Teaching for Understanding: A Teaching Plan Model to Develop Learning K. Scheidler

We've now looked closely at each Reading and Writing Common Core Standard, and discussed the main concepts underlying the Standards.

Reading stresses close text reading, textual evidence to support inference and central ideas, how text develops, word meaning in context and word associations, how the pieces of text relate to the whole, and how point of view or purpose shapes content and style. Word choice affecting tone is key. Students must evaluate content in different formats (e.g., poem and novel, non-fiction and fiction), evaluate text argument, compare text approaches, and read complex text proficiently. Reading informational text proficiently is stressed.

Writing Standards are the three types of writing of persuasive, explanatory, and narrative. Writing must be clear and coherent, with development, organization and style appropriate to task, purpose and audience. Planning, revising, editing, re-writing or trying a new approach constitute the process of writing; one draft is just the beginning. We use word processing and the Internet to produce (research, draft, revise) and publish (final polished draft) and to collaborate. Students learn the research process starting early, with small projects, and build on these skills each year, developing understanding of the subject they're investigating. We assess sources and avoid plagiarism. Students draw evidence from sources for research, reflection and analysis. Students must write routinely over shorter time frames (one class, a day or two) and extended time frames (for reflection, revision, research) for a range of tasks purposes audiences. Students develop skill and fluency in writing for varied purposes.

Teaching for Understanding with Understanding by Design

Wouldn't it be wonderful if all our students could be proficient with each of these Standards? These are fine goals for all students. No student deserves to be deprived of these abilities. Fortunately, we have an excellent planning format that can help us plan for students to develop these Anchor Standards at their grade level. Now more than ever we must plan carefully for the high level expectations.

Excellent student learning develops best with careful, thoughtful planning. With so much at stake today, and ambitious goals, "backwards planning" – planning with the end in mind – and teaching for understanding help us reach our learning goals.

The best planning format for developing understanding of the Standards include the concepts and a template called Understanding by Design.

The Understanding by Design teaching plan is a simple format that organizes the learning stages nicely. (*Please see a revised version of this template below*.) This format developed by consultants Grant Wiggins and Jay McTighe is now used widely nationally. The Understanding by Design format helps us create, develop and guide standards learning. The planning format aids us in teaching for understanding. When we worry, "The students don't understand this," we can seize this opportunity to develop a good plan – knowing our students – that will help them understand what is needed.

We can no longer move along through the school year with a set curriculum, or move through a textbook with some students catching on to concepts and skills, some already knowing the concepts, and others falling behind, not understanding needed concepts. The Understanding by Design format allows for and promotes teaching for understanding, differentiating learning for our varied student achievement levels, and using varied resources. In this model, learning goals are first and the assessment of learning – the test — is second, tightly matching assessment of learning to the goals.

We develop learning activities tightly aligned to the assessment that will determine if students have learned the concepts and Standards.

Wisely, Wiggins informs us that one can start at any entry point to create one's plan. We can start with the materials we're using. What Standards can be learned with these particular materials? What Standards does this text best lend itself to learning? We can begin with the test. What do we want to be sure that students learn? We can begin with particular Standards student need to know and build out the learning plan from there. For example, students need to work on paraphrasing text for research. We focus a teaching plan on paraphrasing.

The Understanding by Design template isn't intended to be strictly linear in development as we create a fine learning plan. However, the final plan is tightly connected. All facets are closely tied together. We eliminate learning activities not tied to learning goals and the assessment. We create and modify learning activities that will develop the goal, such as teaching logical inference or main idea based on text evidence. We select another text that more effectively targets the skill, for example of text style appropriate for audience.

Today we can't just be the "sage on the stage" to instruct, then test, give a grade, and move on. If a student doesn't show he or she has learned the needed understandings then we must re-teach in a different way. Albert Einstein famously said, "Insanity is doing the same thing over and over again and expecting different results." The UbD model allows us to integrate different materials and varied learning strategies for mastery.

The Understanding by Design template is not a fixed plan set in stone, a plan to teach and move on. For today's high expectations, the format leaves room for us to plan for needed re-teaching – in different ways -- and then assessment. Even facets of the assessment may be modified as needed. A child may be provided less complex text to test the skill learning of "tone." Understanding by Design aims to have us pick up those students formerly left behind.

Understanding by Design Stage Three: Learning Activities

Teachers most want to find learning activities that will help students attain the goal and engage students. Varied Internet sites, conferring with peers, using our imagination all help.

At one point in my teaching I decided I was going to have all my students understand the figurative language of poetry and literature that add beauty, visual image enhancement, and layers of meaning to literature. I was aiming for mastery learning.

I found my favorite examples of metaphor, simile and imagery. I simply wanted my students to all be able to identify these basic literary elements (Reading Standard Four). I used whole class direct instruction, because to me these were simple elements that students should be able to easily understand. Then I tested the students to see if they could identify and distinguish them. Over half the class failed. I was astonished. Determined to achieve mastery learning, I re-taught the elements, using the same method of instruction – explanation – but different examples. I tested them again. Again, they failed the assessment. This continued. I was dumbfounded. Simile and metaphor and image aren't rocket science.

When many students still weren't learning these literary devices, I finally decided they weren't going to be able to learn this. Just before I gave up to move on, I had one last small thought from the back of my mind. I changed the type of material I was using. I took a piece of literature that I would have had the class read, from a play that worked well with my classes, and which students connected with.

For one last assessment of learning, I pulled out examples from this play. I used this play's examples of simile, metaphor and imagery for the students to identify the terms on the test. When I tested for the learning this time, every student in the class got an "A" on the test. Astonished, I said to the class, "Why did you all do so well on this test and not on the earlier quizzes!" They all said in unison, "Because that was your language!" My own years of schooling in the classic poets, my love of Wordsworth – "I wandered lonely as a cloud"-- and Yeats, my own favorite figurative language simply

didn't connect with my students. The words were remote; my language affinity wasn't their words; my favorite words didn't connect with their lives. When I used language that was closer to the students, they quickly learned the figurative language. It was then easy for them.

With Understanding by Design, a modification of the format for today's expectations is to add the area of "Re-teaching" when students don't understand the concepts and skills and understandings we're teaching for. We don't move on without re-thinking instruction and changing learning activities and resources. We want the students to understand.

Sometimes out of frustration, with new teachers who may not have developed the expertise a veteran teacher may have developed – from on one's own, or from conversation with a colleague, from trial and error – I hear a teacher say, "They don't want to learn." We adapt our teaching styles, materials and learning strategies to the students, and – miraculously – they're engaged and learn. They can learn in a different way.

Adapting the Understanding by Design format to include re-teaching standards and understandings in a different way with different materials is needed for grade level standards learning. We're teaching the students who are in front of us. The "Golden Age" back when students were easier to teach is a myth. Connecting our students with the material is essential. Opening our minds to that one last thought that might work, considering a fellow teacher's comment and adapting for our own use, not giving up on our students, but digging deeper for new ideas on how to teach, can work.

Range of Learning Activities and Materials, Internet Searches for New Ideas

I marvel at the range of learning activities I hear from teachers.

One teacher with a number of special education children in her class keeps a row of piles of different graphic organizers along the wall of her classroom. With a learning activity, her students can go to the different choices and select the graphic organizer that the student feels would best help.

I had an unruly class that preferred to talk to one another than participate in a full class discussion. It was a struggle to get the class as a whole to focus on our discussion of text. When I introduced the fishbowl Socratic Seminar learning activity of two concentric circles with rules for student-centered discussion of text, the class responded beautifully. This activity has a strict protocol that students magically respond to well. This is because the full class takes active responsibility for the learning. They aren't expected to sit passively.

The "inner circle" on its own examines and discusses a key piece of text. I've modified this to add a few questions for the inner circle to focus on for Standards learning, such as determining tone or "how ideas develop" (Reading Standard Three). Another modification I've added is to also provide the outer circle with the text so they can follow the analysis discussion. Questions I provide students for the outer circle are questions on how the text passage is analyzed by the inner circle, such as, Which student showed insight in the close reading? Which student referred to text for evidence? Which student moved the discussion to more appropriate reading of the text passage? This reinforces these skils by recognizing students who help in this way.

In a middle school class of all special education students, I observed the regular education content area teacher kneel down and intensely explain a concept the student needed to understand, the six-inch, three minute mini-conference that sheds light on a topic for a child. That middle school department had intense discussion over time on their curriculum. Instead of dependency on one textbook, they discussed and put together a curriculum based on needed skills and concepts. They culled the concepts from varied texts. With difficult discussions and debate, these teachers owned the curriculum and the learning activities; they didn't just teach the book. They also created their own learning activities for concepts they chose to teach. These teachers' most struggling students and special needs students excelled. In addition, the department carved out three additional supplementary class times per week for the special education students, for more time on learning. One student in the class said, "This second class takes the stress out of the course for me." By the teachers adding this

second class for the special education students, taught by a content area teacher, to help introduce new material, reinforce current instruction, and using alternative learning activities, test data reflected strong student learning. The classes had no aides or paraprofessionals, only a skilled professional. Creating the common curriculum wasn't easy to get consensus, but the teachers worked it out. This special effort is "out of the box" work that worked, for student learning.

Common Core Standards require opening our minds to see how we can integrate standards learning for all students. Re-thinking our work, learning from others, tossing around a learning method with a friendly colleague, connecting with the students we have in our classes, flexibility, inventiveness, Internet research, and maintaining high standards help all students learn. It's an exciting time in education.

When we take the time to generate new alternative ways of developing student learning in advance of our teaching, we have a fall-back default plan if our plan isn't capturing the learning we're looking for.

We plan in a "backwards" way with the end result in minds, and we teach understanding by design, for all students.

Backwards Planning

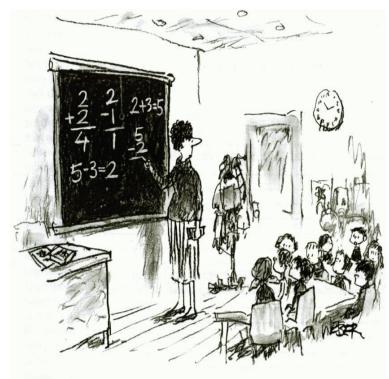
The "Backwards Planning" of the Understanding by Design format is considered backwards because the plan begins with the big ideas and goals of what one wants to teach, Stage One. We can liken this to planning a trip. We decide in the winter that we're heading south: Key West, San Diego, San Juan, Malibu, or the Bahamas – we just choose our spot, our goal. Then we plan the logistics, how we're getting there. We know we're heading to Key West. We just have to figure out how to get there. Similarly, we know we want to teach students to move from the literal to the inferential (Reading Standard One). We have to plan how we'll get there. This is backwards planning. First we begin with the end in mind, then plan how we'll get there.

Stage One: Learning Goals and Big Idea Guiding Questions

Stage One of Understanding by Design is the learning goal(s). In a Standards-based world of teaching, learning goals must focus on Standards learning. To focus and guide

the unit, Understanding by Design also requires "big idea" Essential Questions inquiry questions to guide inquiry that is close to students. This Essential Question is intended to engage students in the learning and focus the learning plan. The Essential Question helps develop understanding of content.

For example, to develop the concept of central idea (Reading Standard Two), our material used may lend itself to such big idea questions as, What makes a good



"Please, Ms. Sweeney, may I ask where you're going with all this?"

friend? What builds trust? What makes a great piece of literature? Why read? What constitutes a hero? What is a value one might be willing to die for? These are not factual questions. They're not, "What are the causes of the Civil War"? Or, "How do we divide fractions"? They're important big ideas a student will consider, think about, ponder over time, and remember. An Essential Question helps students retain understanding because the idea connects well with the student's thinking.

Also, Stage One must include the Common Core Standards we want to develop with each child, and/or are most closely connected with the material we're teaching.

A key here is that to fully develop the Standards, we can really only focus on a small number of Standards to develop the deep understanding that will really have lasting impact, that the student will fully understand and that will stay with the student. We don't learn well a new technology application when someone just quickly goes over many features of the application with us. It's way too much to internalize all the new steps, and then do this ourselves on our own. We must start with just the first few steps, use those, then learn the other procedures, building on learning over time. Also, we have to *use* the knowledge ourselves and stay with it, continue to use the application to fully grasp the understanding and skill. We don't learn a good dive in swimming, or how to serve well in tennis, by seeing someone else do it and then we do it once. We must understand the dive and practice, with a coach telling us what to do to improve.

It's the same with reading and writing. Segmenting teaching objectives improves learning. We can have a good lesson with one text in which we develop the key reading skill of central idea. But to do this well, it must connect with the students, move step by step, and develop the concept well. The pieces of text evidence to support learning central idea must be learned through varied activities, with students working on their own, not simple teacher explanation. And we refer back to that learning again and again with text for retention.

Innovative Student Research

In another example of strong learning, a student explained a research project he had done. The project was to choose to work with a team in student collaboration or on one's own to develop a research topic on a broad theme, research the topic, and present findings on a web site. The research thesis statement on the web site home page was to be no longer than thirty words. This required cogent thinking.

Students were provided on-line access to the Boston Public Library, for ease of access to huge data bases. One student on a team researched every Boston area professor who was an expert on their topic. The team e-mailed a question to these professors. One professor responded, "Usually I don't respond to outside questions like yours, but you're asking such a good question, I will respond." The student team interviewed him via Skype. Imagine students accessing a professor's expert knowledge in this way.

When the web site provided was too constraining, one student used his programming code skills to break through the confines to be able to add more to their site. Working from a need to know, students avidly collected information and learned to integrate sound, video and graphics into their site. They loved finding just the right graphic to suit their purpose and content.

When the students presented their web sites in an evening open house for parents, teachers, and others, we were in awe at what the students had produced, and enthusiastically discussed. This project struck gold.

This would, however, also have been a golden opportunity to have each student, having accumulated so much information, to write an informative or argumentative research paper in addition to the web site information.

Also, students were told that if they weren't comfortable with technology, they could use a tripartite paper presentation.

And sadly, this project was only required of honors level students. Common Core State Standards tell us all students should learn the same high level goals. Even if the final results of this type of project with the lower achieving students weren't as glowing as those of the top level kids, every student would have learned from working on this project. Moreover, why are we giving only the top level students the more engaging projects, when learning could have been ignited with all students having this same project to work on? It might be that other students not included could have done as well with such a project. And all students should have been asked to develop the web site, not a paper presentation. This is Writing Standard 6: "Use technology, including the Internet, to produce and publish writing . . ." It's a Standard for all students.

This web site research project incorporates in a substantial way eighteen of the twenty Reading and Writing Common Core Standards.

I told one student whose project I was asked to judge, and who enthusiastically presented his web site findings, "You'll always remember this work." We must teach in such a way that students remember what they've learned.

Stage Two: How will we assess if students have learned the goals?

Stage Two in Understanding by Design is how students will demonstrate that they've learned the Standards and content area ideas. This is the final assessment of learning.

What's the evidence? What will we see from the students? In an analogy with sports, we'll see the good – or perfect – dive, a dive far improved from the first awkward attempt. We'll see something close to the expert dive that's shown the student from the beginning. UbD author Grant Wiggins argues that we show students first what we expect them to know and be able to do. Common Core Standards spell this out for us.

This learning is a process. It takes some of us longer than others to perfect a dive. Also, some of us would prefer a good golf swing, or making a touchdown pass, or a catch and run to the goal post to score. Others aim to strike a good tennis serve. Others a five mile run in a short time. When we figure out how to match the skill needed to student interest or learning style or the right activity or material, we've hit gold.

This is what makes teaching interesting and engaging for us as teachers; this is the excitement in our own work, finding that match for our students. Success in learning requires teacher creativity, inquiry and patience. But when as the teacher, we or the student get it right, that's the joy in teaching.

Once we've determined the "test" of student learning, then learning activities are designed to help the student perform well on this final assessment.

Stage Three: Learning Activities to help students learn the goals

Stage Three of Understanding by Design includes the learning activities that will develop the student learning. Often we can best plan these activities in advance, thinking in advance of the type of work that students can do to learn the Standards via the content. We must develop learning activities directly tied to goals and the assessment, not random activities unrelated to the Standards learning goal. A good idea of a learning activity is only a good idea when it advances the desired learning.

Student engagement and active involvement is key. The idea of "student as worker" holds here, not the teacher doing all the work. In the technology-based research project the students were highly engaged in the work. The teachers acted as coaches.

We don't learn to dive well by someone explaining it to us, or even by watching our friend learn to dive well. The student must do it oneself. A teacher may explain to the students. But the teacher already knows this. By having the idea of "student as worker," we create activities for students to do, to learn. This means that the teacher can't just take a pile of student papers and "correct" them. By the teacher putting the apostrophes in the right place for the student, underlining the run-on sentence, correcting the introduction, circling the misspelled word, we're just doing what we already know. Our task is creating a learning task in which the student learns. A teacher could have explained the content which the students researched for their project. But by delving into the project on their own, the students developed the understanding and skills to internalize the learning. They learned how to learn. It would have been easier for the teacher to just explain to students. But not effective.

Re-Teaching if Failing to Grasp

Because Common Core Standards are high level, high stakes goals, we take a new view of lack of student proficiency in learning.

We've developed Standards learning goals, create the assessment to test the learning, and we've created learning activities tied to the goals and assessment. We go through the plan, and students don't perform proficiently on the assessment.

Then what?



While developing the learning plan, we can anticipate this and think of other materials or activities students can do and use to help their learning improve. When the reteaching comes from what we know about our particular students who didn't "get it," we can succeed.

Teaching for Understanding

We must develop the student ability to understand. How did we understand how to drive a car, how to teach, how to work well with students? Wiggins describes the realization he had as a coach when one of his players kept playing poorly. His soccer player said, "The other team isn't doing what we worked on in practice!" Wiggins states he had an epiphany; he realized he had failed to teach understanding of the game.

Facts and information are at our fingertips via the Internet. We no longer need to teach facts. When we teach for full understanding, this must be done through active student learning. This understanding may be done in developing writing ability by having the student read his or her paper aloud to him or herself, and realizing the paper had insufficient evidence, lacks an introduction or conclusion, supporting evidence is misplaced in organization. When in the editing mode a student reads one's paper aloud and notices errors such as a period or comma when one pauses in reading.

Common Core Standards *don't* say the teacher must work harder. We can best accomplish what we must by turning the burden of work over to the student. Also, this is how students learn best, by doing the work oneself. By reading one's writing aloud to a peer, one or both realize the corrections needed. Having the student or peer understand the conclusion needed by reading through the writing piece helps the writer, and the peer. These activities develop in the student a metacognition --- learning about learning. In our sports analogy, the one who needs to learn how to dive well must do the work to learn.

Turning the work over to the student is so hard. Because as the teacher, we want control. But it makes our work so much easier if we turn the work over to the students. Then they are doing learning. And internalizing and retaining the learning.

Rubrics Guide and Assess Learning

A rubric spells out clearly to students what is expected on a main learning goal.

A key in turning work over to students is having rubrics that are guides to the activity and also used to assess the work. To be useful to the student, the rubric must be written in "kid-friendly" language. The internet is our new best friend with this. Today we don't have to sit and make up rubrics on our own. We can simply do an Internet search to find an example or model rubric of "sixth grade kid-friendly argument rubric" and find multiple examples. We can then modify these for our own work. With experience, we invent our own rubrics appropriate to our learning goals and our students.

A rubric sets out the expectations for a student's work. It defines for the student what a teacher is looking for. It helps the teacher clarify what he or she wants to see in the work. A student can use the rubric to assess one's own work. A student can use the rubric to help a peer's writing or other work. In this process the peer becomes the teacher. A light bulb goes on in the peer's head. Now the peer understands what he or she must do in his or her own work. We've moved the learning to the student; the teacher continues as a coach to refine work.

Once we begin to develop student-centered learning activities, and good rubrics to guide student work, our lives as teachers will be easier. We benefit from time spent in planning well. We're creating a structure in which students can learn. Students can learn more when the "whole class" teaching structure is removed, to open up space for the student to learn – in differentiated instruction, project based learning, small groups, pairs, student-centered learning such as the "fishbowl" text discussion. The burden on the teacher's shoulder is removed, and placed on the student. It's our job to be the diving coach and guide as needed. Students will enjoy the work more; the teacher

doesn't take home piles of papers to "correct," with little effect on the student. The student learns. When the final test of the student research project is the student presentation of the web site information and thesis and evidence and supporting material, the student presents the learning, the teacher simply assesses with a critical eye.

This is something of a paradigm shift from earlier years of teaching. Our work is different. We plan the goals. We determine the Common Core Standards with which we want to develop understanding and student ability. We create interesting big idea questions to engage the students for them to explore. We create a final assessment that will show the student has learned – the vision of the perfect dive. We then think of engaging learning activities that will help this learning develop in the student. Once we learn this way of teaching, our teacher lives become easier.

It's hard to let go of paper correcting, explaining to the class. But when we learn to be the coach by creating good plans, we can use this model plan again and again, revising as needed.

With teaching for understanding, emphasis on Standards learning, working toward grade level mastery, making every effort to be inventive and develop engaging learning activities in which students are active learners, and tying goals with final assessment with learning activities and re-teaching as needed, we've created a new model that relieves the teacher of tiresome mindless "correcting" work and engages students in learning.

Classroom management becomes easier because students become engaged in the work.

Students are not forced to just passively sit still and be quiet, unnatural at any age.

We have strong, ambitious Standards to guide our practice, at each grade level.

How could teaching be better?

Understanding by Design Planning Template, Modified

STAGE 1 – DES	IRED RESULTS
Unit Title: Gra	de Level
Established Goals:	
Understandings: Students will understand that	Essential Big Idea Questions:
•	•
Common Core Standards Learned	
	<u> </u>
STAGE 2 – ASSESSMENT EVIDENCE	
Performance Tasks:	Other Evidence:
STAGE 3 – LEARNING PLAN	
Summary of Learning Activities:	
Re-Teaching If Not Mastered	
Alternate Learning Activities:	