Designing Instruction for 21st Century Learners

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POLL: Which best describes you?

1. Preservice teacher
2. Inservice teacher
3. Professor
4. Other
Participants will:

1. explore the challenges of designing instruction in 21st century classrooms;
2. identify approaches they use to design instruction for diverse learners;
3. understand what instructional design is and what it offers; and
4. consider implications for using the ADDIE model of instructional design for designing instruction.
Trends Influencing Society & Classrooms

• Technology
• Information
• Globalization
• Equity
• Accountability
## Other Influences

<table>
<thead>
<tr>
<th>edTPA</th>
<th>P21 Framework</th>
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<td>Common Core State Standards</td>
<td>National Educational Technology Standards</td>
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<td>Bloom’s Revised Taxonomy</td>
<td>Understanding by Design</td>
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<td>Differentiated Instruction</td>
<td>Culturally Responsive Pedagogy</td>
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<td>IDEA</td>
<td>Universal Design for Learning</td>
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Culturally diverse

Figure 6-1. Percentage distribution of public school students enrolled in prekindergarten through 12th grade, by race/ethnicity: Selected years, October 1990–October 2010


Decreases

Increases
Culturally diverse

Between 2010 – 2021, NCES predicts:

- American Indian/Alaska Native: +16%
- Asia/Pacific Islander: +26%
- Black: +5%
- Hispanic: +24%
- Two or more races: +34%
- White: -2%

Figure 8-1: Percentage of public school students who are English language learners (ELLs), by state: School year 2009-10

Source: http://nces.ed.gov/programs/coe/figures/figure-ell-1.asp

Cognitively diverse

Figure 9-2. Percentage of students ages 6–21 served under the Individuals with Disabilities Education Act (IDEA), Part B, placed in a regular school environment, by amount of time spent in general classes: Selected school years, 1990–91 through 2009–10


60% included in general classrooms
How people learn is as unique as our fingerprints...
FOR A FAIR SELECTION EVERYBODY HAS TO TAKE THE SAME EXAM: PLEASE CLIMB THAT TREE.
Outside of school...
A Vision of K-12 Students Today
by Barbara Nesbitt

http://www.youtube.com/watch?v=_A-ZVCjWf8
Reflection on Video

1. What are the characteristics of the students in the video?
2. What are the challenges to teaching 21st century students?
POLL: What is the #1 challenge of 21st century teaching?

1. Preparing students for a dynamic, global, technology-driven society
2. Equitably supporting diverse learners
3. Successfully addressing standards
4. Effectively using resources
5. Balancing quality with increased accountability
How can teachers design instruction to address diverse learner needs in 21st century classrooms?
Teaching today involves:

1. **Knowing** one’s students and making instructional decisions to address their needs.
2. **Balancing** students’ individual and shared needs while providing supportive learning experiences required to master standards.
3. **Integrating** abundant resources for teaching.
**POLL:** Which approach do you use for lesson planning?

1. CAST’s Universal Design for Learning
2. Gay’s Culturally Responsive Teaching
3. Madeline Hunter’s model
4. Tomlinson’s Differentiated Instruction
5. Wiggins & McTighe’s Understanding by Design
6. Other
7. I don’t know
Successful 21st century teachers must be “educational designers”

They must possess a:
1. new “mindset”
2. broadened, honed “skill set”, and
3. high-quality “tool set”
A new “mindset”

1. New assumptions about their own role, power, and responsibilities,
2. New empowerment over dimensions of their work,
3. A sense of responsibility for making good decisions for their students,
4. Discipline, knowledge, and skill.
A broad “skill set”

Systematic thinking and approaches for use when:
1. Learning about and examining learner needs
2. Thinking about how learner needs overlap
3. Making instructional decisions
4. Creating instructional materials
5. Making choices about how to teach specific content for specific learners.
A high quality tool set:

1. Instructional models
2. Instructional strategies
3. Technologies
What is a designer?

A professional with specialized skills, knowledge, and competencies.

**Designers:**

- have knowledge from experience, study, and disciplined inquiry,
- apply knowledge to identify, prioritize, and address problems,
- simultaneously balance multiple goals, and work in “real-world” settings with constraints and context.
An Educational Designer is a teacher who:

- approaches instructional planning with intentionality and clear goals,
- applies specialized knowledge to identify and frame instructional challenges related to learners and content, and
- addresses students’ needs through the skillful application of a broad repertoire of instructional models, strategies, and tools.
ADDIE Model

- Analyze
- Design
- Develop
- Implement
- Evaluate

ADDIE Model

- Analyze
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Analyze Phase

1. Determine the instructional goals and objectives.
2. Examine current and desired learner needs and characteristics.
3. Identify contextual factors that might promote or hinder instruction.
4. Locate resources.
Analyze Phase: Activities
Analyze Phase - Activities

1. Analyze academic standards and break into learning goals
2. Identify and examine learner needs
3. Consider important characteristics of the learning context
4. Conduct needs assessment
5. Inventory available materials and resources
6. Select appropriate instructional models of teaching
"You ignored the most important part of design: to understand your users."
- Donald Norman
Design Phase

1. Design the best plan possible for meeting the known need (based on analysis).
2. Design a plan for measuring the quality of product (in development and completed) and possibly the instructional process.
Design Phase: Activities

1. Review learning goals
2. Configure other instructional tools
3. Formulate plans for development of instructional plan and materials
4. Conceive evaluation plan
5. Devise sequence and plan pacing of lesson/unit
Develop Phase

1. Enact the plan that was designed.
2. Develop the instruction and instructional materials.
3. Develop the formative and summative assessments.
Develop Phase: Activities

1. Create lesson plans
2. Develop evaluation plan
3. Produce any instructional materials
Implement Phase

1. Use the products created.
2. Try out the instruction and see how well it works!
Implement Phase: Activities

1. Teach unit
2. Implement use of instructional materials developed
3. Implement evaluation plan
Evaluate Phase

1. Determine effectiveness of instruction.
2. Examine the variety of data (formative & summative).
3. Reflect on entire process.
Evaluate Phase - Activities

1. Analyze data generated from the evaluation plan.
2. Determine levels of student growth, effort, and achievement.
3. Examine quality of instructional plan and/or materials and make modifications as needed.
ADDIE Model

Analyse

Evaluate

Design

Develop

Implement

How can you best design instruction for 21st century learners?
What's Next?
