Planning for Reaching the Standards

Classrooms that work for diverse learners:
A planning process that works for all students

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Overview

Teaching to reach standards is an extremely important task with significant implications for all educators. This new focus has caused both beginners and seasoned educators anxiety for several reasons: 1) Educators have never had to address a particular set of standards 2) teaching to standards is very foreign to the ways in which teachers were initially trained; 3) planning for this endeavor is incongruent with the way current units of instruction and day-to-day lessons are designed 4) teachers have never been held accountable in this way.

This Brief addresses these elements and offers a systematic process for designing course, unit and lesson plans that avails itself to differentiating instruction and reaching standards. It provides you with planning steps, as well as a unit and lesson plan model, both of which are user-friendly and supported by research.

A Paradigm Shift in Planning

In this standards-based era, the teacher’s role must shift in two discrete but interrelated ways: from covering to uncovering the content and from the text-book-follower to assuming the role of the curriculum architect. This role shift will have a significant and perhaps overwhelming impact on teachers, especially if they do not have a systematic process for planning to reach the standards (Covey, 1989). Let’s review a research based process for planning, then look more deeply at the specific steps to planning the unit and tying these steps to the Multifaceted Unit Plan.

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For decades, teachers have used commercially-prepared curriculum materials as their “bible” for instruction; with the text and teacher’s guide as the sole resource for the course. This often leaves teachers feeling responsible for teaching everything in the text from cover-to-cover. In so doing, many educators relied on the teacher’s guide almost exclusively, rather than use it as was intended... as a resource guide. Thus, the curriculum materials became the architectural plans for instruction, and the teacher became the messenger who delivered these set plans on specific days.
In addition, many teachers taught facts in isolation rather than big ideas and key concepts, and planned the day-to-day lessons by identifying how the tasks and activities taken from the teacher’s guide should be implemented. Now, teachers must start their planning at the course level, using their architectural know-how to plan what and how to teach the big ideas and concepts then break them down into units of instruction and then into day to day tasks, which means keeping the standards, big ideas, and key concepts clearly in mind (Wiggins & McTighe, 1998). Central to this paradigm shift in planning, teachers must be mindful of all students, including those with disabilities, so that diverse and unique learning needs will be proactively considered in the initial planning stage.

### Designing the Multifaceted Unit Plan

The unit plan is the framework for your architectural plan. It is the primary vehicle used to teach big ideas, key concepts and or skills. It allows you to extend and refine knowledge by developing meaningful, authentic activities related to students’ readiness, unique characteristics and needs. Once the standards to be taught have been identified as big ideas, you can create an integrated unit plan by following these steps:

**Course Plan**

**Big Ideas & Key Concepts – Standards**

- Assess learner’s interests, readiness, learning styles
- Assess base knowledge and skills for each unit
- Assess the learning – evaluate what needs to be re-taught and how to best re-teach.

**Planning is a process, not an event. There is too much information to teach it all**
## Multifaceted Unit Plan

### Standard(s):
Students identify the different forms of energy and explain transformation of energy and its significance in understanding the structure of matter and the Universe. In other words, students study the various forms of energy - light, heat, sound, gravitational, electrical, mechanical and chemical.

### Multiple Questions:
How is electrical energy transformed? How might electrical energy be like and different from light, heat, sound, gravitational, mechanical or chemical energy?

### Multiple Pathways
Howard Gardner’s multiple intelligences

### Multiple Resources

#### Musical / Rhythmic
- Create a rap explaining how electricity works. (group)
- Write a “round table” story about life without electricity.
- Research inventors of radio, TV, lightbulb, etc.

#### Verbal / Linguistic
- Design a webquest about electricity. (tiered)
- Read the story “The Making of Electricity.” (pairs or alone)
- Develop interview questions. (pair)
- Write report on interview findings. (alone)

#### Naturalistic
- Locate websites about electricity. (tiered)
- Interview “old timers” about life without electricity. (pairs)
- Take a neighborhood tour and analyze use of electricity. (pairs)
- Research wind to energy and water to energy. (small group)
- Write report. (alone)

#### Human
- Educational consultant from power company.
- Local electrician come in to demo electrical safety.

#### Print

#### Technological
- Film: Bill Nye the Science Guy: Magnets & Static Electricity.
- Van de Graf generator.
- Websites.

### Multiple Outcomes

#### Visual / Spatial
- Watch video Bill Nye the science guy. (class)
- Create or complete a graphic organizer depicting electricity. (alone)
- Compare and contrast (visually) parallel circuits and series. (alone)
- Graphically display transformation of electricity. (small group)

#### Logical / Mathematical
- Chart daily use of electricity. Analyze and summarize the findings. (alone/pairs)
- Gather family electric bills and graph. (alone)

#### Bodily / Kinesthetic
- Build and wire Lego car. (alone or pairs)
- Create a papermache lightbulb as an artpiece. (alone or pairs)
- Draw an electrical scheme of a familiar object, (e.g., hairdryer, doorbell)

#### Interpersonal
- Interview a classmate to find out what (s)he knows and wants to know about electricity. (pairs)
- Create questions about electricity. (group)
- Debate pros and cons of electric cars. (group)
- Discuss benefits and liabilities of using solar power in our homes. (group)

#### Intrapersonal
- Reflect on your learning by writing daily summaries in your journal. (alone)
- Analyze your use/abuse of electricity. (alone)

### Special Considerations:
What do you need to take into account to increase the likelihood of success for all students? For example, information developed from the Instructional Assessment Process (see next page)
Multifaceted Unit Plan

**Standard(s):**

**Multiple Resources:**
- Human
- Print
- Technological

**Multiple Pathways**
- Howard Gardner’s multiple intelligences
  - Verbal / Linguistic
  - Musical / Rhythmic
  - Bodily / Kinesthetic
  - Visual / Spatial
  - Interpersonal
  - Logical / Mathematical
  - Naturalistic
  - Intrapersonal

**Multiple Questions:**

**Multiple Outcomes:**
- Visual / Spatial
- Intrapersonal

Special Considerations:

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1. Select the big ideas and place it in the center of the template (see page 3 and 4).

As Covey (1989) says, “keep the main thing the main thing.” Research says we must focus on a deep study of a smaller number of topics (Zemelman et al., 1998).

2. Develop essential/driving questions

Essential questions serve as doorways into focused and interactive discussion, inquiry and research, rather than yielding simple fact. These questions help learners to focus on what is important to know. They:

• Have no simple “right” answer
• Raise other important questions, often across content areas
• Reoccur to highlight big ideas and issues
• Can incite and maintain student inquiry (Wiggins & McTighe, 1998).

For example: What might have caused the race riots and what might be the implications today; as compared to non-essential questions: When were the race riots, where did they take place, and who was Martin Luther King?

When developing essential questions, identify those that will “frame” teaching and learning for ALL students by focusing on key issues and ideas that stimulate higher-order thinking in the subject area.

3. Create multiple outcome measures, as not all students will be assessed in the same way, (e.g. performance tasks) criteria, and tool(s) to assist in obtaining results (see page 3, far right side).

In this step you must identify the assessment evidence needed to show that all students have achieved the desired result...understanding of the big idea. The goal is to obtain valid, reliable, credible, and useful evidence so you will know if students have “shown that they know.” As the curriculum architect, teachers must become an assessor, as well as an activity designer. Therefore, the performance task(s) should be challenging, open-ended, authentic, and performable by all students (Zemelman et al., 1998). Again, this is where you differentiate how students are assessed to achieve maximum information, building on the strengths of students to create mans of assessing student learning.

4. Design multiple pathways to learning integrating tasks and activities that assist in understanding (see page 3, central portion).

Using Gardner’s (1993) theory of Multiple Intelligence, you, as curriculum architects, can design diverse tasks and activities that are meaningful and provide opportunities to “uncover” the big ideas while simultaneously extending student learning. The models on pages 3 and 4 articulate the key words for each of the eight areas of intelligence and can be used as a guide for planning. For instance:

Logical / Mathematical – How might we include numbers, classification, critical-thinking and calculations into this unit of instruction?

Verbal / Linguistic – How might we integrate reading, writing and speaking into this unit of instruction?
Musical – How might we embed music, singing, sounds, rhythms, and dance into this unit of instruction?

Bodily / Kinesthetic – How might we weave physical doing, movement, exercise, drama, building and manipulating objects into this unit?

Interpersonal – How might we utilize various active learning arrangements (e.g., partner and group work, peer tutoring and long-term group projects) into this unit of instruction?

Intrapersonal – How might we include self reflection and analysis as well as student choice into this unit of instruction?

Visual / Spatial – How might we include graphic organizers, color, art, pictures, and illustrations into this unit of instruction?

Once numerous tasks have been identified, teachers must address the methods to be used to “make the learning come alive”. Opportunities for hands-on moving around, discussing, drawing, charting, singing, and reflecting present themselves, rather than simply assigning students independent seatwork. By providing multiple pathways for learning and varied student groupings you are differentiating instruction. You will be proactively focusing on each student’s unique style of learning, while simultaneously increasing their motivation and interest in the subject area (Tomlinson, 2001). To further increase student motivation, it is recommended that students take part in the design of this portion of the learning unit.

Refer to the Arts in Education brief at www.sig.hawaii.edu for resources to support you in this effort.

5. Identify varied and unique resources for learning (see page 3, far left side).

Teachers need not be the sole “deliverer” of instruction nor should one textbook be used as the sole instructional print resource. Therefore, as curriculum architects and facilitators of learning, you should consider three interrelated categories of resources during the planning phase; human, print, and technological (Zemelman et al., 1998). In doing so, all students’ readiness, interests, and learning styles will be considered and again you will be differentiating instruction.

Research says a variety of resources should be used in order to accommodate all students’ readiness, interest, and learning styles (Tomlinson, 2001).
Planning the Daily Lesson

The final design component of the planning process is to create a daily lesson plan. Return to your Multifaceted Unit Planning Template and select one or more “pathway” elements from the learning unit to design your lesson plan. This will diversify the types of learning experiences in which students are exposed over several lessons, allowing all students access to the big ideas being taught. Keep in mind that within each lesson you will also differentiate elements of the lesson to support the primary pathway selected for that lesson.

In planning your lesson keep in mind that every single lesson, regardless of the age group or subject matter, has four common components which are:

- Introduction or Anticipatory set
- Body
- Closing
- Assessment

Embedded within this structure is a series of steps which will assist you in crafting the lesson.

1. **Identify goal for the lesson.**
   
   What is the goal of this lesson?

2. **Identify lesson objectives.**
   
   What are the objectives/outcomes for this lesson? By the end of this unit learners should be able to know about and/or be able to do (what)?

3. **Design performance/outcome measure, criteria and measurement tool.**
   
   How will you know you have reached the learning and the lesson's objectives? How will the learning be assessed? How all learners will be assessed? What criteria will you use? What measurement tool? How might you assess the effectiveness of the lesson?

4. **Determine needed resources.**
   
   What are the varied human, print, and technological resources needed to effectively implement this lesson?

5. **Select mode of delivery.**
   
   What is the primary mode of delivery (direct instruction–meaning getting or inquiry–meaning making or a combination)?

6. **Create the sequence for instruction.**
   
   What is the instructional sequence you will follow?

   **Direct instruction**
   - initial instruction
   - guided practice
   - independent practice

   **Inquiry**
   - exploration
   - explanation
   - expansion

7. **Identify the time needed to complete each step in the sequence.**
   
   What is the timeframe for each component?

8. **Target elements to be differentiated based on learner readiness, learning style(s) and/or interest.**
   
   Differentiate instruction to accommodate all learners. What might you need to differentiate in order to accommodate all learners? (Tomlinson, 2001)

   - learning environment
9. **Assess the learning and assess the lesson.**

   How will you assess the effectiveness of the lesson and the learning?

10. **Alter the plan.**

   What might you need to do (re-teach the lesson?), or alter the next time this lesson is taught?

**Resources**

Universal Design for Learning Web site http://www.cast.org/udl


SIG Web site http://www.sig.hawaii.edu

**Summary**

For many teachers, new and seasoned, this may be a new and very detailed approach. With new things it is easy to feel overwhelmed and a bit lost, that is normal. Working through the process will begin to make things clearer for you. Consider working as a part of a team of teachers to plan and share ideas together. This level of support and cross-pollination will benefit everyone involved, including the students. With the knowledge acquired in this brief educators are now equipped with a research based, systematic and efficient way in which to become curriculum architects by describing how to design a course, a learning unit and a lesson plan with the intention of meeting the standards. By following the steps and using the pre-designed templates you can work to accommodate all learners and teach to reach standards in an effective way, and you and the students can have more fun as you see learning come to life!

**References**


For more information on The Planning Process contact Dr. Jeanne Bauwens at (808) 358-1157.

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