

MULTIMEDIA INSTRUCTIONAL THEORIES THAT CAN BE APPLIED IN GAMIFICATION

SEGMENTING



Break down content into smaller segments or units to aid comprehension and reduce cognitive overload.

PERSONALIZATION



Adapt learning materials to suit individual learners' needs and preferences.

REPETITION AND REINSTATEMENT



Allow learners to revisit and review content multiple times to reinforce learning and reduce anxiety.

ACCESS TO PRIOR INSTRUCTIONAL CONTENT



Provide access to previous instructional materials to support learning and reduce cognitive load.

ORGANIZATION



Structure information in a clear and coherent manner to facilitate understanding and reduce anxiety.

MAYER'S COGNITIVE THEORY OF MULTIMEDIA LEARNING

Principles that can reduce cognitive load and enhance learning through multimedia presentations.

Coherence: Presenting material in a logical and organized manner.

Signaling: Highlighting important information to direct learners' attention.

Redundancy: Avoiding unnecessary repetition of information.

Spatial and Temporal Contiguity: Presenting related elements close together in time and space to facilitate comprehension.

Modality: Presenting information using multiple sensory channels (e.g., visual and auditory).

Segmenting: Breaking down information into smaller, manageable chunks.

Pretraining: Introducing key concepts before presenting complex material.

Personalization: Tailoring content to individual learners' preferences and needs.

Voice and Image: Using human voice and relevant visuals to enhance understanding.