Designing Lesson Plans

A focus on lesson planning raises a few important questions:

- What exactly should be included in a lesson plan, and how does it differ, if at all, from a UbD unit plan?

- How is backward design applied at the lesson level?

- How much detail should lesson plans contain?

- How should the lessons and learning events in a unit be sequenced to be most engaging and effective?

- What is the role of textbooks and related resources in lesson planning?

- How about pacing guides?

Backward Design and Lesson Planning

We'll examine these questions by considering an analogy with popular mapping applications like MapQuest or Google Maps. Online maps include a zooming tool to allow users to get a wide-angled view of an entire region and then progressively zoom downward, all the way to individual streets and buildings. We can view curriculum similarly, from a big-picture vantage point down to its smallest unit:

- A *curriculum* is organized to reflect mission (e.g., critical thinking) and program goals (e.g., scientific inquiry).

Source: From *The Understanding by Design Guide to Advanced Concepts in Creating and Reviewing Units*, (pp. 105–108), by G. Wiggins and J. McTighe, 2012, Alexandria, VA: ASCD. Copyright 2012 by Grant Wiggins and Jay McTighe. Reprinted with permission.

- These long-term goals are framed by *subjects* (e.g., science) and courses (e.g., biology).

- *Courses* are composed of units (e.g., the cell).

- *Units* are composed of lessons (e.g., plant cells).

- *Lessons* are composed of events (e.g., viewing a plant cell through a microscope).

- *Events* are composed of step-by-step actions and directions (e.g., procedures for focusing the scope and recording observations).

Just as travelers need to know their overall destination before embarking on the trip, events and daily lessons need to be planned backward from course and unit goals, mindful of the larger mission and program outcomes. Developed in this way, lessons are more likely to provide engaging, coherent, and helpful scaffolding toward a significant learning target, just as online maps and GPS devices allow drivers to follow an efficient and effective route to their end point. Failure to plan lessons backward increases the likelihood that lessons will consist of directionless activities or coverage of discrete content objectives without a clear, worthy, and unifying end in mind. To shift the metaphor, a collection of individual events does not ensure a coherent lesson, unit, or course over time, any more than a pile of bricks automatically results in a solid and aesthetically pleasing building. There has to be a detailed blueprint of the whole to ensure that each part belongs; and there has to be an intelligent plan and scope of work by the general contractor to ensure that the whole is achieved in the most efficient and logical sequence.

Essential Lesson Elements

So, if we plan lessons backward from broader goals, what should these daily plans include? Some educators who have become acquainted with Understanding by

Design assume that the three-stage unit-planning template can also serve as the organizing format for individual lessons. We do *not* recommend this. The key elements of UbD—understandings, essential questions, and transfer performances—are too complex and multifaceted to be satisfactorily addressed within a single lesson—and are sometimes too complex to be satisfactorily addressed within a single unit. Moreover, essential questions and transfer goals should be revisited over time, not put to rest by the end of a single class period.

Having clearly defined the key elements of a UbD unit, what, then, should be in a lesson plan? The phrase *lesson plan* is ambiguous. It can refer to a plan we develop from scratch for our own sake in managing instruction, and it can refer to an outline of previously planned work we provide primarily for the sake of supervisory oversight. In UbD, the phrase is ambiguous in another important way. Unless we know how specific Stage 3 in the original unit plan is, and unless we know how much freedom a teacher has as a designer of lessons, we don't really know what kind of a plan is called for—either for ourselves or for supervisors. At one extreme, where schools require teachers to work from an official curriculum, a lesson plan might simply involve a relatively straightforward task of making a personal calendar that parcels out the planned events. (This is arguably what happens now in textbook-driven or programmed instruction.) On the other hand, if the original Stage 3 is very broad, then teachers will have to flesh out more detailed lesson plans for day-to-day instruction. Such lessons will need to closely align with Stages 1 and 2 and include the essential elements previously discussed.

Nonetheless, we believe that any effective lesson plan includes several basic components, regardless of particular local needs, emphases, and interests. Effective lesson plans include a meaningful objective, appropriate events, formative assessments, a plan to adjust, and appropriate closure.

- *Meaningful Objective*—An objective for the lesson is proposed, justified in terms of past learning and student interest, and linked to longer-term goals

(that is, aligned with specific unit elements of Stages 1 and 2, to course and program goals, and to mission)—the *W* in WHERETO.

- *Appropriate Events*—Learning events are created to maximize engaged and effective learning, mindful of student diversity, in terms of the unit goals and goal types (transfer, meaning, or acquisition [T-M-A]).

- *Formative Assessments*—Ongoing assessments and "look-fors" enable teachers to check along the way for learners' misconceptions or skill deficits, and adjust their instruction accordingly.

- *A Plan to Adjust*—When formative assessments reveal learning difficulties, it does not make sense to ignore them and continue marching through the curriculum. Learning plans need to build in time for teachers to respond to inevitable student challenges and unpredicted student interests and responses as the work of the day unfolds.

- *Appropriate Closure*—Effective lesson plans typically conclude with a lesson summary or debrief, links to past and future lessons, and student self-assessment or reflection.

Lesson Plan Formats

It wouldn't be wise for us to argue for one official template for lesson plans in UbD, because many schools and districts already have an agreed-upon format that teachers are expected to use. Regardless of the particular elements or format that a teacher, school, or district chooses to include in a lesson, keep in mind that UbD was developed in part to overcome a bad habit in lesson planning—losing sight of long-term aims and focusing only on a plan for each day or, at most, a week. The danger in the traditional approach is that learning outcomes can become divided up into very small bits of content in ways that make it less likely that learners will make the intellectual connections and develop the complex performance abilities that lie at the

heart of meaning-making and transfer. Thus it is vital to ensure that any formal lesson plans and their associated formats signal that lessons are transparently built backward from unit goals and are deliberate in signaling the need to build in meaning-making and transfer activities that work together across lessons.

Coding Lesson Events

A practical way of ensuring this coherence and alignment is through the use of a simple coding system. In this regard, we strongly recommend that before you become too invested in (or bogged down by) detailed lesson planning, you first simply summarize the key learning events in sequence for your Stage 3 learning plan. Then code these events to the desired results of Stage 1 and associated assessments in Stage 2.

In addition to basic coding for alignment with Stages 1 and 2, designers can also code their lessons using other schema, such as T-M-A, WHERETO, Bloom's taxonomy categories, or Webb's Depth of Knowledge.

Another reason we hesitate to offer a fixed lesson plan template is that lesson types and timing differ. For example, in the opening lesson or lessons for a new unit, teachers preview the topic and help learners see the purpose and relevance of the targeted learning. Such lessons include some diagnostic (or pre-) assessment to check for prior knowledge and skills, misconceptions, and students' interests related to the topic. We also recommend that teachers begin with some stimulating hook to engage learners early on. These ideas reflect the *W* and the *H* in WHERETO.

Of course, we do not need a new hook or pre-assessment for every lesson within the unit. However, these unique lesson elements are arguably crucial at the start.

At the conclusion of a unit, the culminating lesson or lessons typically include a unit summary; student self-assessments, reflection, and goal setting; a consideration

of "so what?" (that is, making connections to future learning and real-world applications); and a preview of the next unit. Once again, not every lesson within a unit will need these particular elements, but they are important for closure.

Figure O.1 summarizes the distinctive qualities of the beginning and ending lessons, coded for the WHERE elements.

Figure O.1

Beginning and Ending Lessons

Beginning Lessons in a Unit Include	Ending Lessons in a Unit Include
• An introduction to the unit goals and the purpose/value of learning them (W). • A preview of the evidence needed to demonstrate learning, including the transfer performance tasks (W). • A preview of the rubrics to be used, along with models/exemplars of effective performance (W). • A review of the unit sequence (W). • Pre-assessment to check for student readiness—knowledge, skill levels, potential misconceptions, and interests related to the unit topic (W). • A hook to engage interest and focus learning (H). Note: *There is not a prescribed sequence for these beginning elements. For example, a teacher may begin a new unit with a hook, and then introduce the unit goals. Alternatively, a teacher might start by showing models of excellent performance, and then describe the unit goals and assessments.*	• A return to the essential questions to consider what has been learned and better understood (E-2, R). • An opportunity for students to self-assess their performance based on the unit goals and assessment results. • A reflection on the "so what"; for example, *What can I now do with what I have learned? How will this learning help me in school? In my life?* (E-2, R). • An opportunity for students to set future learning goals (E-2). • A preview of the next unit (W) and its connection to the one just completed. Note: *The end of the unit affords the opportunity for teachers to reflect on the unit's effectiveness, self-assess their own teaching, and identify adjustments they plan to make when teaching the unit in the future.*