment information guides differentiation.
6. Respectful tasks engage learners in working with essential content in ways that stimulate and challenge them.
7. Responsive teaching addresses learners’ differences through effective classroom routines, and use of varied and appropriate teaching/learning strategies.

UbD and DI Connections



Understanding by Design – Big Ideas and Implications

Big Ideas	Understandings	Essential Questions	Implications
<p>Understanding</p> <p>Essential Questions</p>	<p>* A primary goal of education is the development and deepening of understanding to enable transfer of learning.</p> <p>* Content needs to be “unpacked” to identify the “big ideas” worth understanding and the essential questions worth uncovering.</p>	<ul style="list-style-type: none"> • <i>What transferable “big ideas” are most worth understanding?</i> • <i>How might we “uncover” content to help learners make sense of the important ideas?</i> 	<ul style="list-style-type: none"> √ Unpack content standards to identify the “big ideas,” enduring understandings, and essential questions. √ Consider potential misunderstandings and use on-going assessments to check for them.
<p>Transfer</p> <p>Authenticity</p> <p>Six facets</p>	<p>* Understanding is revealed when students transfer their learning through authentic applications.</p> <p>* Six facets of understanding – the capacity to <i>explain, interpret, apply, shift perspective, empathize, and self assess</i> – serve as indicators of understanding.</p>	<ul style="list-style-type: none"> • <i>What is understanding?</i> • <i>How will we know that students truly understand the “big ideas”?</i> 	<ul style="list-style-type: none"> √ Assess student understanding through “authentic” performance tasks that reflect one or more of the facets of understanding and require transfer. √ Collect “other evidence” for assessing knowledge and skills.
<p>W.H.E.R.E.T.O.</p>	<p>* The W.H.E.R.E.T.O. elements guide planning and teaching for understanding.</p>	<ul style="list-style-type: none"> • <i>What does “teaching for understanding” look like?</i> 	<ul style="list-style-type: none"> √ Use the W.H.E.R.E.T.O. elements when planning instruction.
<p>Backward Design</p> <p>Design Standards</p>	<p>* A 3-stage “backward design” process helps avoid the twin sins of “activity- and coverage-oriented” curricula.</p> <p>* Regular reviews of curriculum against design standards enhance curricular quality and effectiveness.</p>	<ul style="list-style-type: none"> • <i>Why are the best curriculum designs planned “backward”?</i> • <i>How might we use design standards to enhance the quality and effectiveness of our curriculum?</i> 	<ul style="list-style-type: none"> √ Use “backward design” and the UbD Template to plan units, courses and programs. √ Regularly review curriculum against UbD design standards and make needed adjustments.

Differentiated Instruction – Big Ideas and Implications

Big Ideas	Understandings	Essential Questions	Implications
<p>Readiness</p> <p>Interests</p> <p>Learner Profile</p>	<p>* Learners differ in terms of their readiness (background knowledge, skill levels, and experiences), learning profile (culture, gender, preferred style/intelligence), and interests/talents. Learning is enhanced when these differences are acknowledged and addressed.</p>	<ul style="list-style-type: none"> • <i>How will we determine a learner's readiness, interests and profile?</i> • <i>How will we accommodate differences in learners' readiness, interests and profile?</i> 	<ul style="list-style-type: none"> √ Use diagnostic (pre-) assessments to check for students' readiness, interests and profile. √ Use the information from pre-assessments to plan differentiated instruction.
<p>Content</p> <p>Process</p> <p>Product</p>	<p>* Effective differentiation is anchored by a curriculum grounded in "big ideas," essential knowledge and skills with varied routes to accessing the content.</p> <p>* Learning is enhanced when instruction helps students make sense of content by accommodating differences in readiness, interest, and learning profile.</p> <p>* Students can demonstrate their learning through varied products and performances. Valid assessment evidence can be collected without standardization.</p>	<ul style="list-style-type: none"> • <i>What should <u>all</u> students know, understand and be able to do?</i> • <i>How will we frame content in ways that respond to differences in learner's readiness, interest, and learning profile.</i> • <i>What activities and mental processes will help students make sense of content?</i> • <i>How will students "best" display their knowledge, skills and understandings?</i> 	<ul style="list-style-type: none"> √ Address learners' diverse needs, interests, and profiles through a variety of strategies, such as tiered lessons, flexible groupings, and scaffolded assignments. √ Provide varied learning options and/or allow students appropriate choices regarding how they work (<i>process</i>) as well as the ways that they demonstrate their learning (<i>products and performances</i>).
<p>Learning</p> <p>Environment</p>	<p>* The potential for learning is enhanced when students feel affirmation, affiliation, a sense of contribution, growing autonomy, and a sense of accomplishment.</p>	<ul style="list-style-type: none"> • <i>In what ways can the classroom environment enhance learning for all learners?</i> 	<ul style="list-style-type: none"> √ Connect with each student, build a community of learners, and establish "ground rules." Support and reinforce <i>all</i> learners for effort, progress and achievement.

A Summary of Key Research Findings Supporting Understanding by Design

- Views of how effective learning proceeds have shifted from the benefits of diligent drill and practice to focus on students' understanding and application of knowledge.

- Experts' knowledge is organized... Their knowledge is not simply a list of facts and formulas that are relevant to the domain; instead, their knowledge is organized around core concepts or 'big ideas' that guide their thinking about the domain (e.g., Newton's second law of motion); it is "conditionalized" to specify the contexts in which it is applicable; it supports understanding and transfer (to other contexts) rather than only the ability to remember. Novices' knowledge is much less likely to be organized around big ideas; they are more likely to approach problems by searching for correct formulas and pat answers that fit their everyday intuitions.

- Learning must be guided by generalized principles in order to be widely applicable. Knowledge learned at the level of rote memory rarely transfers; transfer most likely occurs when the learner knows and understands underlying principles that can be applied to problems in new contexts. Learning with understanding is more likely to promote transfer than simply memorizing information from a text or a lecture.

- Skills and knowledge must be extended beyond the narrow contexts in which they are initially learned. For example, knowing how to solve a math problem in school may not transfer to solving math problems in other contexts. It is essential for a learner to develop a sense of *when* what has been learned can be used -- the conditions of application. Failure to transfer is often due to learners' lack of this type of conditional knowledge.

- Curricula that are a "mile wide and an inch deep" run the risk of developing disconnected rather than connected knowledge. Research on expertise suggest that a superficial coverage of many topics in the domain may be a poor way to help students develop the competencies that will prepare them for future learning and work."

- Feedback is fundamental to learning, but feedback opportunities are often scarce in classrooms. Students may receive grades on tests and essays, but these are summative assessments that occur at the end of projects. What are needed are formative assessments, which provide students with opportunities to revise and improve the quality of their thinking and understanding.

- Assessments must reflect the learning goals that define various environments. If the goal is to enhance understanding and applicability of knowledge, it is not sufficient to provide assessments that focus primarily on memory for facts and formulas. Many assessments measure only propositional (factual) knowledge and never ask whether students know *when*, *where*, and *why* to use that knowledge. Given the goal of learning with understanding, assessments and feedback must focus on understanding, and not only on memory for procedures or facts.

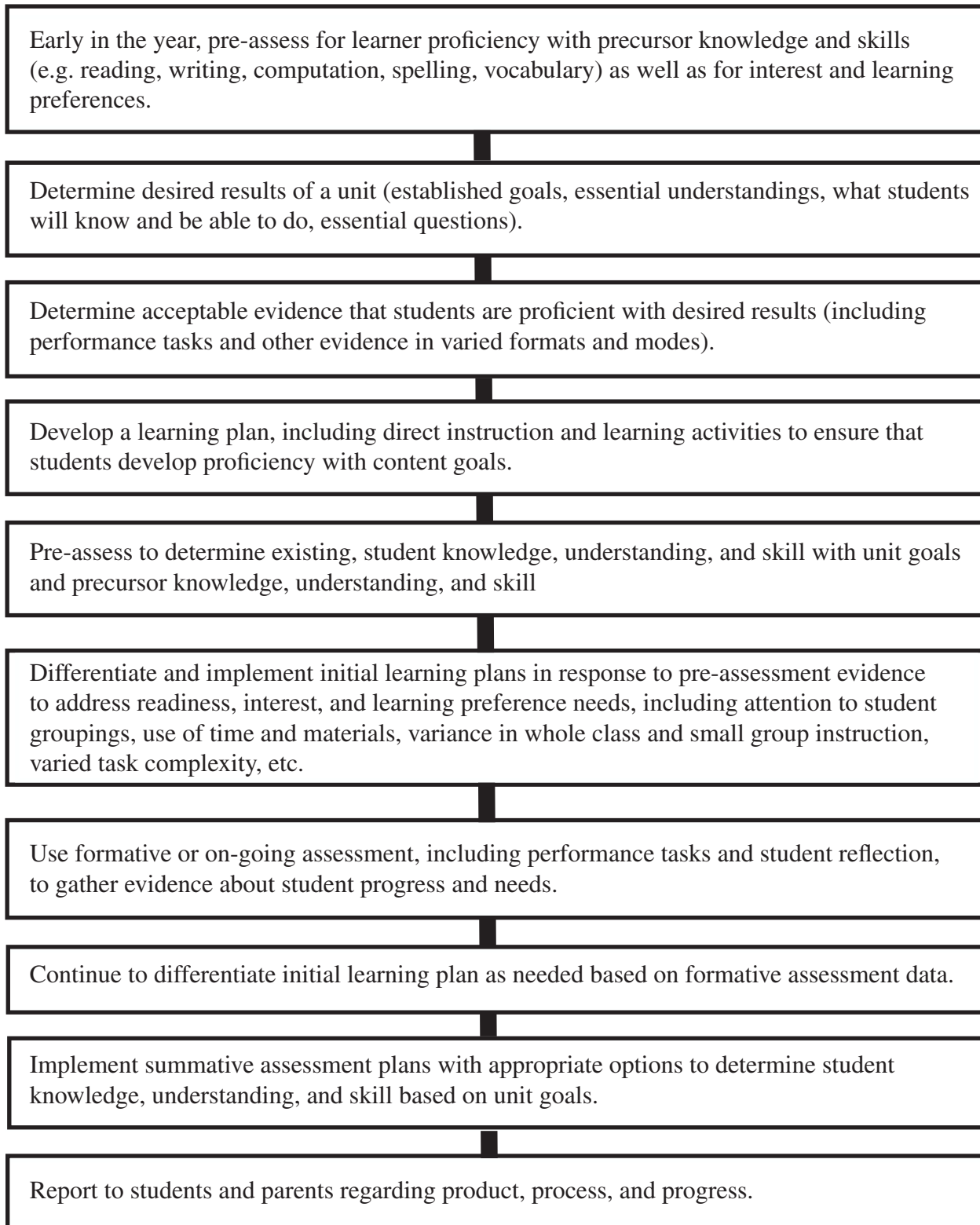
A Summary of Key Research Findings Supporting Differentiated Instruction

- Learning profile refers to preferred modes of learning or ways in which a student will best process what he/she needs to learn. Learning profile is shaped by a person's gender, culture, learning style, and intelligence preference. It is important for classrooms to provide a range of materials, processes, and procedures for learning so that students with different learning profiles find them comfortable and effective places to learn.
- Intelligence manifests itself in a variety of spheres. While these manifestations are fluid rather than fixed, there is benefit to addressing a learner's intelligence preferences in instruction.
- A person's culture shapes his/her perspectives, points of view, frames of reference, modes of communication, sense of identity, and cognitive style. While there is great variance within any culture and it is not appropriate to generalize to a culture, classrooms that favor cultural patterns of one group and are inhospitable to those of other groups are likely to have negative impacts on the learning of students from the non-favored groups.
- A person's gender can influence the way that person sees and interacts with the world around them—including the classroom. While it is not appropriate to generalize to a particular gender, there are likely some female-preferred learning patterns and some male-preferred learning patterns
- Learners must work at an appropriate degree of challenge or degree of difficulty with what they seek to learn. When tasks are too difficult for students, they become frustrated and do not learn effectively or efficiently. When tasks are too easy for students, they become bored and do not learn, in spite of the fact that they might earn high grades. Learning occurs through a progression of appropriately scaffolded tasks at degrees of difficulty just beyond the reach of a particular student.
- Students learn more effectively when teachers diagnose a student's skill level and prescribe appropriate tasks.
- When an individual's interest is tapped, learning is more likely to be rewarding and the student more likely to become an autonomous learner. Student interest is key to on-going student motivation to pursue tasks at increasing levels of complexity.

Integrating UbD and DI when Planning a Unit

The following chart depicts a step-by-step sequence for designing a UbDI unit. The actual design process is more iterative (i.e., back and forth) in nature.

Continue developing a learning environment that promotes success for each learner.



Continue actively learning about the strengths and needs of each learner.

UbD: Stages of “Backward” Design



The backward design approach consists of three general stages:

Stage 1. Identify Desired Results – In stage one 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, etc.)? 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 WHERETO 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?

Stage 1 – Desired Results

Established Goal(s):

G

Understanding(s):

Students will understand that...

U

Essential Question(s):

Q

Students will know...

K

Students will be able to...

S

Stage 2 – Assessment Evidence

Performance Task(s):

T

Other Evidence:

OE

Stage 3 – Learning Plan

Learning Activities:

L

Stage 1 – Desired Results

Established Goal(s): G

- *What relevant goals (e.g., Content Standards, Course or Program Objectives, Learning Outcomes etc.) will this design address?*

Understanding(s): U

- *What are the “big ideas”?*
- *What specific understandings about them are desired?*
- *What misunderstandings are predictable?*

Essential Question(s): Q

- *What provocative questions will foster inquiry, understanding, and transfer of learning?*

Students will know...

K

Students will be able to...

S

- *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?*

Stage 2 – Assessment Evidence

Performance Task(s): T

- *Through what authentic performance task(s) will students demonstrate the desired understandings?*
- *By what criteria will “performances of understanding” be judged?*

Other Evidence: OE

- *Through what other evidence (e.g. quizzes, tests, academic prompts, observations, homework, journals, etc.) will students demonstrate achievement of the desired results?*
- *How will students reflect upon and self-assess their learning?*

Stage 3 – Learning Plan

Learning Activities: L

- *What learning experiences and instruction will enable students to achieve the desired results? How will the design –*

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)?

H = hook all students and hold their interest?

E = equip students, help them experience the key ideas, and explore the issues?

R = provide opportunities to rethink and revise their understandings and work?

E = allow students to evaluate their work and its implications?

T = be tailored (personalized) to the different needs, interests, abilities of learners

O = be organized to maximize initial and sustained engagement as well as effective learning?

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 America 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

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

Stage 2 – Assessment Evidence

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

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

Chow Down - 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 OE *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.*

Stage 3 – Learning Plan

Learning Activities: *(samples)*



1. Begin the unit by asking, "Can what you eat help prevent zits?" to "hook" students to consider the relationship of nutrition to health and appearance.
2. Have students begin a "foods diary" to chart their eating for 3 weeks.
3. Introduce essential and unit ?s and key vocabulary terms.
4. Present concept attainment lesson on food groups, then categorize foods accordingly.
5. Have students read & discuss the nutrition brochure from the USDA.
6. Present lesson on the Food Pyramid and identify foods in each group.
7. Read and discuss relevant selections from the Health textbook.
8. Present and discuss the video, Nutrition and You.
9. Have students design an illustrated nutrition brochure to teach younger children about the importance of good nutrition for healthy living.
10. Assess & give feedback on the brochures; allow students to self- and peer-assess the brochures using a list of criteria.
11. Working in cooperative groups, have students analyze a hypothetical family's diet and make recommendations for improved nutrition.
12. Conduct a group review & give feedback regarding the diet analyses.
13. Have students listen to, and question, guest speaker (nutritionist from hospital) about health problems caused by poor nutrition.
14. Have students conduct research on health problems resulting from poor eating.
15. Model how to interpret food label information for nutritional value; have students practice.
16. Have students work independently to develop the 3-day camp menu.
17. Observe and coach students as they work on their menus
18. Evaluate and give feedback on the camp menu project. Then, have students self- and peer-assess their projects using rubrics.
19. Conclude the unit with students reviewing their food diary and self evaluating their personal eating habits (i.e., the extent to what extent are they healthy eaters?)
20. Have students develop a Personal Nutrition Plan to improve their eating.

Stage 1 – Desired Results

Established Goal(s):

G

The goals or content standards do not change (except for students with an authorized I.E.P.)

Understanding(s):

U

Students will understand that...

The “big ideas” of content do not vary. In reality, some students will be able to go into greater depth, but the desired understandings should remain a fixed target.

Essential Question(s):

Q

Essential questions should reflect the “big ideas” that we want students to come to understand. Since essential questions are open-ended, they allow various entry points, as well as different depths of response.

Students will know...

K

While knowledge and skills are linked to the goals or content standards, some differentiation may be needed to address knowledge or skill gaps or to extend learning for those students who demonstrate mastery.

Students will be able to...

S

Stage 2 – Assessment Evidence

Performance Task(s):

T

Other Evidence:

OE

In Stage 2, teachers collect evidence of learning based on the goals of Stage 1. Some differentiation of the assessments may be appropriate. For example, students may be allowed to develop varied products and performances to demonstrate their understanding and proficiency. In addition, teachers may allow certain modifications (e.g., allowing oral rather than written responses), as long as acceptable evidence of the targeted learning is obtained.

Stage 3 – Learning Plan

Learning Activities:

L

Differentiated instruction is appropriate in Stage 3 to address student differences in background knowledge and experience, skill levels, interests, talents and learning styles. Designers need to consider ways in which lessons, activities, and resources might be personalized without the sacrificing unit goals.

Incorporating Differentiation and Backward Design

Unit Topic: Novel Study - *The Catcher in the Rye* **Designer(s):** D. Grant
Subject(s): English/Language Arts **Grade(s):** 9th-10th

Stage 1 – Desired Results

Established Goal(s):

- Students will read and interpret works of literature.
- Students will analyze authors’ styles.
- Students will write for a variety of purposes and audiences.

Understanding(s):

Students will understand that...

- Novelists often provide insights about human experience and inner life through fictional means.
- Authors use a variety of stylistic devices to hook and hold their readers.
- Holden Caulfield represents common adolescent experience but masks deep-seated personal problems about growing up and relationships with others.

Students will know...

- the plot, setting and main characters of the novel
- stylistic devices used by J.D. Salinger in *The Catcher in the Rye*

G

While the established goals will remain the same for virtually all students (exception: some IEPs), it's important at the outset of planning to consider the range of students likely to be in the class in terms of their backgrounds, readiness needs, interests, and learning profiles.

Q

Essential Question(s):

- What is the relationship between fiction and truth?
- What insights do we gain into American history and contemporary culture through its literary characters?
- How does J.D. Salinger ‘hook’ you as a reader? How effective were his stylistic devices?
- What’s wrong with Holden?

K

Students will be able to...

- use interpretive reading strategies to analyze literature
- develop a well-reasoned hypothesis through a close reading of a text
- write to explain
- apply writing conventions effectively

Ideas for Differentiation

Think about ways in which you might link the essential understandings and questions to the lives and experiences of students, and how exploration of the understandings and questions could help build community in the classroom.

What precursor knowledge and skills are you expecting students to have in preparation for this set of knowledge and skill? Begin thinking about ways you can support students in developing “missing” competences and what you can do to extend the knowledge & skill of students who already show mastery.

Incorporating Differentiation and Backward Design

Unit Topic: Novel Study - *The Catcher in the Rye* **Designer(s):** D. Grant
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Stage 2 – Assessment Evidence

Performance Task(s):

WHAT'S WRONG WITH HOLDEN?

You serve as a case worker at the psychiatric hospital where Holden Caulfield is telling his story. After a close reading and discussion of Holden's account of the events of the preceding December, you will write a letter to Holden's parents to describe Holden's behavior and explain what (if anything) is wrong with him. Cite examples from the text to support your analysis.

T

Ideas for Differentiation

Are there students who will need support with reading/searching the text? With writing? Consider using peer critique groups, mini-workshops, small group instruction, targeted vocabulary handouts, role play prior to writing, etc.

Content Criteria:

- insightful interpretation of literary character
- citation of relevant text to support the character analysis

Product/Performance Criteria:

- clear and coherent writing
- accurate and effective use of writing conventions

Other Evidence:

Quizzes: two quizzes on the plot, settings and main characters

Writing Prompt: Describe a “modern day” teenager using J.D. Salinger’s writing style.
Reading Response Journal: Students to respond in their journals to two questions at the end of each reading assignment.

- a) *What is the most important thing you learn about Holden in this section of the novel?*
- b) *What is the most important unanswered question about Holden at this point in the novel?*

Would it be helpful to some students to see models of papers that do and don't meet these criteria? Would it be helpful to advanced students to see advanced models. Do rubrics provide something for highly able students to aim for?

Would it be helpful for struggling students to have an option for later quizzes to demonstrate ultimate mastery of content? Might it be useful to tier the writing prompt? Are there some students who would benefit from scaffolded writing early on in the reading response process?

Incorporating Differentiation and Backward Design

Unit Topic: Novel Study - *The Catcher in the Rye* **Designer(s):** D. Grant
Subject(s): English/Language Arts **Grade(s):** 9th-10th

Stage 3 – Learning Plan

Consider the W.H.E.R.E.T.O. elements:

Day One: Begin by telling students that Holden is telling his story from a “rest home” or psychiatric hospital in California. Set the tone of a puzzle to be solved -- a character and a situation that will be revealed gradually.

Present and discuss the culminating the performance task, “What’s wrong with Holden?”

Ask the students to respond in the journal at the end of each reading assignment and before the next class to two questions: a) what is the most important thing you learn about Holden in this section of the novel? and b) what is the most important unanswered question about Holden at this point in the novel? Student responses to these questions will begin and end daily class discussions.

The novel is divided her into six reading assignments. Sample discussion questions are provided (in italics).

- #1: Chapters 1-4 (pp. 1-35): What observations do you have about Holden’s use of language?
- #2: Chapters 5-9 (pp. 35-66): What observations do you have about Holden’s fight with Stradlater?
- #3: Chapters 10-14 (pp. 66-104): On p. 87, Holden says, “The Navy guy and I we were glad to’ve met each other. Which always kills me. I’m always saying, ‘Glad to’ve met you to someone, I’m not at all glad I met.’ If you want to stay alive, you have to say that stuff, though.” Based on your own life and experiences, do you think this last observation is true? Be specific.
- #4: Chapters 15-18 (pp. 105-141): Look at the conversation between Holden and Sally on pp. 130-134. What do you think is most important about it in regards to understanding Holden?
- #5: Chapters 19-23 (pp.141-180): What do you think is the most revealing moment in the long scene between Holden and Phoebe, in D.B.’s bedroom?
- #6: Chapters 24-26 (pp. 180-214): How do you interpret Mr. Antolini’s behavior and Holden’s reaction to it, at the time and later? What scene early in the book does this remind you of?

Ideas for Differentiation

Be sure to front-load vocabulary here (spotlight/clarify key academic vocabulary students will need for success). Ensure that students have an accurate context for dealing with the concept of mental illness – views may be shaped by culture/experience.

For struggling students, consider amplifying discussion questions with illustrations that point students to key text. For all students, consider making links between Holden’s experiences and those in their own lives.

Some students might benefit from pre-writing discussion groups to jump-start the process and/or from post-writing sharing groups to see how other students are thinking and writing. If students write in class, the teacher might meet with small groups to clarify, support, extend, monitor.

Incorporating Differentiation and Backward Design

Unit Topic: Novel Study - *The Catcher in the Rye* **Designer(s):** D. Grant
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Stage 3 – Learning Plan

Consider the *W.H.E.R.E.T.O.* elements:

L

Day Two: [Each day, students meet in their cooperative groups to discuss the reading and the associated question. Then, lead a full class discussion.]
e.g., Holden is at his funniest in these early chapters describing Pencey Prep, but even here students will notice how he uses language and humor to distance and protect himself. In discussing student answers to the journal questions, remind students as they go along in their reading to note: 1. Any details about Holden’s family; 2. What things Holden says “depress him.”

Day Three: Give Quiz #1. Conduct a class discussion in response to the quiz questions and journal writing related to their reading.

Day Four: Present students with excerpts from several different authors’ descriptions of characters. Have students work in cooperative groups to compare these authors w/ the way in which Salinger describes. Guide students in identifying specific literary techniques used by Salinger.

Day Five: Present and discuss writing assignment (OE #2). Review the writing process and allow pre-writing time for brainstorming and initial organization of ideas. Present and discuss scoring rubric. Continue drafting for homework.

Day Six: Give Quiz #2. Discuss quiz and journal responses to reading. Have students meet in peer review groups to exchange and give feedback on draft writing based on the rubric. Allow revision time. Students complete the writing assignment for homework.

Day Seven: Discuss the ending of the book. In preparation for the final performance task, have students work in groups to discuss Holden from the perspective of different characters – one from a member of Holden’s family, one from one of his teachers, and two from his friends/peers. Lead full class discussion. Then, ask students to identify the characteristics of an effective response to their forthcoming task, What’s Wrong With Holden? Guide them in generating the key rubric traits. Students complete task over the weekend.

Day Eight: Collect the letters to Holden’s parents. Discuss students’ interpretations of “what’s wrong with Holden?” Have students complete, and then collect, their final journal entries.

Ideas for Differentiation

Use flexible grouping over time so students sometimes meet with students of similar readiness to work on particular skills, sometimes with mixed readiness to support growth, sometimes with interest-based groups, or groups using on a particular modality to explore ideas (e.g art, drama, music).

Day 3--do any students need scaffolding for the quiz? Use varied approaches to calling on students to ensure maximum participation in discussion.

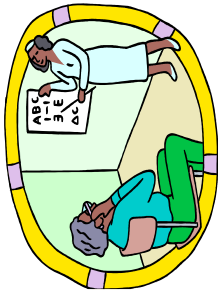
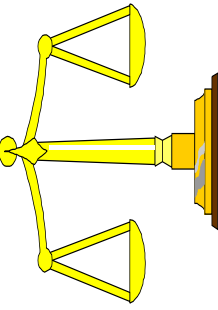
Day 4—use excerpts from various cultures, at varied reading levels.

Day 5—meet briefly with advanced writers to extend their sense of possibility.

Day 6--use peer review groups w/ guidelines targeted at particular skills needs.

Day 7—pre-arrange students to role play the different character perspectives.

Three Types of Classroom Assessments

<p>Stage 3 – Assessment <i>for</i> Learning</p> <p>Diagnostic (pre-) Formative</p>	<p>Stage 2 – Assessment <i>of</i> Learning</p> <p>Summative</p>
	
<p>assessment that <i>precedes</i> instruction to check students' prior knowledge and identify misconceptions, interests, and/or learning style preferences</p> <p>Diagnostic assessments provide information to assist teacher planning and guide differentiated instruction.</p> <p><u>Examples:</u> pre-test, student survey, skills check, K-W-L</p>	<p><i>ongoing</i> assessments that provide information to guide teaching and learning for improving learning and performance</p> <p>Formative assessments include both formal and informal methods.</p> <p><u>Examples:</u> quiz, oral questioning, observation, draft work, “think aloud,” dress rehearsal, portfolio review, misconception check</p>
<p>assessment that <i>precedes</i> instruction to check students' prior knowledge and identify misconceptions, interests, and/or learning style preferences</p> <p>Diagnostic assessments provide information to assist teacher planning and guide differentiated instruction.</p> <p><u>Examples:</u> pre-test, student survey, skills check, K-W-L</p>	<p><i>culminating</i> assessments conducted at the end of a unit, course, or grade level to determine the degree of mastery or proficiency according to identified achievement targets</p> <p>Summative assessments are evaluative in nature, generally resulting in a score or a grade.</p> <p><u>Examples:</u> test, performance task, final exam, culminating project or performance, work portfolio</p>

Ideas for Diagnostic (Pre-) Assessment

The following pre-assessment techniques provide efficient diagnostic checks of student prior knowledge and misconceptions. This information guides any differentiated instruction/assessment that may be needed.

K-W-L

Prior to the introduction of a new topic or skill, ask students what they already **K**now (or think they know) about the topic or skill. These are recorded on a board or chart paper under the “K” column. (Sometimes, students make statements that are incorrect or reveal misconceptions.)

Secondly, ask them what they **W**ant to know (or what questions they have) about the topic/skill. These are recorded under the “W” column. (Their questions often reveal interests or “hooks” to the topic. In some cases, their questions reveal misconceptions that will need to be addressed.)

As the lesson or unit proceeds, **L**earnings are summarized and recorded in the “L” column as they occur. (This provides an opportunity to go back and correct any misconceptions that may have been initially recorded in the “K” column.)

Pre-Test (non-graded)

Give students a pre-test to check their prior knowledge of key facts and concepts. Use the results to plan instruction and selection of resources. (Make sure that students know that the results will not count toward final grades.)

Skills Check (non-graded)

Have students demonstrate their proficiency with a targeted skill or process. It is helpful to have a proficiency checklist or developmental rubric to use in assessing the degree of skill competence. Students can then use the checklist or rubric for on-going self assessment.

Web/Concept Map

Ask students to create a web or concept map to show the elements or components of a topic or process. This technique is especially effective in revealing whether students have gaps in their knowledge and the extent to which they understand relationships among the elements.

Misconception Check

Present students with common errors or predictable misconceptions regarding a designated topic, concept, skill or process. See if they are able to identify the error or misconception and explain why it is erroneous or flawed.

The misconception check can also be presented in the form of a true-false quiz, where students must agree or disagree with statements or examples.

Differentiation of Knowledge and Skills based on Pre-Assessment

Identify one or more pre-assessment techniques (column one) to check the readiness levels of students for the identified **Knowledge** and **Skills** in Stage 1. Use the second and third columns to plan possible approaches for meeting the needs of struggling and advanced learners.

Pre-assessments for Diagnosing Readiness
<input type="checkbox"/> K-W-L for _____ _____ _____
<input type="checkbox"/> Pre-Test on _____ _____ _____
<input type="checkbox"/> Skills Check for _____ _____ _____
<input type="checkbox"/> Web/Concept Map on _____ _____ _____
<input type="checkbox"/> Misconception Check for _____ _____ _____
<input type="checkbox"/> Observation for _____ _____ _____
<input type="checkbox"/> Other: _____ _____ _____

Knowledge	Skills
<p><i>Ideas for building needed background knowledge or addressing skill gaps for struggling learners:</i></p> _____ _____ _____ _____ _____ _____ _____	<p><i>Ideas for extending knowledge/skill learning for advanced learners:</i></p> _____ _____ _____ _____ _____ _____ _____

Constructing a Performance Task Scenario using G.R.A.S.P.S.

Consider the following set of stem statements as you construct a scenario for a performance task. Refer to the previous idea sheets to help you brainstorm possible scenarios. (Note: These are idea starters. Resist the urge to fill in all of the blanks.)

Goal :

- Your task is _____
- The goal is to _____
- The problem/challenge is _____
- The obstacle(s) to overcome is (are) _____

Role:

- You are _____
- You have been asked to _____
- Your job is _____

Audience:

- Your client(s) is (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 a _____
in order to _____
- You need to develop _____
so that _____

Standards & Criteria for Success:

- Your performance needs to _____
- Your work will be judged by _____
- Your product must meet the following standards _____
- A successful result will _____

Constructing a Performance Task Scenario using G.R.A.S.P.S.

Goal:

- **Your goal is to** help a group of foreign visitors understand the key historic, geographic and economic features of our region.

Role:

- **You are** an intern at the Regional Office of Tourism.

Audience:

- **The audience** is a group of nine foreign visitors (who speak English).

Situation:

- **You have been asked to** develop a plan, including a budget, for a four-day tour of the region. Plan your tour so that the visitors are shown sites that best illustrate the key historical, geographic and economic features of our region.

Product/Performance and Purpose:

- **You need to** prepare a written tour itinerary and a budget for the trip. You should include an explanation of why each site was selected and how it will help the visitors understand the key historic, geographic and economic features of our region. Include a map tracing the route for the tour.
[Optional: Provide a budget for the trip.]*

Standards & Criteria for Success:

- **Your** proposed tour plan **needs to include...**
 - an itinerary and route map
 - the key historical, geographic and economic features of the region
 - a clear rationale for the selected sites
 - *- accurate and complete budget figures

Allowing Student Choice in Products

The following Tic-Tac-Toe Chart offers a practical technique for allowing appropriate student choice regarding the product(s) and/or performance(s). The teacher may structure the options while allowing students to choose from the various columns.

Product Tic-Tac-Toe Chart

<i>ESSAY</i>	<i>ORAL REPORT</i>	<i>POSTER</i>
<i>RADIO SCRIPT</i>	<i>FREE CHOICE</i>	<i>COMIC STRIP</i>
<i>LETTER</i>	<i>ROLE PLAY</i>	<i>ILLUSTRATED BROCHURE</i>

Differentiation Variables

The following differentiation variables could be considered when designing learning and performance tasks. The desired results, nature and needs of the students, the teacher's style, available resources (time, supplies, equipment, funds) and classroom feasibility.

Student Choice – To what extent will students have choices regarding the following?

- task topic task activities process for completing task
 product(s)/performance(s) audience(s)

Access to Resources – Will all resources needed (information, supplies, equipment) be provided? To what extent will students be expected to gather information, provide their own supplies/equipment, etc.?

- all necessary information/ resources provided other: _____

Performance Mode – How will students work?

- individually pair/group (optional) pair/group (required)

Audience(s) for Student Product(s)/Performance(s) – To whom will students present their products and performances?

- teacher other school staff expert(s) parents/community
 peers (in class) other students other: _____

Time Frame – How long will students be involved in this task? Include time for presentations and evaluations.

- 1 – 2 class periods 3 – 5 periods other: _____

Degree of Scaffolding – To what degree will students be provided with instructional support (scaffolding) as they work on the task?

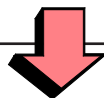
- no support some support, as needed extensive support

Evaluation of Student Product(s)/Performance(s) – Who will be involved in evaluating student products and performances?

- teacher other staff expert judge(s) external scorers
 student (self evaluation) peers other: _____

Assessment Task Blueprint

What understandings/goals will be assessed through this task?



What criteria are implied in the standard(s)/understanding(s) *regardless* of the task specifics? What qualities must student work demonstrate to signify that standards were met?

Through what authentic performance task will students demonstrate understanding?

Task Description:



What student products/performances will provide evidence of desired understandings?

By what criteria will student products/performances be evaluated?

Understanding criteria:

Product quality criteria:



Performance Task Blueprint

What content standard(s)/understanding(s) will be assessed through this task?

Students will demonstrate an understanding of a balanced diet.
Students will plan nutritional meals/snacks for themselves and others.

What criteria are implied in the standard(s)/understanding(s) regardless of the task specifics?

What qualities must student products/performances demonstrate to reveal understanding/proficiency?

- understanding of a balanced diet
- nutritionally sound meal plan

Through what authentic performance task(s) will students demonstrate understanding/proficiency?

Task Overview (GRASPS)

Since we have been learning about nutrition, you have been asked to help other students your age learn about healthful eating. Your task is to prepare an illustrated brochure to help them understand what a "balanced diet" is. Present two examples of nutritionally-balanced meals and two that are unhealthy. Describe and show three potential health problems that might arise as a result of poor eating choices.

What student products/performances will provide evidence of desired understanding/proficiency?

- illustrated brochure

*By which **primary** criteria will student products/performances be evaluated?*

- effective explanation of balanced diet
- examples accurately illustrate nutritionally sound meals
- examples correctly show potential health problems

*By which **secondary** criteria will student products/performances be evaluated?*

- neat and effective illustrations
- correct spelling/grammar

Blueprint for Differentiating Tasks

What content standard(s)/understanding(s) will be assessed through this task?

Students will demonstrate an understanding of a balanced diet.
Students will plan nutritional meals/snacks for themselves and others.

What criteria are implied in the standard(s)/understanding(s) regardless of the task specifics?

What qualities must student products/performances demonstrate to reveal understanding/proficiency?

- understanding of a balanced diet
- nutritionally sound meal plan

Through what authentic performance task(s) will students demonstrate understanding/proficiency?

Task 1 Overview (GRASPS)

Your task is to prepare a picture book for first graders to help them understand what a "balanced diet" is. Show two examples of nutritionally-balanced meals and two that are not healthy. Include pictures to show the children what might happen to someone who only ate "junk" foods instead of a balanced diet.

Task 2 Overview (GRASPS)

Your task is to produce a pamphlet for the community health clinic. (Audience = adults and teenagers.) Your brochure should contain a written explanation of sound nutrition and include two sample daily meal plans showing how they meet the USDA recommendations. Include a chart showing a breakdown of the fat, protein, carbohydrates, vitamins, minerals, and calories for each meal plan.

What student products/performances will provide evidence of desired understanding/proficiency?

• picture book

• written pamphlet
• chart of nutritional values

By which **primary** criteria will student products/performances be evaluated?

- effective explanation of balanced diet
- examples accurately illustrate nutritionally sound meals
- examples correctly show potential health problems

By which **secondary** criteria will student products/performances be evaluated?

• book is neat and attractive
• foods are accurately colored

• correct spelling/grammar
• accurate nutritional chart

Strategies for Differentiating Content

in response to differences in learners’:

READINESS

- Provide texts at varied reading levels and in students’ primary languages.
- Provide supplementary materials at varied reading levels.
- Provide audiotaped materials.
- Use videos to supplement and support explanations and lectures.
- Use texts with key portions highlighted.
- Provide organizers to guide note-taking.
- Provide key vocabulary lists for reference.
- Use reading buddies or partners to work with text materials.
- Use flexible groupings to address knowledge and skill gaps.
- Other: _____

LEARNING PROFILE

- Present information orally, visually, and in writing.
- Use applications, examples, and illustrations from various “intelligences”.
- Use materials, applications, examples, illustrations from both genders and a range of cultures/communities.
- Use materials that connect content to student’s cultures.
- Teach from both whole-to-part and part-to-whole approaches.
- Demonstrate ideas in addition to talking about them.
- Use wait time to allow for student reflection.
- Other: _____

INTERESTS

- Provide interest centers to encourage further exploration of topics.
- Provide a wide range of materials related to student interests and cultures.
- Use student questions to guide lectures, materials’ selection, and assignments.
- Other: _____

Strategies for Differentiating Process & Product

in response to differences in learners’:

READINESS

- ___ Use tiered activities (activities at different levels of difficulty, but focused on the same learning goals).
- ___ Provide detailed and highly structured task directions for learners who need it, while leaving the task more open for the more capable and independent students.
- ___ Provide resource materials at varied levels of readability and sophistication.
- ___ Provide teacher led mini-workshops on needed skills at varied levels of complexity based on student needs.
- ___ Provide tailored homework assignments based on readiness..
- ___ Provide materials in the primary language of second-language learners.
- ___ Other: _____

LEARNING PROFILE

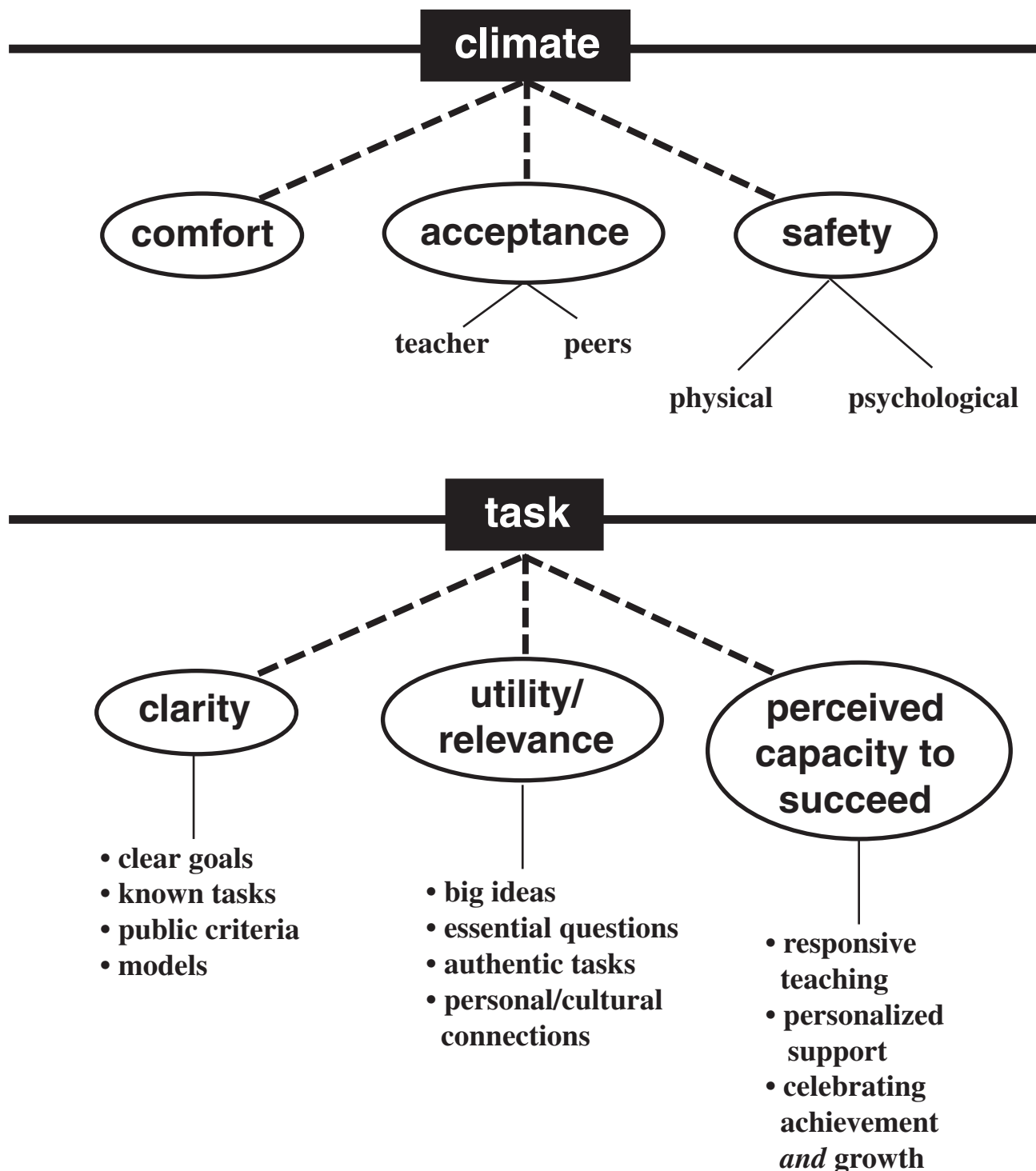
- ___ Allow multiple options for how students express their learning (i.e., varied products and performances to allow learners to work to their strengths).
- ___ Balance competitive, collegial, and independent work arrangements.
- ___ Allow students to have choices regarding their preferred working mode. (e.g., visually, orally, kinesthetically, in writing).
- ___ Other: _____

INTERESTS

- ___ Establish interest-based work groups and discussion groups.
- ___ Use both like-interest and mixed-interest work groups.
- ___ Use the Jigsaw cooperative strategy to allow students to specialize in aspects of a topic they find interesting.
- ___ Allow students to propose interest-based projects and independent studies (related to the content being learned).
- ___ Develop activities that seek multiple perspectives on topics and issues.
- ___ Other: _____

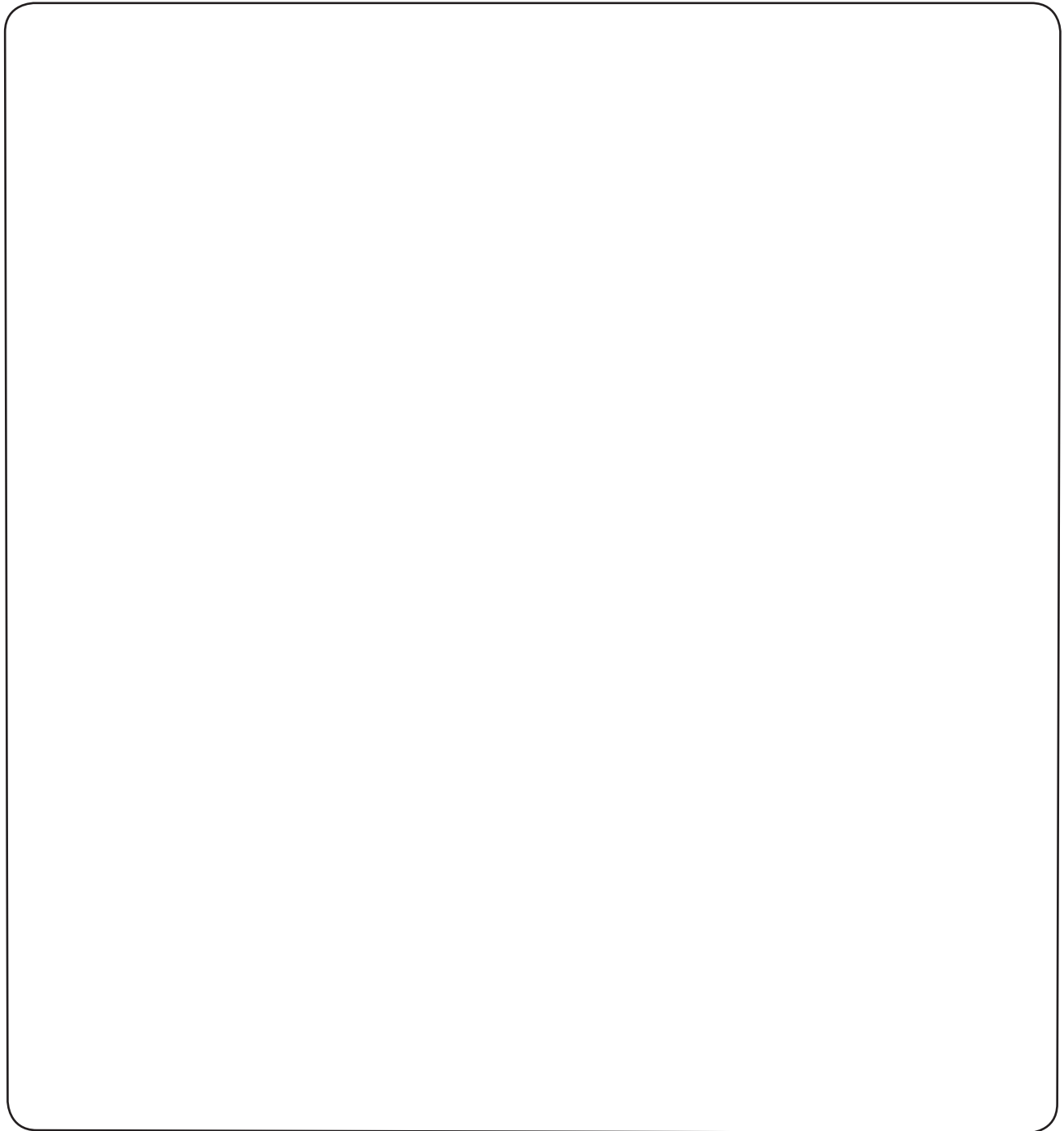
A Research-Based UbD and DI Connection

Research has identified the following variables that impact a learner's willingness to put forth effort. Both Understanding by Design and Differentiated Instruction address these variables in ways that support students and their learning.



Making Connections

Directions: Use the space below to make connections between UbD and DI. You may prepare a verbal summary, sketch a visual representation, create a graphic organizer (e.g., Venn diagram) or make analogies. Be prepared to explain the connections that you have made.



Indicators of Classrooms that Focus on Understanding and Respond to Varied Student Learning Needs*

Jay McTighe and Carol Tomlinson

A Positive, Supportive Learning Environment Supports Understanding

- The teacher makes opportunities to connect with students and shows interest in them as individuals.
- The teacher and students are respectful of one another.
- The teacher calls on students equitably and attends to individuals equitably.
- There is active participation by a very broad range of students.
- Routines and rituals are in place to help each learn feel a sense of belonging and value in the class.
- Students comfortably and respectfully work together in ways that draw on the strengths of each learner and promote both individual and group success.
- Students seem comfortable asking questions & seeking help.
- The teacher creates situations in which students interact with one another to ask questions, pose answers to one another's questions, develop strategies for solving problems, evaluate the quality of their work and their contributions to its quality.
- There is an emphasis on student growth toward important goals vs. on student competition.

Flexible Teaching and Learning Support Student Understanding

- Clear guidelines for working support needs of individuals and the group.
- Students understand why different students sometimes have different work.
- Students work in a variety of groups within a relatively short time span.
- The teacher uses multiple modes of teaching in order to support varied learner needs.
- Students know how to get and give help appropriately as needed.
- The teacher flexibly uses space, time, and materials to address varied learning needs.
- The teacher meets with individuals and small groups of students to address varied learning needs.
- Teacher and students share responsibility for making the classroom work smoothly.
- The teacher acts as a coach or facilitator of learning for individuals and the group.

Big Ideas and Essential Questions are Central to the Work of Students

- Teachers can explain the connection between big ideas, essential questions, and content standards.
- Big ideas and essential questions are posted in classrooms and referred regularly.
- Students consistently return to examination of big ideas and essential questions and give evidence of grasping their meaning and significance.
- Students explore knowledge and skills in the context of big ideas.
- The teacher connects big ideas to the interests and experiences of students to support student understanding and motivation.

Observable Indicators of UbDI Classrooms

(continued)

___ All students work with the big ideas and essential questions, but with varied support systems, at varied degrees of complexity, and in various modes to support their learning.

Students Explore and Reveal Understanding

___ Assessments often require students to explain, interpret, apply, give perspective, empathize, or examine something about themselves.

___ Instructional strategies often require students to explain, interpret, apply, give perspective, empathize, or examine something about themselves.

___ Students regularly explain or justify their work and show how they arrived at answers.

Classroom Assessment Practices Support Student Success

___ The teacher uses pre-assessment of student readiness, interest, and learning profile to understand students' points of entry into units of study.

___ Students are informed of and give evidence of understanding criteria for performance requirements and evaluative criteria.

___ Students work toward success on performance tasks and other assessments.

___ Multiple assessments (including self assessments) and multiple forms of assessment are used regularly to provide feedback for the teacher on student understanding and to help students understand their achievement and progress.

___ On-going assessment of student readiness, interest, and learning profile clearly informs the teacher's instructional planning and instruction.

___ Significant classroom time is spent on inquiry and reflection.

Attention to Student Variance is Central to Planning, Teaching, and Learning

___ The lesson gives evidence of proactive, up-front planning by the teacher to address varied learning needs.

___ The lesson makes appropriate provisions for a broad range of student needs.

___ The teacher attends to student readiness, interest, and learning profile needs.

___ There is evidence of differentiation of how students access essential knowledge, understanding, and skill (content); how they make sense of essential knowledge, understanding, and skill (process); and how they demonstrate what they have come to know, understand, and be able to do (product/performance).

___ The teacher appropriately uses a broad range of instructional strategies to support student engagement and understanding.

Students often Use Authentic Performance to Apply Knowledge and to Reveal Understanding

___ Performance tasks and other assessments that ask students to apply knowledge are an integral part of the assessment/learning process.

___ The teacher uses rubrics and models/exemplars regularly and shares them with students.

___ The teacher regularly monitors students' authentic work and provides feedback to help them improve their work.

** No classroom will exhibit all of these indicators at any one time
or all of the time and no teacher should be expected to do so.*