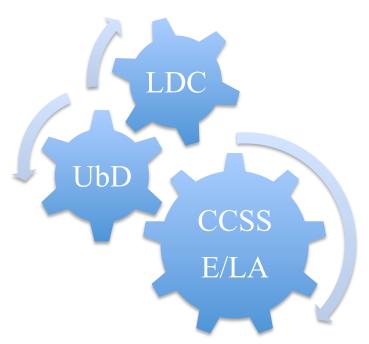
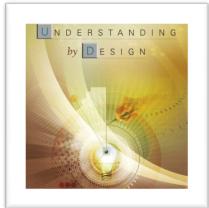
LDC and UbD: Complementary Frameworks







Jay McTighe

Consultant and co-author of the *Understanding by Design* series

Funded by the Bill & Melinda Gates Foundation

Introduction

As the introduction to the Common Core State Standards for English/ Language Arts notes, "These Standards do not dictate curriculum or teaching methods." Educators must translate the Standards into curricula and determine the requisite instruction needed to help students achieve them. Understanding by Design® (UbD) and The Literacy Design Collaborative (LDC) both provide robust frameworks to help educators achieve this aim. These two bodies of work share common features and have the potential to combine for greater effect. This paper explores connections between UbD and the LDC and suggests ways to extend the power and impact of each. Specifically, the paper will examine three key questions:

- 1. How does the work of the Literacy Design Collaborative (LDC) intersect with Understanding by Design (UbD)?
- 2. In what ways might UbD and LDC work together to enhance their effectiveness at the classroom level?
- 3. How might the LDC framework be scaled as part of a comprehensive standards-based system?

Intersections

How does the work of the Literacy Design Collaborative (LDC) intersect with Understanding by Design (UbD)?

UbD and LDC share complementary features, both in concept and operation. Conceptually, UbD and LDC encourage educators to "unpack" standards in terms of desired performances, rather than simply as lists of specified knowledge and skills to be covered. Operationally, this performance orientation is reflected through the creation of rich tasks that reflect the intent of the Standards. Accompanying rubrics and illustrative anchor examples illuminate the desired qualities and levels of rigor for both teachers and learners. These worthy tasks and rubrics are then de-constructed to identify the requisite knowledge, skills and understandings needed by students to perform them well. This approach allows instruction to be "mapped backward" with the end in mind. Figure 1 provides a summary of the key shared features of the two frameworks.

Figure 1 – Shared Features of UbD and LDC

Both Understanding by Design and The Literacy Design Collaborative:

- Provide structured, yet flexible frameworks for guiding curriculum planning, instruction and assessment aligned to Standards.
- Encourage "backward" mapping of instruction from desired performances on worthy tasks.
- Offer practical design tools (e.g., Unit and Task Templates, GRASPS) to guide teachers and teams in instructional design.
- Help to establish a "mental template" for effective planning and teaching as educators work with the Templates and associated processes (e.g., backward design, instructional ladder).
- Provide educators with multiple examples (UbD units, Template Tasks and Modules) that can be adapted and used to create additional resources.
- Engage students in authentic application of knowledge and skills through rich tasks based on Standards.
- Include criterion-based tools and review protocols for quality control and feedback.
- Support meaningful collaborations by educators in Professional Learning Communities (PLCs), including shared design of tasks and unit plans, peer reviews for quality control, examination of student work by teams of teachers, and sharing of successful instructional strategies and resources.

While they have much in common, Understanding by Design and The Literacy Design Collaborative originated from different roots and have developed along varied pathways. Figure 2 highlights unique aspects of each framework.

Figure 2 – Unique Features of UbD and LDC

	Understanding by Design	Literacy Design Collaborative			
Standards Standards Standards Standards Standards The UbD framework asks curriculum designers to explicitly "unpack" Standards to identify Transfer Goals, Understandings and Essential Questions. The UbD framework can also be applied to other outcomes, such as 21st Century Skills and Habits ide Co		Focused on the literacy skills identified in the ELA Common Core Standards through application to content in English, Social Studies, Science and Technical subjects. LDC tasks embody performances called for by the Career and College Readiness Anchor Standards in ELA, while companion instructional modules target the requisite skills.			
Grade Level	Applicable across the grades, from pre-K to university level.	Initially developed for the secondary level (grades 6-12), but is now being extended to grades 4-5.			
Instruction	Encourages alignment between teaching practices and three interrelated goals – Acquisition (of knowledge and skills), Meaning Making (understanding of "big ideas") and Transfer of learning. The WHERETO framework promotes desirable teaching practices (e.g., preassessments, "hooks", and student reflection).	LDC modules follow an "instructional ladder" system in which the requisite literacy skills are identified by "back mapping" from the tasks. Instruction in the targeted skills is then organized around a series of mini tasks and short assignments. On-going formative assessments allow teachers to address student misunderstandings or skill deficiencies.			
Performance Tasks	UbD emphasizes authentic performance and encourages teachers to establish a meaningful context for tasks using the GRASPS frame.	The LDC system is anchored by a set of tasks presented as "teaching" tasks or assignments. These are constructed by teachers based a series of Task Templates linked to CCSS Anchor Standards for ELA.			
	The primary goals of UbD – understanding and transfer – are assessed via performance tasks	The LDC tasks include well-developed rubrics. Thus, the tasks can be used for formative			

Assessment	based on the facets of understanding. Other evidence (e.g., quiz, skill check) provides supplementary measures of targeted knowledge and skills.	assessment purposes. Illustrative samples of student work help teachers calibrate levels of rigor while serving as tangible models for learners.
Curriculum Mapping Across the Grades	The book, <i>Schooling by Design</i> , outlines a systemic approach for using the UbD framework to map the curriculum across the grades. Curriculum coherence is achieved through "spiraling" essential questions and "cornerstone" tasks directed toward long-term transfer goals.	Initial LDC implementation focused on developing and using teaching tasks at the classroom level. Continued efforts will develop cross-grade and content maps of tasks with accompanying instructional modules.
Quality Control	Offers a set of Design Standards with corresponding rubrics to serve as the criteria for quality control. A detailed peer- and expert- review protocol provide the mechanism for evaluating and refining UbD units and courses. (Appendix B presents UbD Design Standards.)	A criterion-based Jurying System has been developed to guide the review of LDC tasks and modules.

Connections

In what ways might UbD and LDC work together to enhance their effectiveness at the classroom level?

Both UbD and the LDC provide practical and proven frameworks for translating Standards into curriculum, engaging learners in rich tasks, and focusing performance-based instruction. Each offers practical tools for enlisting teachers as design partners in Standards implementation. This section explores ways to combine the strengths of UbD and LDC for an even greater effect.

One straightforward connection involves the placement of a Literacy Design Collaborative teaching task and instructional module within an Understanding by Design unit. In so doing, UbD can provide the overall frame, while LDC components provide a focused task for linking literacy with subject matter content and a practical "ladder" for the requisite instruction. UbD elements can enhance the design by specifying important understandings and essential questions, and framing the teaching task through GRASPS.

Figure 3 shows a visual representation of this connection. Here are further thoughts about this connection examined through the three stages of backward design used in UbD.

Stage 1 – Specify Desired Results

When planning a unit using UbD, educators "unpack" Standards by identifying the long-term transfer goals, understandings and companion essential questions, and knowledge and skills objectives. LDC Tasks inherently involve "transfer" in that they ask students to apply reading and writing (and sometimes, speaking) skills in the context of examining an issue or question from subject area content (typically from science, social studies or a technical area). In fact, performance on the task reflects the ultimate "desired result" from which we can plan backward.

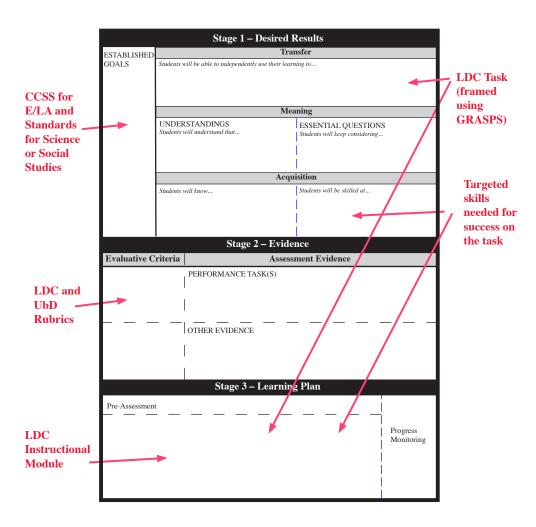


Figure 3 - An LDC Task and Instructional Module within a UbD Unit

UbD could enhance the unit design by identifying important understandings that learners may need to develop and companion essential questions related to the literacy and content Standards. Figure 4 presents two examples for Reading and Writing, respectively:

Figure 4 – Understandings and Essential Questions linked to CCSS ELA College and Career Anchor Standards

CCSS ELA College and	Understandings	Essential Questions		
Career Anchor Standards				
Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.	 Writers don't always say things directly or literally; sometimes they convey their ideas indirectly (e.g., metaphor, satire, irony). Effective readers must "read between the lines" and make inferences from context clues. 	 What is this text really about? (e.g. theme, main idea, moral) What does a "close" reading require? How do you "read between the lines?" How can I make and support inferences from text? 		
Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.	 To be convincing, an argument must be supported with sound evidence and valid reasoning. Effective writers make deliberate choices regarding content, language, and style to convey their message to their target audience. 	 What makes an argument persuasive? How do I support my argument? Who is my audience? What will work best for this audience? 		

While one could argue that good teachers already "know" this and cultivate such understandings in their students, our long experience with UbD indicates that many teachers intend to develop these understandings but their attempts are often implicit. My advice is to make the "invisible visible" by posing such Essential Questions *explicitly* (by design) in order to help students achieve these important Understandings. The good news is that in English/Language Arts, a relatively small number of Understandings and companion Essential Questions (EQs) spiral through the curriculum across the grades. Once these are identified, teachers of E/LA and content subjects can incorporate them into their teaching, and students come to see them as important because they recur.

Note: Some of the LDC tasks are already framed around important, provocative questions. However, these questions are typically about the issues or problems being investigated, rather than about the nature of effective reading and writing practices. I think that *both* types of questions are valuable and should be part of the unit design and corresponding instruction.

<u>Stage 2 – Determine Acceptable Evidence</u>

The clear intent of the College and Career Readiness Anchor Standards is long-term; i.e., to equip learners to be able to *use* their literacy skills outside of school on their own. In other words, we want students to be able to transfer their learning to make sense of new texts, address complex issues and communicate clearly and effectively in varied contexts. With this end in mind, both UbD and LDC establish rigorous and relevant tasks that call for (and reveal) understanding and transfer abilities. There is an important side benefit: such tasks tend to be more engaging and motivating for students, especially compared to textbook exercises, teacher lectures and skill worksheets.

While Literacy Design Collaborative has characterized its tasks as "teaching" tasks or assignments as opposed to assessment tasks, my view is that the line here is blurry. In UbD, performance tasks are typically placed in Stage 2 as part of assessment evidence for two reasons:

- 1) performance on the task gives evidence of students' achievement of Standards by revealing the extent of their understanding and ability to transfer their learning;
- 2) teachers can judge (assess) student performance on the task by using a previously developed rubric.

However, I certainly agree with the LDC spirit; i.e., that the primary purpose of the task is to focus learning and teaching, *not* to simply obtain a measure or grade. Moreover, both frameworks stress the importance of planning instruction backward from task performance, not simply "covering" a list of knowledge and skills from grade-level standards. In other words, a rich task embodies the long-term goals of the Standards and focuses learning and teaching, just as the game in athletics focuses coaching and practice.

Regardless of where we place it on a unit template, I propose that the GRASPS format from UbD, particularly the **R**ole and **A**udience, can enhance LDC tasks without at all compromising their intent. We use the acronym, GRASPS, to help designers establish an authentic context for the performance tasks. Here is a summary of the GRASPS elements

and how they relate to LDC tasks:

G = The GOAL

The goal refers to the *student's aim* in the task, not the teacher's intent. For example, a goal for the student in one LDC task is to come up with a position on the question, *Does a person's social class determine his/her destiny?*, and write an essay in response. The teacher's goal in this task is help students carefully read texts, think critically, construct and support an effective argument, and communicate clearly in writing. The "content" of the question is an engaging vehicle for applying these various skills.

$\mathbf{R} = \text{The ROLE}$

This element assigns a role for students to consider in the task scenario. In some cases, the most authentic role for a student is *themselves* (e.g., if a student is expressing their own opinion in an article for the school paper). In other cases, we have found it valuable to establish a "real life" simulated role (e.g., you are an editor, an historian, a scientist, etc.). The point here is straightforward; i.e., to give students opportunities to put themselves in realistic roles to consider how people *outside* of school apply the reading, research, thinking and communication skills that they are learning.

In some cases, mindful of the "perspective" and "empathy" facets of understanding, it may be worthwhile to allow students to take different roles in the same task scenario. For example: "You are a plantation owner, legislator, abolitionist, preacher, or factory owner just prior to the Civil War. Your job is to express your view about secession in a simulated town hall debate..." A related option is to have students shift roles in different phases of the task. In the previous Civil War example, a teacher might have each student play a specific role related to the secession debate and then switch to a reporter to write an editorial on the issue, etc. In a science/mathematics task, students could develop a design and proposal for a skateboard park. In Part 2, they play the role of the Parks and Recreation Board to review the design proposals.

A =The AUDIENCE

In the wider world outside of school, people work to meet the needs of clients, patients, customers and audiences. To make school more like the world which students will enter, educators create tasks that include target audiences – real or hypothetical. Having the student focus seriously on what a particular audience needs and expects in various situations is an important part of transfer – and real-world effectiveness.

A few of the LDC tasks I have seen specify an audience (e.g., "Write a letter to Alfred Wegener's critics that compares the evidence supporting continental drift..."), but most imply that the main audience for the student's essay or report is the teacher. I recommend that the LDC Task Templates be modified to include a section/option for identifying an audience.

In some cases, teachers can allow the students to select a target audience as long as their choice makes sense in the context of the task. Also, varying the audience for a given task provides a natural vehicle for differentiation. For example, a less skilled writer could be asked to write for a younger audience.

S =The SITUATION:

The situation or setting establishes the context for task performance. In UbD, we encourage designers to strive to create an authentic situation within which students will demonstrate their understanding. Note that I am using the term, *authentic*, in two senses: 1) authentic to the way in which people in the "real world" use the knowledge and skill students are learning; 2) authentic to the learner, in terms of relevance and personal interest. The best tasks are authentic in both senses. In my judgment, the LDC tasks are clearly authentic in the first sense. Adding the Role and Audience elements, when appropriate, can enhance the personal connections for students. Moreover, the addition of an explicit audience enables teachers to emphasize an important understanding about writing; i.e., that *Effective writers make deliberate choices regarding content, language, and style to convey their message to their target audience*.

P = Products and Performances:

The LDC tasks currently involve students in producing authentic products (essay, report, letter, etc.). However, there may be occasions when teachers could present students with product options. Here is an example of adding possible audiences and product options (highlighted in bold italics) to an existing LDC task:

Will technology be the salvation or downfall of humankind? After reading "There Will Come Soft Rains" and the accompanying texts, write *an essay for the readers of a philosophy journal, an editorial in the school newspaper for fellow students, a blog to post on Technology-Blog.com*. to address the question and support your position with evidence from the text(s).

S = Standards (Criteria)

The detailed LDC rubrics currently in use specify the key criteria of an excellent product/performance.

Using the GRASPS elements to augment LDC tasks offer two benefits:

- 1. There is potential for repeated use of the *same* LDC Task Template to become boring to students and/or lead to formulaic responses (Think the 5-paragraph essay). By varying *role*, *audience*, *situation*, and *products/performances*, the Task Templates stay "dynamic" without comprising their integrity.
- 2. When appropriate, students can be given choices not only about the task topic, issue, or question but about task variables (*role*, *audience*, *situation*, and *products/performances*). Such choices allow personalization and differentiation within the task while engaging students with associated Standards.

Stage 3 – Develop the Learning Plan

The Literacy Design Collaborative offers an excellent instructional protocol, including an analysis of the skills needed to performance the task, and an instructional ladder consisting of a series of mini tasks to guide learning and formative assessment. Such a well-conceived teaching process will unquestionably enhance the learning plan within a UbD unit.

LDC Instructional Modules present sound guidelines for teaching with the task in mind. Nevertheless, a few finer-grained questions are worth considering: What is the best sequence for developing and refining the literacy skills called for in the tasks? How should related concepts in the content subjects be introduced and developed? How are lessons and units ideally organized and paced? The emerging work on Learning Progressions (e.g., Hess, 2011) suggests answers to such questions, and offers great promise in helping teachers develop an optimal instructional sequence and "map" their lessons and units according to how students learn and I recommend that insights from Learning Progressions be incorporated, both to inform the identification and sequencing of requisite skills within an individual Module *and* to guide the mapping of LDC Tasks across a year and across the grades.

Size Matters: From "Micro" to "Macro"

How might the LDC framework be scaled as part of a comprehensive standards-based system?

The previous section suggested considerations for enhancing the work of the Literacy Design Collaborative at the classroom level. This section explores how LDC tasks can be established as part of a larger, "spiral" curriculum at the school and district levels.

At present, the LDC Task Templates provide the equivalent of building materials to enable teachers to construct meaningful learning experiences around the E/LA CCS Standards coupled with subject area content. This is a necessary and appropriate phase as the Templates are introduced and piloted in sites throughout the country. As these tools mature and as teachers become more comfortable using them, it will be time to move from the "micro" (i.e., individual teachers experimenting with the Templates) to a more coordinated, "macro" conception. Analogously, this suggests the need to create blueprints for entire buildings so that as individual rooms are designed, they to contribute to a coherent whole¹.

In the book, Schooling by Design (Wiggins and McTighe, 2007), Grant Wiggins and I describe a coherent curriculum and assessment system, in which curricular programs are mapped "backward" from exit, Anchor Standards. A set of "spiraling" Understandings and Essential Questions provide the conceptual through lines that link across the grades. One key feature of such as a system is an articulated set of what we have called cornerstone tasks, mapped backward from 12 to pre-K.

Cornerstone tasks are curriculum-embedded tasks that are intended to engage students in applying their knowledge and skills in an authentic and relevant context. Like a cornerstone anchors a building, these tasks are meant to anchor the curriculum around the most important performances that we want learners to be able to do (on their own) with acquired content knowledge and skills. They honor the intent of the Standards, within and across subject areas, instead of emphasizing only the content measured on external accountability tests.

¹ This point is acknowledged on p. 62 of the *The 1.0 Guidebook to LDC* under the heading, Sequenced Courses.)

Effective cornerstone tasks have the following characteristics; they...

- are curriculum embedded (as opposed to externally imposed);
- recur over the grades, becoming increasingly sophisticated over time;
- establish authentic contexts for performance;
- call for understanding and transfer, not simply "correct" answers on decontextualized items;
- integrate 21st century skills (e.g., critical thinking, technology use, teamwork) with subject area content;
- can be used as rich learning experiences as well as for formative and summative purposes;
- evaluate performance with established rubrics;
- engage students in meaningful learning while encouraging the best teaching;
- provide content for a student's portfolio (so that they graduate with a resume of demonstrated accomplishments rather than simply a transcript of courses taken).

In *Schooling by Design*, we proposed to use a set of task frames (nearly identical to the LCD Task Templates) as the vehicle for designing these recurring tasks in all subjects. Here is an example of such a task frame for use in mathematics, science and history, followed by two examples of how the same frame can be used in a recurring manner.

Cornerstone Task Frame (example)				
period)	et the data on [] for the past [] (time Prepare a report (oral, written, graphic) for [] ice) to help them understand:			
•	what the data shows (analysis)			
•	what patterns or trends are evident (pattern recognition)			
•	what might happen in the future (prediction)			

Elementary version

Second-grade students in three separate classes work in teams of four and take turns measuring the height of each member using tape measures affixed to the classroom walls. The height measurements are taken at the beginning of the school year and every seven weeks thereafter. When they begin, the second-grade teachers and classroom aides model the process and assist students with their measures and their recordings. As the year progresses, students require less help as they improve their skills in measuring and recording. By years end, many groups are working completely independently.

By mid-May, each second-grade class has obtained six height measures. The teachers demonstrate how to create a simple graph with height in inches plotted against the months of the school year, and the students plot their own data. Using rulers, they connect the dots to see "rise over run" (a visual representation of their growth over time). The chart papers are posted throughout the room, and the students circulate in a gallery walk to view the changes in heights of the various groups. The teachers then ask the students to analyze the data by posing guiding questions: "In what months did we grow the most this year?" "Is there a difference between how boys and girls have grown in second grade?" "How does our class growth compare to that in the other second grades?" (The teachers create an average class growth chart that they show to all second graders.) "What can we predict for next year's second graders about how they will grow based on our data?" Students are then asked to work in their groups to develop a presentation for the current first graders. Finally, students write a letter to the principal recommending what size desks should be purchased for 2nd graders (since one-size desks don't always work because we come in different sizes and we grow a lot during the year!).

Secondary Version

High school students use several Internet search engines to locate data from the World Health Organization, the National Institutes of Health, and at least two other sources on documented H1N1 (aka swine flu) cases. Working in teams, the students engage in the following task activities:

- Collect and record data from at least four sources on the spread of H1N1 virus in various countries during designated time periods.
- Compare and evaluate the four sources. (Which sources were the most thorough? Which were the most understandable? Which were the most credible?)
- Analyze the data. (What patterns did you notice with age and gender? What geographic patterns emerged? What about associated deaths? What was the impact of governmental policies, such as travel restrictions or quarantine, on the spread of

infections? Do you have any predictions for future spread of this, or similar, viruses based on your research and analysis?)

• Prepare a summary report to effectively communicate the data and your analysis to a target audience (for example, a congressional committee, the general public, or teenagers) using an appropriate communications medium (such as a newspaper article, blog, website, podcast, or television news special). Include recommendations (such as for government policy or individual precautions) in the event of a future outbreak of a different flu strain.

Note that both versions share common elements from the task frame. Each task establishes a relevant context for actively involving students in gathering, analyzing, and displaying data. Both tasks call for some forecasting or prediction based on observed patterns. Both call for communication of findings to a target audience. The secondary version of the task also incorporates the 21st century themes of global awareness and health/wellness, as well as critical thinking, information technology, and communication skills. All of the skills and processes in both tasks are transferable; they apply in mathematics, science, history, and a variety of real-world contexts.

Now imagine a recurring set of such tasks that spiral across the grades, moving from simpler, scaffolded versions to increasingly challenging situations. And imagine similar task frames established within and across all academic areas to guide other sets of recurring tasks. This is the type of *system* we advocated in our book.

The Literacy Design Collaborative has created a system for realizing this vision for the E/LA Anchor Standards and associated content areas. A natural next step is the creation of systemic "maps" of Cornerstone LDC tasks that spiral across the grades. Here is a visual representation of such a blueprint of quarterly tasks that emanate from common Task Templates and are vertically aligned. (Note: The listed task categories are merely suggestive.)

A Map of Cornerstone LDC Tasks

Grades	Task Template A Informational Reading and	Task Template B Research and Writing	Task Template C Informational Reading and	Task Template D Literary Analysis
	Argumentation	Witting	Presentation Presentation	Narrative Writing

12	T	T	T	T
11	T	T	T	T
10	T	T	T	T
9	T	T	T	T
8	T	T	T	T
7	T	T	T	T
6	T	T	T	T
5	T	T	Т	T
4	T	T	Т	T

Such a system offers an alternative to traditional "scope and sequence" curriculum mapping of content and skill objectives. Instead, it suggests framing the curriculum around a set of worthy tasks that increase in complexity and sophistication over the grades. These tasks form the backbone of a Standards-based curriculum.

As suggested by the visual, I endorse the planned expansion of LDC Tasks and Modules into the upper elementary school grades. Just as coaches of youth baseball introduce batting by starting with T-ball (a scaffold version that prepares players for independent hitting in the future), it makes sense to introduce these rich LDC tasks to younger students in simplified forms.

The UbD framework reminds educators to always plan "backward" with the end in mind. In E/LA, the College and Career Anchor Standards define the "end" since they specify what students should be able to do *on their own* in reading, writing, listening, speaking and research in order to meet the demands of college and the workplace. The emphasis on autonomous performance, without scaffolding, suggests that as teachers apply the LDC Task Templates across the grade levels, we should see a "gradual release" of support (e.g., graphic organizers, step-by-step guide sheets, teacher cues) and concomitant increase in student self-direction as they work with the tasks.

Empowering Professional Learning Communities

Building a set of agreed-upon LDC Tasks into the curriculum can elevate the role and impact of Professional Learning Communities (PLCs). While many schools and districts have enacted PLC structures, the focus of such groups is often directed toward an analysis of state test scores. While results from an external measure certainly provide

important data on student achievement, an annual "snapshot" from a multiple-choice test is not sufficiently detailed or timely enough to inform and guide improvement actions at the classroom and school levels. A more robust approach to instructional improvement calls for staff to regularly engage in an ongoing analysis of student performance data from multiple sources.

Having a common set of rich tasks is a pre-requisite for teachers to meet in teams and analyze student work. Such meetings involve much more than just "scoring" student work. As part of their PLC sessions, teachers select anchor examples of *excellent*, *good*, *fair* and *poor* performance based on established rubrics. They identify general patterns of strengths as well as areas needing improvement. Then, they share their best ideas, strategies and resources for addressing the weaknesses.

While this approach is familiar to coaches of team sports and sponsors of extracurricular activities such as drama and band, the establishment of a coordinated set of common LDC tasks opens up this valuable professional learning experience to teachers in the academic areas. Indeed, such PLC interactions provide the fuel for continuous improvement while establishing a professionally enriching, results-oriented school culture.

Conclusion

Understanding by Design and the Literacy Design Collaborative are similar in concept and practice. Both frameworks:

- Provide structured, yet flexible frameworks for guiding curriculum planning, instruction and assessment aligned to Standards.
- Encourage "backward" mapping of instruction from desired performances on worthy tasks.
- Offer practical design tools to guide teachers and teams in instructional design.
- Provide educators with multiple examples (UbD units, Template Tasks and Modules) that can be adapted and used to create additional resources.
- Engage students in authentic application of knowledge and skills through rich tasks based on Standards.
- Include criterion-based tools and review protocols for quality control and feedback.
- Support meaningful collaborations by educators in Professional Learning Communities (PLCs), including shared design of tasks and unit plans, peer

reviews for quality control, examination of student work by teams of teachers, and sharing of successful instructional strategies and resources.

The confluence of these two frameworks as described in this paper offers a promising pathway for building coherent curricula for engaging students in meaningful application of their learning.

References

Crawford, M.; Galiatsos, S.; Lewis, A. (2011). *The 1.0 Guidebook to LDC: Linking Secondary Core Content to the Common Core State Standards*. Literacy Design Collaborative. p 8

Hess, K. (December 2011). Learning Progressions Frameworks Designed for Use with the Common Core State Standards in English Language Arts & Literacy K-12.

The LDC Design Team (2012). The Literacy Design Collaborative Framework: Rules of the Road for LDC v 1.0.

McTighe, J and Wiggins, G. (2004). *The Understanding by Design Professional Development Workbook*. Alexandria, VA: ASCD.

McTighe, J and Wiggins, G. (2011). *Understanding by Design® Framework*. Alexandria, VA: ASCD.

Tomlinson, C. and McTighe, J (2006). *Differentiated Instruction and Understanding By Design: Connecting Content and Kids.* Alexandria, VA: ASCD.

Wiggins, G. and McTighe, J (1997). *Understanding by Design*. Alexandria, VA: ASCD.

Wiggins, G. and McTighe, J (2005). *Understanding by Design: Expanded Second Edition*. Alexandria, VA: ASCD.

Wiggins, G. and McTighe, J (2007). Schooling by Design. Alexandria, VA: ASCD.

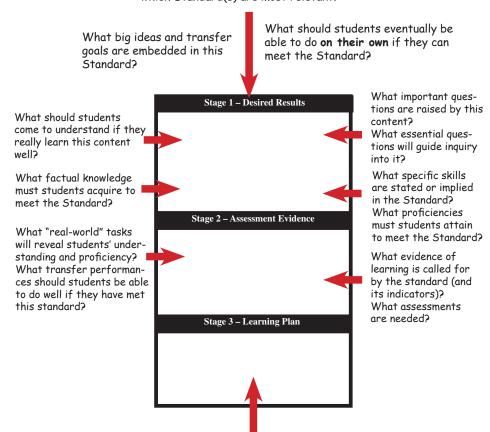
Wiggins, G. and McTighe, J (2011). *The Understanding by Design Guide to Creating High Quality Units*. Alexandria, VA: ASCD.

Wiggins, G. and McTighe, J (2012). *The Understanding by Design Guide to Advanced Concepts in Creating and Reviewing Units.* Alexandria, VA: ASCD.

Appendix A – Standards-based Curriculum Planning with UbD

Curriculum Planning with Standards using UbD

What Standard(s) will the unit focus on? Given your reasons for teaching the unit, which Standard(s) are most relevant?



What instruction is needed to equip students to meet this standard?

What learning experiences will help learners acquire the knowledge and skills, make meaning of the important ideas and equip them to transfer their learning?

Appendix B – UbD Design Standards*

Key: 3 = meets the standard 2 = partially meets the standard 1 = does not yet meet the standard

The unit plan –				
Stage 1	3	2	1	Feedback
1. identifies important, transferable ideas worth exploring (Q) and understanding (U).				
2. identifies Understandings stated as full-sentence generalizations: <i>students will understand that</i> (U).				
3. specifies the desired long-term Transfer Goals that involve genuine accomplishment (T)				
4. is framed by a few open-ended, thought-provoking and focusing Essential Questions (Q).				
5. identifies relevant Standards, Mission, and/or Program Goals (G), to be addressed in all 3 Stages.				
6. identifies knowledge (K) and skill (S) needed to achieve understanding and address the established goals.				
7. aligns all the elements – T, U, Q, G, K, S – so that Stage 1 is focused and coherent.				
Stage 2				
8. specifies valid assessment evidence of all desired results: Stage 2 aligns with Stage 1.				
9. includes authentic performance tasks based on one or more facets of understanding.				
10. provides sufficient opportunities for students to reveal their achievement.				
11. includes evaluative criteria to align each task to Desired Results and to provide suitable feedback on performance.				
Stage 3				
12. Includes learning events and instruction needed to help learners –				
a. Acquire targeted knowledge and skills				
b. Make meaning of important ideas.				
c. Transfer their learning to new situations.				
13. effectively incorporates the W.H.E.R.E.T.O. elements so that the unit is likely to				
be engaging and effective for all learners. Overall	+	-	\vdash	
9 . 9 - 11 - 1			\vdash	
14. is coherent with all 3 stages in alignment.				
15. is likely to work: feasible and appropriate for this situation.				

^{*}Note: More detailed rubrics are available for each of the Standards.

Appendix C - LDC Task Samples (from Pennsylvania)*

After researching text and online resources on Plate Tectonics and Continental Drift, write a letter to Alfred Wegener's critics that compares the evidence supporting continental drift and the evidence explaining the mechanics of plate movement and argues that Wegener was in fact correct. Be sure to support your position with evidence from the texts.

Will technology be the salvation or downfall of humankind? After reading "There Will Come Soft Rains" and the accompanying texts, write an essay that addresses the question and support your position with evidence from the text(s). Be sure to acknowledge competing views. Give examples from past or current events or issues to illustrate and clarify your position.

Did "government" effectively utilize available scientific knowledge to better living conditions for the working class during the latter part of the Industrial Revolution? After reading provided texts, photographs and political cartoons, write an editorial that addresses the question and support your position with evidence from the text(s). Be sure to acknowledge competing views. Give examples from past or current events or issues to illustrate and clarify your position.

Does a person's social class determine his/her destiny? After reading John Steinbeck's Of Mice and Men and selected articles from the New York Times and Time magazine write an essay that addresses the question and support your position with evidence from the text(s). Be sure to acknowledge competing views. Give examples from past or current events or issues to illustrate and clarify your position.

*Note: The generic task template is noted in **bold type** with specific texts and writing products added.