Designing Coherent Instruction and Demonstrating Knowledge of Resources

November 6, 2013
Domain 1: Planning and Preparation

What a teacher knows and does in preparation for engaging students in learning.
Review

• Last time, we discussed ways to demonstrate knowledge of students and then what is included in setting instructional outcomes for the students.

• The focus this week is on designing coherent instruction and demonstrating knowledge of resources to use within the instruction.
Pair and Share

1. When planning and preparing for each week’s lessons, list the different factors that you consider when designing lessons and instruction that reflect a coherent plan?

2. When planning instruction, how do you determine the resources that you will use?
Domain 1

• 1a: Demonstrating Knowledge of Content and Pedagogy
• 1b: Demonstrating Knowledge of Students
• 1c: Setting Instructional Outcomes
• 1d: Demonstrating Knowledge of Resources
• 1e: Designing Coherent Instruction
• 1f: Designing Student Assessments
1e Elements
Learning Activities

*Instruction is designed to engage students and advance them through the content.*

Jot down two instructional activities that you have done with your students that you felt really engaged them and helped them to understand the content and make progress in achieving the targeted instructional outcomes.
Instructional Materials and Resources

Aids to instruction are appropriate to the learning needs of the student.

Now, jot down the instructional materials and resources that were used within each of the two engaging instructional activities.
Instructional Groups

*Teachers intentionally organize instructional groups to support student learning.*

Jot down how you grouped your students for the activities (individual, small, large; mixed ability, same ability, etc.)
Lesson and Unit Structure

*Teachers produce clear and sequenced lesson and unit structures to advance student learning.*

Take one of the instructional activities and write down what lesson/unit this was a part of and where you included it in the structure of the lesson—beginning activity (prior to instruction), middle (during instruction), culminating activity (at end to put all together)
1e Indicators

- Lessons that support instructional outcomes and reflect important concepts
- Instructional maps that indicate relationships to prior learning
- Activities that represent high-level thinking
- Opportunities for student choice
- Use of varied resources
- Thoughtfully planned learning groups
- Structured lesson plans
Level 1

- Learning activities are poorly aligned with the instructional outcomes.
- Learning activities do not follow an organized progression.
- Learning activities are not designed to engage students in active intellectual activity.
- Learning activities have unrealistic time allocations.
- Instructional groups are not suitable to the activities and offer no variety.
Critical Attributes of Level 1

• Learning activities are boring and/or not well aligned to the instructional goals.

Example: After his ninth graders have memorized the parts of the microscope, the teacher plans to have them fill in a worksheet.

• Materials are not engaging or do not meet instructional outcomes.

Example: The teacher plans to use a 15-year-old textbook as the sole resource for a unit on communism.

• Instructional groups do not support learning.

Example: The teacher organizes her class in rows, seating the students alphabetically; she plans to have students work all year in groups of four based on where they are sitting.

• Lesson plans are not structured or sequenced and are unrealistic in their expectations.

Example: The teacher’s lesson plans are written on sticky notes in his gradebook; they indicate: lecture, activity, or test, along with page numbers in the text.
Level 2

• Some of the learning activities and materials are aligned with the instructional outcomes and represent moderate cognitive challenge, but with no differentiation for different students.

• Instructional groups partially support the activities, with some variety.

• The lesson or unit has a recognizable structure; but the progression of activities is uneven, with only some reasonable time allocations.
Critical Attributes of Level 2

• **Learning activities are moderately challenging.**
  Example: After a mini-lesson, the teacher plans to have the whole class play a game to reinforce the skill she taught.
  The plan for the ELA lesson includes only passing attention to students’ citing evidence from the text for their interpretation of the short story.

• **Learning resources are suitable, but there is limited variety.**
  Example: The teacher finds an atlas to use as a supplemental resource during the geography unit.

• **Instructional groups are random, or they only partially support objectives.**
  Example: The teacher always lets students self-select a working group because they behave better when they can choose whom to sit with.

• **Lesson structure is uneven or may be unrealistic about time expectations.**
  Example: The teacher’s lesson plans are well formatted, but the timing for many activities is too short to actually cover the concepts thoroughly.
Level 3

• Most of the learning activities are aligned with the instructional outcomes and follow an organized progression suitable to groups of students.

• The learning activities have reasonable time allocations; they represent significant cognitive challenge, with some differentiation for different groups of students and varied use of instructional groups.
Critical Attributes of Level 3

• Learning activities are matched to instructional outcomes.
  Example: The teacher reviews her learning activities with a reference to high-level “action verbs” and rewrites some of the activities to increase the challenge level.

• Activities provide opportunity for higher-level thinking.
  Example: The teacher creates a list of historical fiction titles that will expand her students’ knowledge of the age of exploration.

• The teacher provides a variety of appropriately challenging materials and resources.

• Instructional student groups are organized thoughtfully to maximize learning and build on students’ strengths.
  Example: The teacher plans for students to complete a project in small groups; he carefully selects group members by their reading level and learning style.

• The plan for the lesson or unit is well structured, with reasonable time allocations.
  Example: The teacher reviews lesson plans with her principal; they are well structured, with pacing times and activities clearly indicated.
    The fourth-grade math unit plan focuses on the key concepts for that level.
Level 4

• The sequence of learning activities follows a coherent sequence.
• The sequence of learning activities is aligned to instructional goals.
• The sequence of learning activities is designed to engage students in high-level cognitive activity.
• Learning activities are appropriately differentiated for individual learners.
• Instructional groups are varied appropriately, with some opportunity for student choice.
Critical Attributes of Level 4

• **Activities permit student choice.**
  Example: Teacher’s unit on ecosystems lists a variety of challenging activities in a menu; the students choose those that suit their approach to learning.

• **Learning experiences connect to other disciplines.**
  Example: The lesson plan clearly indicates the concepts taught in the last few lessons; the teacher plans for his students to link the current lesson outcomes to those they previously learned.

• **The teacher provides a variety of appropriately challenging resources that are differentiated for students in the class.**
  Example: While completing their projects, the students will have access to a wide variety of resources that the teacher has coded by reading level so that students can make the best selections.

  The teacher has contributed to a curriculum map that organizes the ELA Common Core State Standards in tenth grade into a coherent curriculum.

• **Lesson plans differentiate for individual student needs.**
  Example: After the cooperative group lesson, the students will reflect on their participation and make suggestions.
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1d Elements
Resources for Classroom Use

*Materials must align with learning outcomes.*

What are 3 resources for educational materials you use outside of your curriculum?

How do you determine if they are relevant to learning outcomes?
Resources to Extend Content Knowledge and Pedagogy

Materials that can further teachers’ professional knowledge must be available.

How do you further your professional knowledge? Do you belong to any professional organizations? Training on the web? Professional journals?
Resources for Students

Materials must be appropriately challenging.

What resources do you provide to your students?

Make a list of the resources you provide to your students for further learning outside the classroom.
1d Indicators

- Materials provided by the district
- Materials provided by professional organizations
- A range of texts
- Internet resources
- Community resources
- Ongoing participation by the teacher in professional education courses or professional groups
- Guest speakers
Level 1

• The teacher is unaware of resources to assist student learning beyond materials provided by the school or district.

• The teacher is not aware of resources for expanding one’s own professional skill.
Critical Attributes of Level 1

• The teacher uses only district-provided materials, even when more variety would assist some students.
  Example: For their unit on China, the students find all of their information in the district-supplied textbook.
  In the literacy classroom, the teacher has provided only narrative works.

• The teacher does not seek out resources available to expand her own skill.
  Example: The teacher is not sure how to teach fractions but doesn’t know how he’s expected to learn it by himself.

• Although the teacher is aware of some student needs, he does not inquire about possible resources.
  Example: A student says, “It’s too bad we can’t go to the nature center when we’re doing our unit on the environment.”
Level 2

- The teacher displays some awareness of resources beyond those provided by the school or district:
  --for classroom use
  --for extending one's professional skill
- The teacher does not seek to expand this knowledge.
Critical Attributes of Level 2

• The teacher uses materials in the school library but does not search beyond the school for resources.
  Example: For a unit on ocean life, the teacher really needs more books, but the school library has only three for him to borrow. He does not seek out others from the public library.

• The teacher participates in content-area workshops offered by the school but does not pursue other professional development.
  Example: The teacher knows she should learn more about literacy development, but the school offered only one professional development day last year.

• The teacher locates materials and resources for students that are available through the school but does not pursue any other avenues.
  Example: The teacher thinks his students would benefit from hearing about health safety from a professional; he contacts the school nurse to visit his classroom.
    In the second-grade math class, the teacher misuses base 10 blocks in showing students how to represent numbers.
Level 3

- The teacher displays awareness of resources beyond those provided by the school or district.
- This awareness includes:
  - those resources on the Internet
  - resources for classroom use
  - resources for extending one’s professional skill
- The teacher seeks out such resources.
Critical Attributes of Level 3

• Texts are at varied levels.
  Example: The teacher provides her fifth graders a range of nonfiction texts about the American Revolution so that regardless of their reading level, all students can participate in the discussion of important concepts.

• Texts are supplemented by guest speakers and field experiences.

• The teacher facilitates the use of Internet resources.
  Example: The teacher takes an online course on literature to expand her knowledge of great American writers.

• Resources are multidisciplinary.
  Example: The ELA lesson includes a wide range of narrative and informational reading materials.

• The teacher expands her knowledge through professional learning groups and organizations.

• The teacher pursues options offered by universities.

• The teacher provides lists of resources outside the classroom for students to draw on.
  Example: The teacher distributes a list of summer reading materials that will help prepare his eighth graders’ transition to high school.
Level 4

- The teacher’s knowledge of resources for classroom use and for extending one’s professional skill is extensive.
- Knowledge of resources includes those available through the school or district, in the community, through professional organizations and universities, and on the Internet.
Critical Attributes of Level 4

• Texts are matched to student skill level.
  Example: The teacher is not happy with the out-of-date textbook; his students will critique it and write their own material for social studies.

• The teacher has ongoing relationships with colleges and universities that support student learning.

• The teacher maintains a log of resources for student references.

• The teacher pursues apprenticeships to increase discipline knowledge.
  Example: The teacher spends the summer at Dow Chemical learning more about current research so that she can expand her knowledge base for teaching chemistry.

• The teacher facilitates student contact with resources outside the classroom.
  Example: The teacher matches students in her Family and Consumer Science class with local businesses; the students spend time shadowing employees to understand how their classroom skills might be used on the job.
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Questions