



Online Training on

“Instructional Design for Techno-Pedagogy Integration”

Organized by Central Institute of Educational Technology, NCERT
in collaboration with SNDT Women's University, Mumbai

 **16 September 2025**  **4:00 pm-5:00 pm**

Day 2: Models of Instructional Design

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For more information about
the programme, Visit

<https://training-ciet.blogspot.com/p/instructional-design-for-techno.html>

Watch it Live on
NCERT Official YouTube Channel

<https://www.youtube.com/@NCERTOFFICIAL>



For any further queries, mail to: training.helpdesk@ciet.nic.in Or Call: 8800440559

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Instructional Systems Design (ISD) is the process for creating instructional systems.

An instructional system may be defined as an arrangement of resources and procedures used to facilitate learning.

Gagne et al (2000)

Conducting a Workshop?

You are invited to conduct a Workshop for teachers next week.

This is the only message you have received.

Now it's your turn to get ready.

What kind of questions will you ask to prepare yourself?



Conducting a Workshop?

Which level do these teachers teach?

How many are they?

What is the topic?

Why is this workshop happening?

Will it be online or offline?

When is it?

What is the duration?

What are the objectives of this workshop?

Am I to conduct alone or in a team?

What resources are available at the venue?

Am I expected to use any material?

Are we going to assess the participants?



Conducting a Workshop?

Are the teachers motivated?

Will these teachers participate in the activities I plan?

How many activities should I plan in a day?

Will there be assistants at the venue?

Will they need to carry take-away notes?

Are they ICT-savvy?

Will there be computer lab available?

Will participants bring their own laptops?

Are we charging fee?

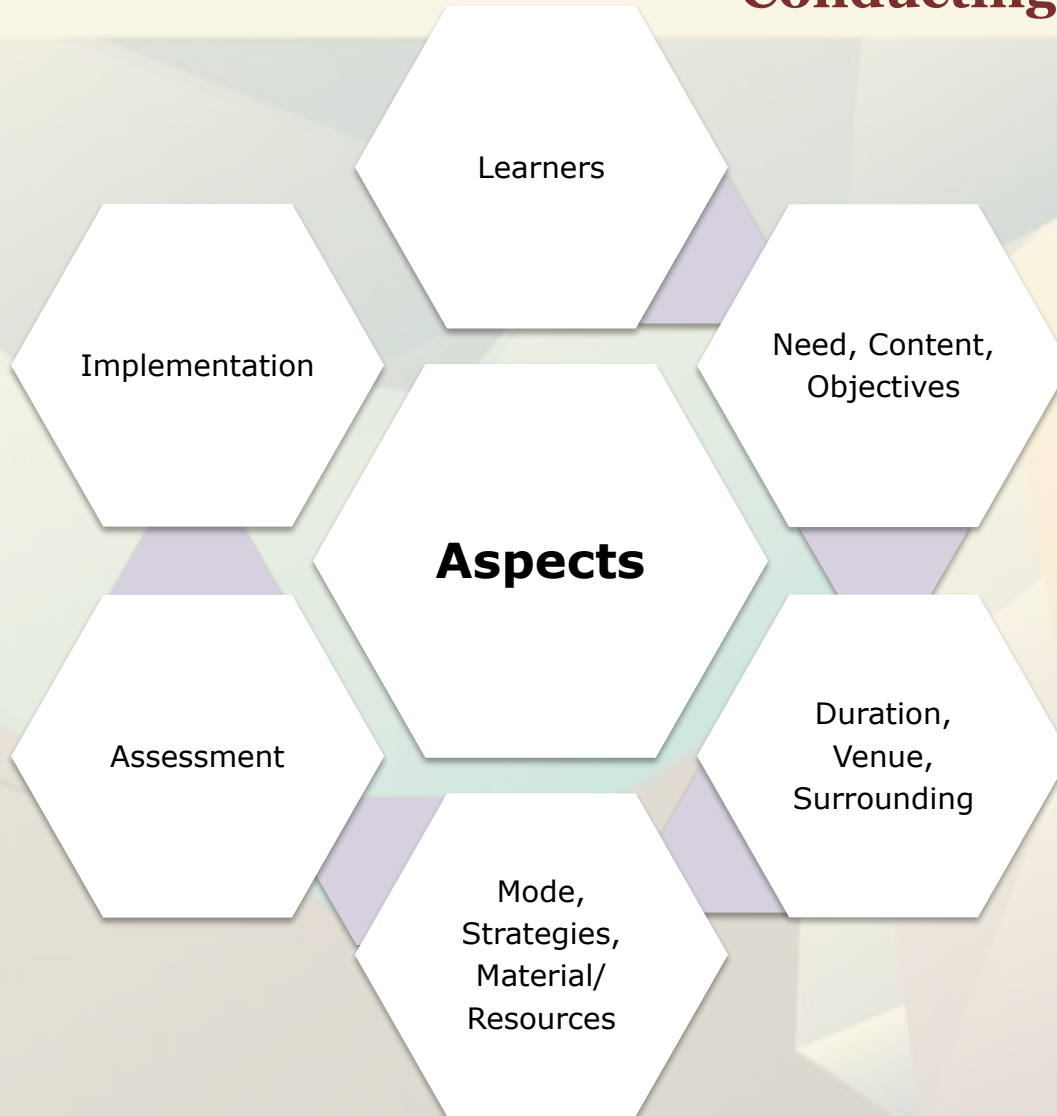
Do we need a brochure?

Is it by an organization?

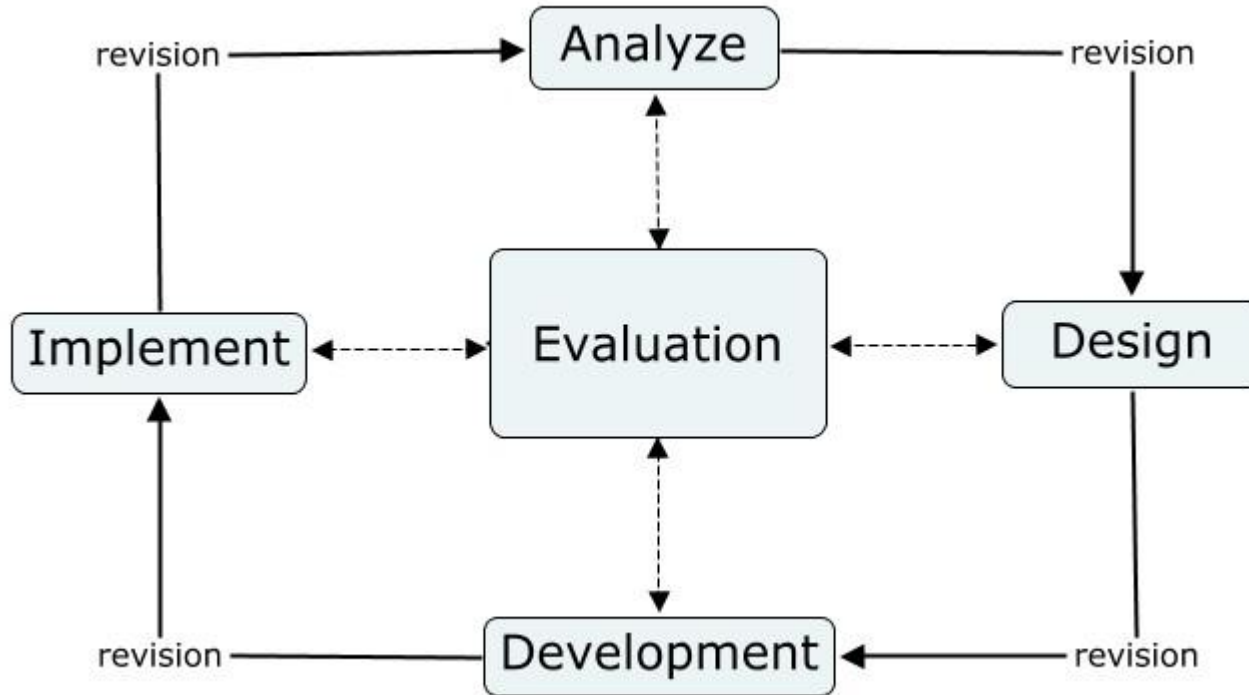
Who is certifying?



Conducting a Workshop?

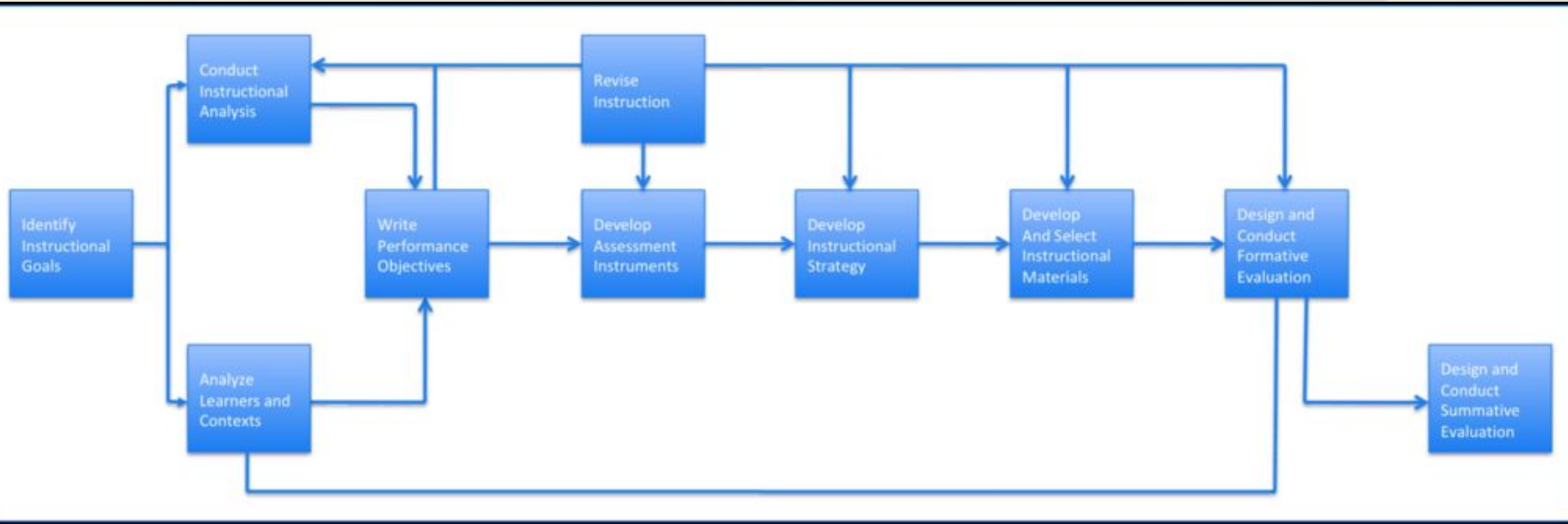


ADDIE of Instructional Design



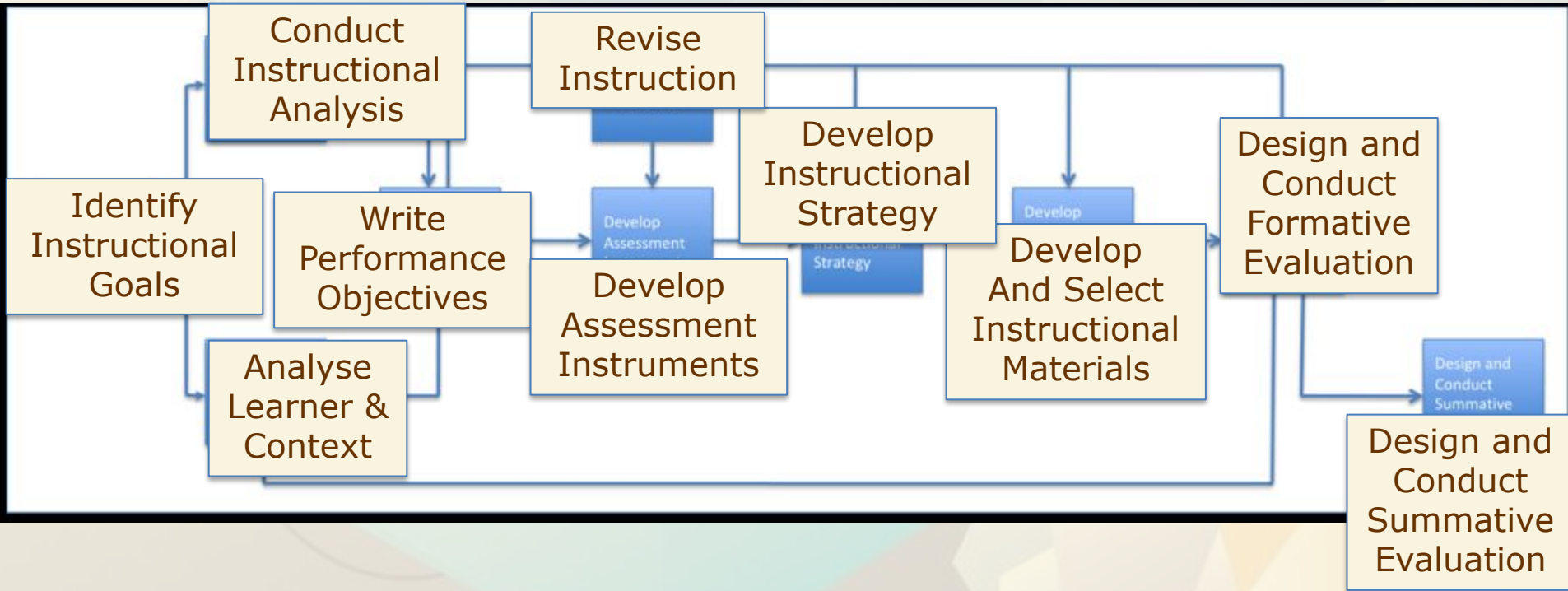
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Dick and Carey Model of ISD



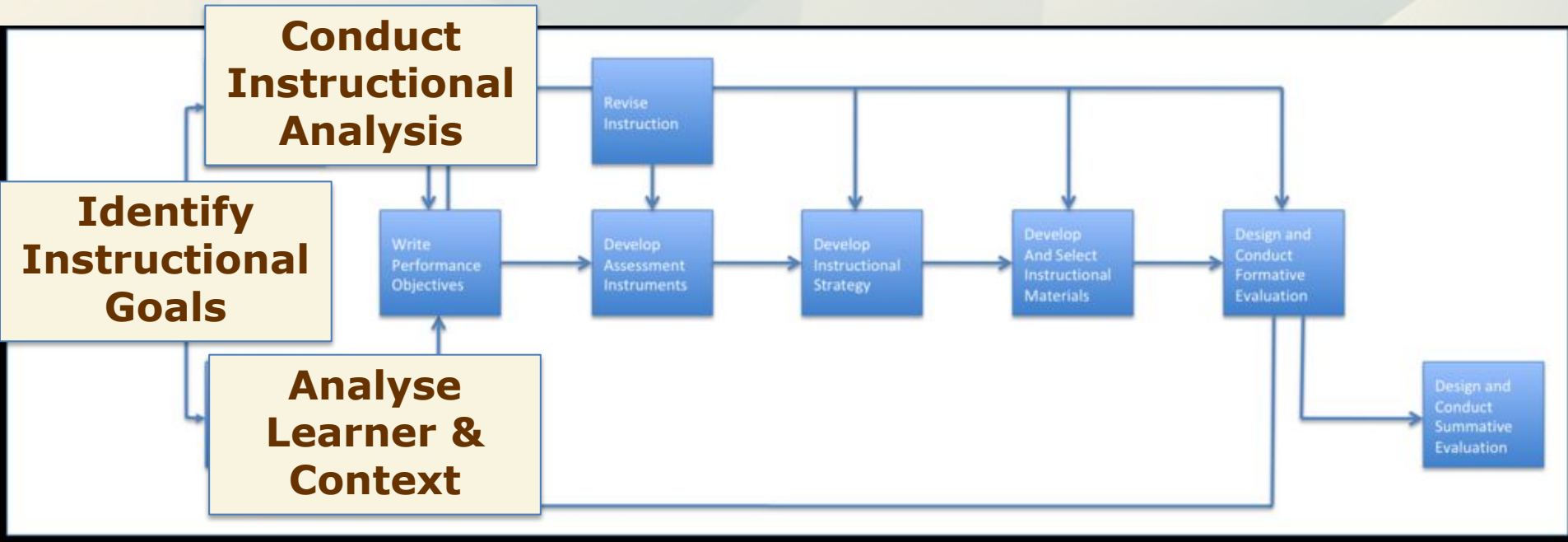
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Dick and Carey Model of ISD



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Dick and Carey Model of ISD



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- ❖ First and most crucial phase
- ❖ The process that identifies the learning need
- ❖ Subsequent work based on the outcome of the analysis

Analysis

Design

Development

Implementation

Evaluation

- ❖ What is the significance of the topic?
- ❖ Is there a gap in the learner's knowledge base and goals?

Analysis


Design

Development

Implementation

Evaluation

- ❖ Who is the learner?
- ❖ What is their knowledge base?
- ❖ Is there sufficient motivation and commitment?
- ❖ What are their attitudes toward content and the delivery system?



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graph TD; A[Analysis] --> B[Design]; B --> C[Development]; C --> D[Implementation]; D --> E[Evaluation];
```

Analysis

Design

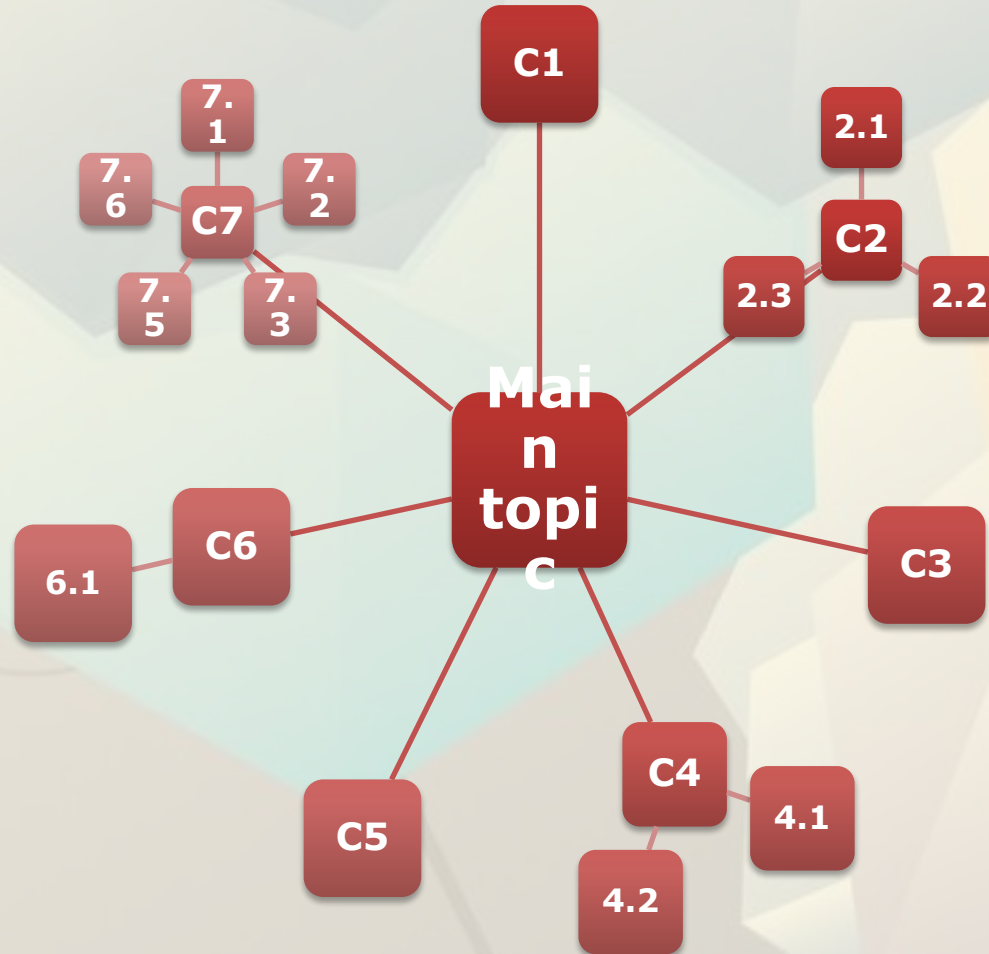
Development


Implementation

Evaluation

What are the conditions in which the learner will learn/ be trained?

- ❖ Physical/ Technical
- ❖ Resources
- ❖ Constraints





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graph TD; A[Analysis] --> B[Design]; B --> C[Development]; C --> D[Implementation]; D --> E[Evaluation];
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Analysis

Design

Development

Implementation

Evaluation

What all needs to be learnt?

- ❖ collating raw content from various sources
- ❖ identifying the key terms, facts, concepts, procedures, processes, principles, rules

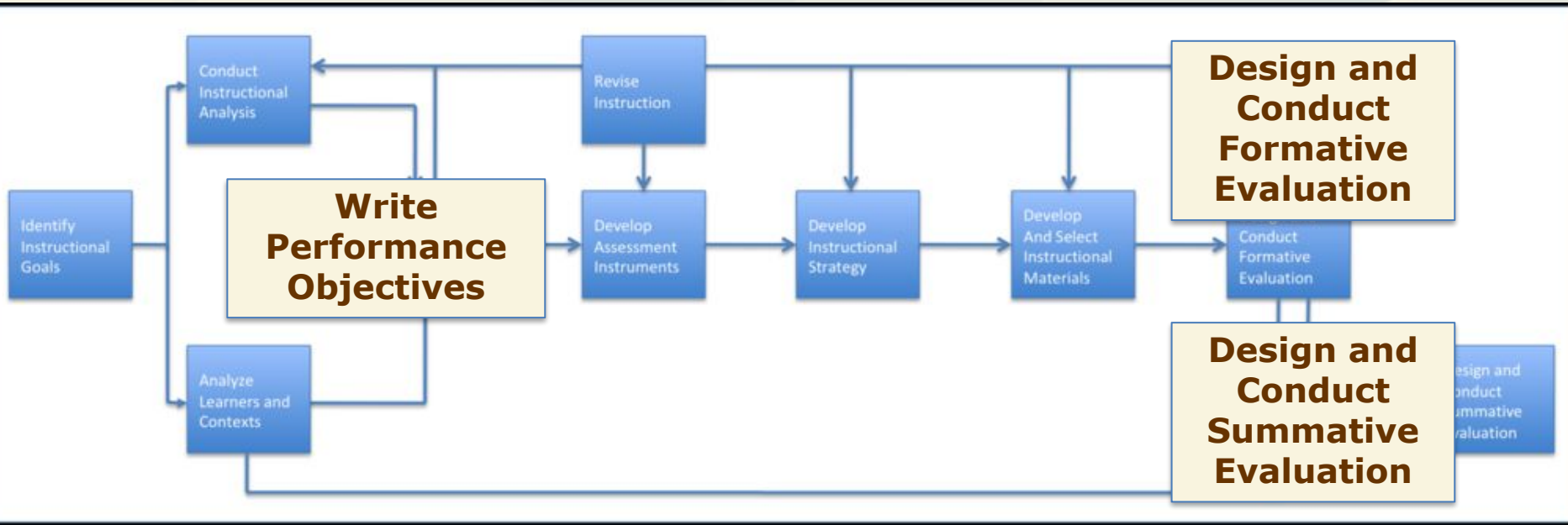
Design: Considerations

Presentation of content & planning of interaction

The outcome of the Analysis phase is used to create the design



Dick and Carey Model of ISD



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Designing Structure and Sequence

- ❖ chunking content logically
- ❖ organizing the content in the appropriate, logical and effective sequence
- ❖ presenting content in a systematic manner
- ❖ Output of the content structure and sequence is a Flowchart

Analysis

Design

Development

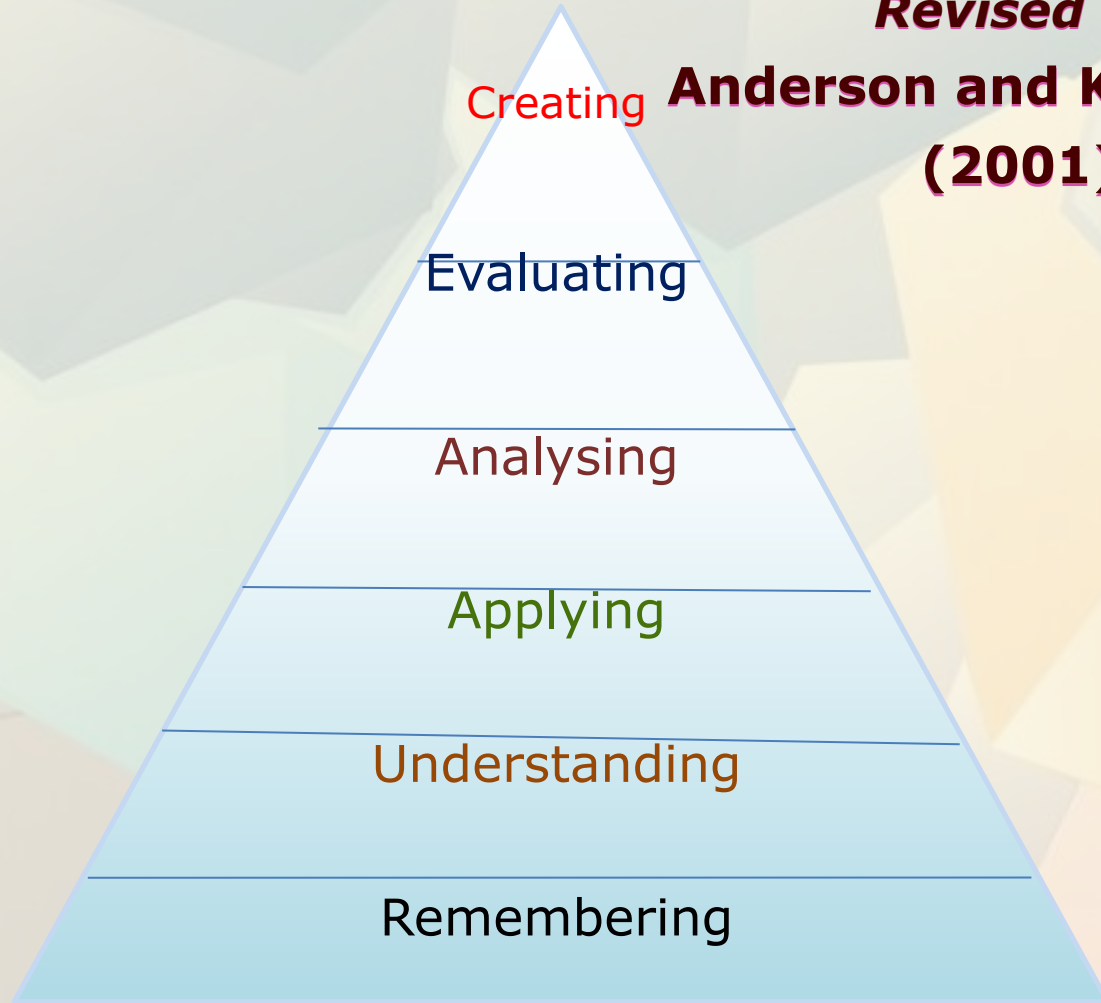
Implementation

Evaluation

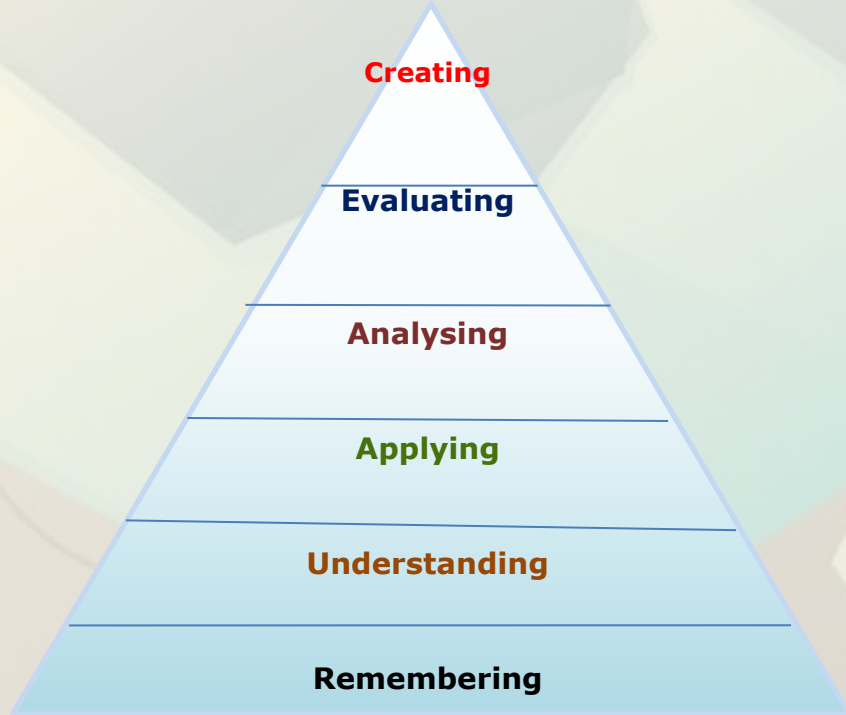
Revised Taxonomy of Bloom

Revised by

**Anderson and Krathwohl
(2001)**



Learning Outcomes

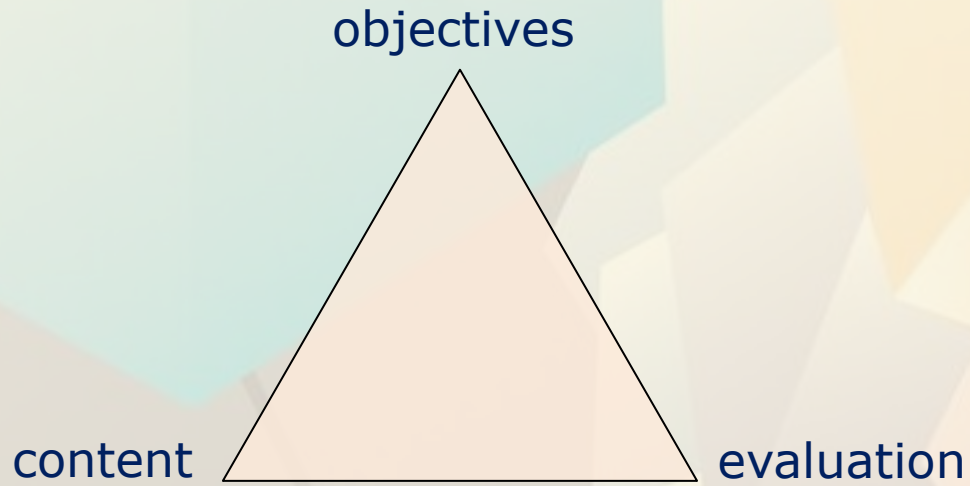


REVISED Bloom's Taxonomy Action Verbs

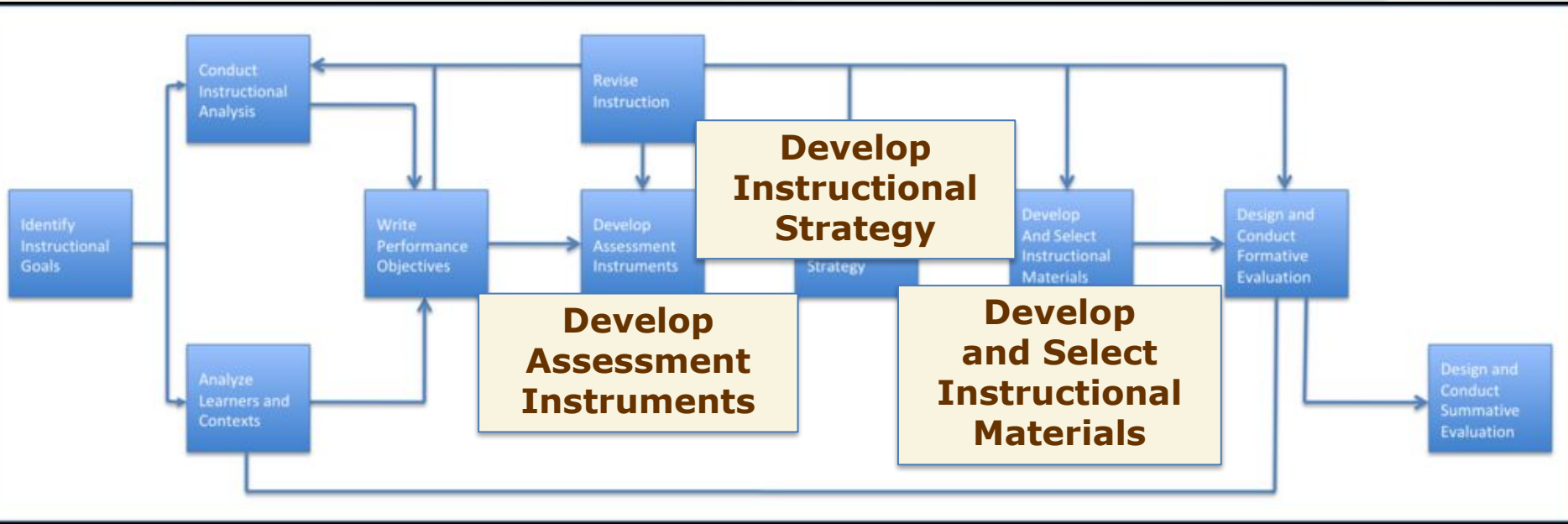
Definitions	I. Remembering	II. Understanding	III. Applying	IV. Analyzing	V. Evaluating	VI. Creating
Bloom's Definition	Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers.	Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas.	Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations.	Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria.	Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions.
Verbs	<ul style="list-style-type: none"> Choose Define Find How Label List Match Name Omit Recall Select Show Spell Tell What When Where Which Who Why 	<ul style="list-style-type: none"> Classify Compare Contrast Demonstrate Explain Extend Illustrate Infer Interpret Outline Relate Rephrase Show Summarize Translate 	<ul style="list-style-type: none"> Apply Build Choose Construct Develop Experiment with Identify Interview Make use of Model Organize Plan Select Solve Utilize 	<ul style="list-style-type: none"> Analyze Assume Categorize Classify Compare Conclusion Contrast Discover Dissect Distinguish Divide Examine Function Inference Inspect List Motive Relationships Simplify Survey Take part in Text for Theme 	<ul style="list-style-type: none"> Agree Appraise Assess Award Choose Compare Compile Conclude Criteria Criticize Decide Defend Determine Disprove Estimate Evaluate Explain Importance Influence Interpret Judge Justify Mark Measure Opinion Perceive Prioritize Prove Rate Recommend Rule on Select Support Value 	<ul style="list-style-type: none"> Adapt Build Change Choose Combine Compile Compose Construct Create Delete Design Develop Discuss Elaborate Estimate Formulate Happen Imagine Improve Invent Make up Maximize Minimize Modify Original Originate Plan Predict Propose Solution Solve Suppose Test Theory

Anderson, L. W., & Krathwohl, D. R. (2001). A taxonomy for learning, teaching, and assessing. Abridged Edition. Boston, MA: Allyn and Bacon.

- ❖ Write specific objectives
- ❖ Design alternative evaluation strategies and tools
- ❖ Design alternative instructional strategies
- ❖ Design session plan



Dick and Carey Model of ISD



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- ❖ Develop resources
(storyboards, recording, editing, design, development etc.)
- ❖ Develop strategy
- ❖ Develop evaluation strategies and tools
- ❖ Develop a detailed session plan
- ❖ Develop a course on LMS
- ❖ Prepare manuals for effective use

Implementation

- ❖ Prototype testing and revision
- ❖ Conduct sessions
- ❖ Launch courses
- ❖ Publish material

Analysis

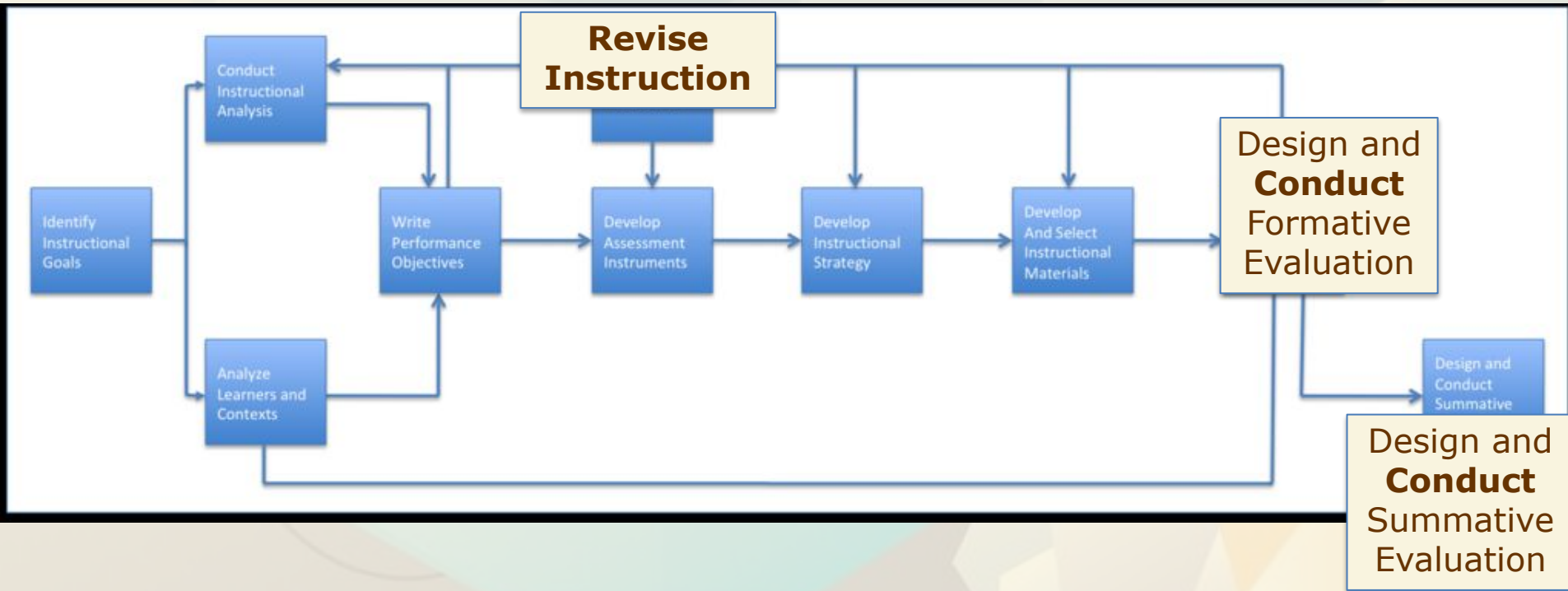
Design

Development

Implementation

Evaluation

Dick and Carey Model of ISD



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Analysis

Design

Development

Implementation

Evaluation

- ❖ Conduct evaluation
- ❖ Collect feedback
- ❖ Revise

Gagne's Nine Events of Instruction

Gagne's
Events of
Instruction

❖ Gaining attention

Informing learners of the objective

Stimulating recall of prior learning

Presenting the stimulus

Providing learning guidance

Eliciting performance

Providing feedback

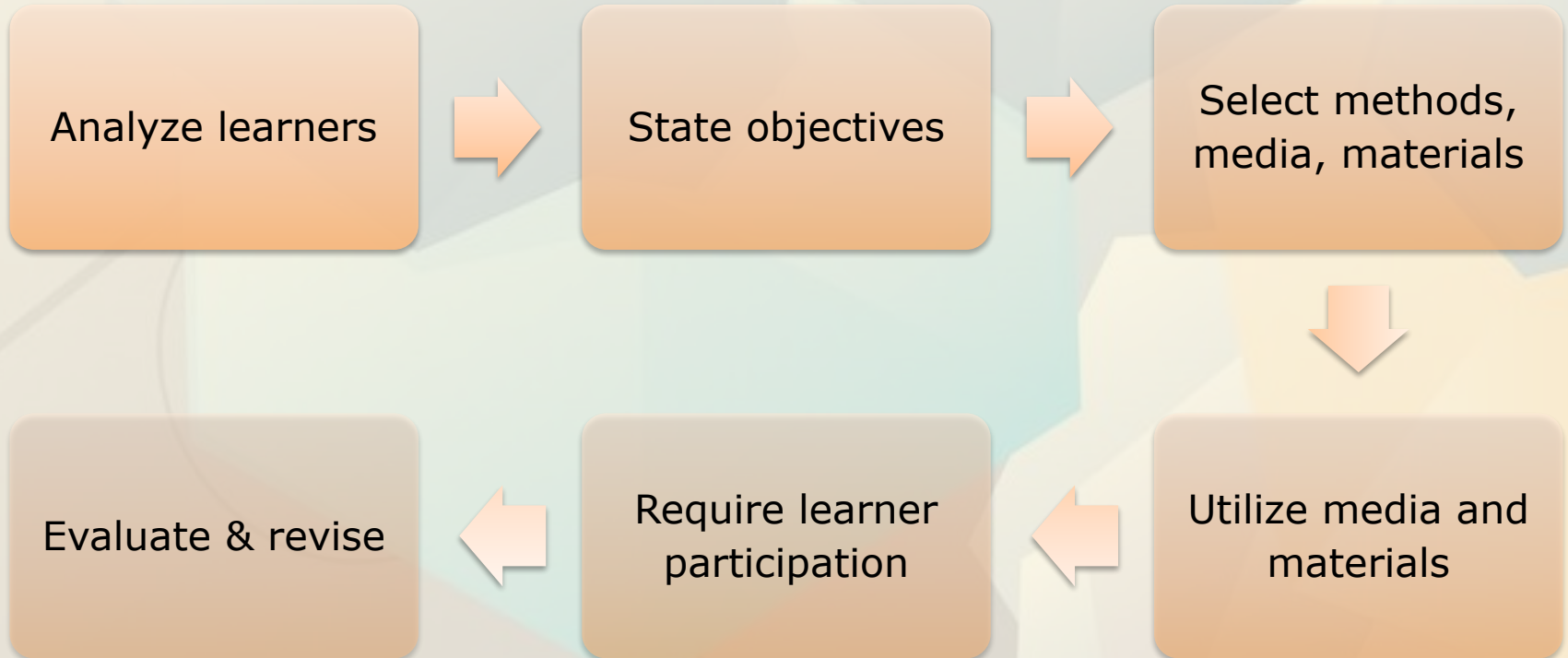
Assessing performance

Enhancing retention and transfer

- ❖ Identify instructional problems & goals
- ❖ Examine learner characteristics
- ❖ Consider subject content & tasks
- ❖ State instructional objectives
- ❖ Sequence content logically
- ❖ Design instructional strategies
- ❖ Plan instructional delivery
- ❖ Develop evaluation instruments
- ❖ Revise as needed

<https://educationaltechnology.net/kemp-design-model/>

ASSURE Model



Align

- Goals with learner & organizational needs

Get set

- Plan resources, tools, and timeline

Iterate

- Develop in small cycles

Leverage

- Use feedback to refine design

Evaluate

- Continuous assessment & improvement



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Thank you!

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Comparison

Model	Focus	Strengths
ADDIE	Systematic process	Widely used, clear stages
Dick & Carey	Systems approach	Detailed, structured
ASSURE	Learners & media	Practical classroom use
Kemp	Learner-centered, flexible	Comprehensive, adaptable
AGILE	Iterative, feedback-driven	Fast, adaptable, continuous improvement