

**Deductive Lesson Design.** The teacher states the learning targets to the learners at the beginning of the instruction. The teaching techniques and learning experiences (tasks, activities, assignments) that follow are planned to move the learner from the learning targets (knowledge, skill, or understanding) to specific examples.

**Inductive Lesson Design.** Students are given specific examples, and through an inquiry process (activities/learning experiences, examples, non-examples, and questions that guide students' thinking), they begin to discover the generalization (transferable idea) being represented. In other words, students move from specific examples to the more abstract transferable idea and understanding. Concept-based curriculum and instruction uses an inquiry lesson design to guide students to conceptual understandings, but there are points in lessons where a deductive structure is appropriate (e.g., when teaching factual knowledge and skills).

As you can see, an effective lesson is not something that can be pulled off a shelf. There are many components to an effective lesson, and the art of teaching creates a natural flow among them. This is why aspiring and veteran teachers never stop learning. Next, we are going to examine these lesson attributes more deeply in the context of a developing concept-based teacher.

## THE DEVELOPING CONCEPT-BASED TEACHER

A developing concept-based teacher evolves in multiple ways. The following three categories capture the essential areas of a teacher's growing expertise:

- Understanding Concept-Based Curriculum and Instruction
- Concept-Based Lesson Planning
- Concept-Based Instruction

One does not need to develop mastery in all categories sequentially before plunging into the journey.

The stages in the process of becoming a concept-based teacher span multiple areas:

- Understanding Concept-Based Curriculum and Instruction
- Concept-Based Lesson Planning
- Concept-Based Instruction

**Understanding Concept-Based Curriculum and Instruction.** Previous books about concept-based curriculum (Erickson, 2007, 2008; Lanning, 2013) go into considerable depth about the rationale and process for developing concept-based curriculum units with step-by-step writing guides. Erickson's work provides numerous examples of concept-based

curriculum in content-laden disciplines (social studies, science, and mathematics) and Lanning's work addresses the steps to developing concept-based curriculum in process-driven disciplines. (The 2013 book focuses on English language arts, but the model works equally well in other process-based disciplines such as world language and the visual and performing arts.) The purpose of this book is not to provide another curriculum design resource but to blend together highlights of our earlier works. Chapter 1 summarizes the rationale for concept-based curriculum while other chapters provide while highlights of elements of concept-based curriculum units.

Before teachers can begin redesigning instruction to better target conceptual understanding, they need to grasp how a concept-based curriculum is constructed and why. Problems emerge fairly quickly if teachers are handed a concept-based curriculum and are expected to implement it without accompanying professional development. If you revise the content, increase expectations for thinking, and introduce an additional curriculum dimension (conceptual understanding) without addressing the skill and knowledge of teachers who will be implementing the curriculum, the end result will be frustration and the same student results seen prior to the revisions.

The first category, *Understanding Concept-Based Curriculum and Instruction*, lists characteristics necessary to comprehend concept-based curriculum so that instructional decisions maintain fidelity to the aims of concept-based teaching and learning.

**Concept-Based Lesson Planning.** The importance of lesson planning cannot be overstated. Of course an excessively detailed lesson plan may make the task too arduous. However, it is inadequate and professionally irresponsible for a teacher to walk into a class thinking "my lesson plan is in my head." While lesson plans are not foolproof, writing out the key elements of an effective lesson prior to instruction clarifies thinking, serves as a reference for future planning, creates a document for collaboration, and reveals evidence of one's dedication to quality teaching. A concept-based lesson plan charts a deliberate path to conceptual understanding. There are many facets to a high-quality lesson, so to leave planning to chance runs the risk of working hard without the expected return on learning . . . and the students cannot be blamed! The more that goes into thinking through a lesson, the greater the chances are the execution of the plan will go smoothly and the learning targets will be met.

In planning a concept-based lesson, there needs to be coherence among each of the lesson components. This means:

- the examples of factual content and skills exemplify the generalization(s) (conceptual understandings) students are expected to realize,
- guiding questions are used to bridge students' thinking from the factual knowledge (or examples) to the generalization (conceptual level of understanding),
- the learning experiences (student assignments) are designed to support students' learning of the knowledge and/or processes that exemplify the generalizations to be realized and understood, and finally,
- assessments are aligned to the identified learning targets, knowledge, skills, and understanding(s), of the lesson.

Again, there is much to consider when planning a concept-based lesson. A lesson template helps structure the components and make planning more manageable. Collaboratively designing lessons with colleagues is a proven way to expedite the process.

**Concept-Based Instruction.** Concept-based instruction actualizes the lesson plan. Concept-based instruction focuses on continually moving students toward deeper conceptual understanding. Feedback and discussions after lesson observations, analysis of multiple student assessment data points, and self-reflection will refine concept-based instruction, but developing expertise takes time. These authors emphasize that concept-based instruction requires thinking teachers who, in turn, develop thinking students. In addition, DuFour, DuFour, Eaker, and Many (2006) reiterate the message that communities of professional educators collaborating on lessons and continually analyzing the impact of those lessons on student learning is a powerful means by which to both improve professional practice and increase student achievement.

Next, let's move from the definitions of the three categories of the developing expertise of the concept-based teacher to rubrics of each. First, Figure 5.2, *The Developing Concept-Based Teacher—Understanding Concept-Based Curriculum and Instruction*, is a rubric describing the stages of learning a teacher may travel through in terms of understanding and supporting concept-based teaching and learning. This tool is intended to help both teachers and administrators monitor progress with specific feedback while realizing that all the intricacies of understanding are impossible to capture in a rubric!

Next, the rubric in Figure 5.3, *The Developing Concept-Based Teacher—Concept-Based Lesson Planning*, describes some of what goes into thinking through and planning a quality lesson. We both distinctly remember the time we spent each Sunday afternoon planning the coming week of

classroom instruction. The “Concept-Based Lesson Planning” continuum may look overwhelming at first glance, but with practice and collaboration, many of the attributes can be incorporated into a lesson template fairly readily. The goal is to help teachers think carefully through the essential aspects of a quality lesson ahead of delivery. Although there are many factors that affect the success of a lesson, inappropriate or careless planning is the number one reason instruction falters.

You will find a model music lesson plan in Figure 5.4 and a model math lesson in Figure 5.5. Notice how well thought out each lesson is and how the elements of the rubric in Figure 5.3 are addressed. These are wonderful concept-based teachers!

Finally, Figure 5.6, *The Developing Concept-Based Teacher—Concept-Based Instruction*, examines behaviors typical of novice, emerging, and master concept-based teachers. Certainly all the intricacies of instruction cannot be captured in a rubric; however, the descriptors may spark new insights about areas that are critical to implementing the curriculum with integrity.

## **DO THE DEVELOPING CONCEPT-BASED TEACHER RUBRICS HAVE A PLACE IN TEACHER EVALUATION PLANS?**

Audiences we speak with frequently ask this question. Across the United States, many school systems are turning to tools that will help describe how instruction improves across bands in various categories as they revise their teacher evaluation plans. Charlotte Danielson’s books (e.g., *Enhancing Professional Practice: A Framework for Teaching*, 1996), are often referenced and have been adopted in states and districts that are changing the way they monitor and evaluate instruction. Danielson’s work is well respected, but if a district or school is committed to implementing concept-based curricula, the language in the instrument used for evaluations should be as consistent as possible with the expected concept-based pedagogy; otherwise, it can be confusing for teachers and administrators.

*The Developing Concept-Based Teacher* rubrics in Figures 5.2, 5.3, and 5.6 can be easily merged with Danielson’s descriptions by tweaking language. For example, look at Figure 5.7, which extracts one category of Danielson’s framework, *Questioning*, which is part of her Domain 3.

Compare the language in Figure 5.7 with the language about questioning in *The Developing Concept-Based Teacher* rubrics. Clearly there are parallels across the documents, but more precise wording about the types of questions concept-based teachers would be expected to use is offered in *The Developing Concept-Based Teacher* rubrics.