Instructional Model Comparison

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Education 533: Instructional Systems Design & Development

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April 12, 2012

The terms “instructional models” and “instructional strategies” are frequently used interchangeably. However, these terms actually present differences when designing instruction. An instructional model is a framework for curriculum instruction, and an instructional strategy is a plan for implementing that curriculum or presenting it to the learners.

*Instructional Models*

Instructional models involve the design of programs and curriculum, and are generally more content focused. They usually all follow the general “ADDIE” framework. ADDIE is a model comprised of the components of analysis, design, development, implementation, and evaluation. Each of these steps are usually visible in a systematic instructional model. Some examples of models that follow the ADDIE structure are the Dick and Carey Model of Instructional Design, Understanding by Design, and Kemp’s Instructional Design.

Understanding by Design is a model that uses “backward design,” where the designer identifies the desired results first. The three steps to this results-based model are: 1. Identify desired results, 2. Determine acceptable evidence, and 3. Plan learning experiences and instruction. This model is most widely used in a K-12 educational setting, and is more specifically used for curricular units rather than in-depth programs.

The Dick and Carey Model, also including ADDIE characteristics, includes a system that may be more appropriate for more audiences and for more intricate programs.

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| ADDIE | Understanding by Design | Dick and Carey Model |
| ANALYSIS: Determine needs for instruction, target goals, identify current skills and resources | Identify desired results, determine acceptable evidence  Identify the problem, develop the design brief, formulate a design specification | Conduct instructional analysis, identify entry behaviors and characteristics, identify instructional goals |
| DESIGN: Write outcomes and objectives, identify topics, sequence units, define lessons and activities, and assessments | Design a product/solution | Write performance objectives |
| DEVELOPMENT: Decide on activities and materials, revise and refine materials and activities | Plan learning experiences and instruction | Develop criterion referenced tests, instructional strategy, instructional materials |
| IMPLEMENTATION: Market materials, provide help or training | Use appropriate techniques and equipment, create product/solution | Develop instructional strategy and instructional materials, revise instruction |
| EVALUATION: Implement student evaluations, program evaluations, and program maintenance and revision | Evaluate the product/solution | Design and conduct formative evaluation and summative evaluation |

Instructional Models Comparison

*Instructional Strategies*

Instructional strategies are methods that a teacher presents material to the learners. Strategies are more student-focused, and may be more specific to a lesson rather than an entire program. Some examples of instructional strategies include discovery learning, inquiry teaching, cognitive apprenticeship, and gradual release of responsibility.

Gradual release of responsibility is a method that includes the following steps: modeling, guided instruction, collaborative practice, and independent practice. It provides the modeling, scaffolding, and individual practice. This method begins with the responsibility of the task completely on the teacher, and transitions so that the responsibility is completely on the student by the end of the lesson, unit, etc.

Discovery learning is an instructional strategy that emphasizes inquiry, implicit learning, and hands-on activities. It provides the opportunity for the student to investigate without the coaxing of a teacher. The student is encouraged to reflect on his or her experiences, and to explore his or her environment as a way to develop learning.

Instructional Strategies Comparison

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|  | Gradual Release of Responsibility | Discovery Learning |
| Characteristics | Explicit, scaffolded | Implicit, environmental, hands-on |
| Role of student | Observer, participant | Discoverer, thinker |
| Role of teacher | Model, guide, observer, reinforcer | Guide, observer |
| 21st Century Skills | Listening skills, following directions, collaborative learning, independent learning | Inquiry, critical thinking, collaborative learning, problem solving |
| Ease of Use | Easy lesson delivery into systematic “I Do, We Do, You Do” steps | Easy lesson delivery, not much preparation needed |
| Assessment | Formative assessment through guided practice, (repeat modeling and guided practice if necessary), summative assessment at independent practice | Formative assessment through observations |
| Theoretical Origins | Vygotsky | Constructivist, Jean Piaget, Jerome Bruner, Seymour Papert |
| See Also | Zone of Proximal Development | Inquiry Teaching |

References

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