

CONCORSO PUBBLICO, PER ESAMI, A N.1 POSTO DI CATEGORIA D, POSIZIONE ECONOMICA D1, AREA TECNICA, TECNICO-SCIENTIFICA ED ELABORAZIONE DATI, PER LE ESIGENZE DEL CENTRO DI SERVIZIO DI ATENEO "FEDERICA WEBLEARNING – CENTRO DI ATENEO PER L'INNOVAZIONE, LA SPERIMENTAZIONE E LA DIFFUSIONE DELLA DIDATTICA MULTIMEDIALE" DELL'UNIVERSITÀ DEGLI STUDI DI NAPOLI FEDERICO II (COD.RIF. 2103) INDETTO CON DECRETO DEL DIRETTORE GENERALE N. 638 del 05/08/2021 E DEL QUALE E' STATO DATO AVVISO SULLA GAZZETTA UFFICIALE IV SERIE SPECIALE – CONCORSI ED ESAMI N. 67 DEL 24/08/2021

TRACCE NON ESTRATTE alla prova orale del 12/10/2021

PROVA ORALE N.1 CONCORSO PUBBLICO COD. RIF. 2103

1. La candidata contestualizzi il concetto di enhanced learning fornendo un esempio di progettazione.
2. Si descrivano le caratteristiche principali del backward design analizzando pro e contro di tale approccio.
3. La candidata illustri teorie pedagogiche e strumenti legati all'apprendimento collaborativo fornendo un esempio di strumento utile per metterle in atto.
4. Si illustri la modalità per scaricare le immagini da Google Drive condiviso.

PROVA ORALE N.1 CONCORSO PUBBLICO COD. RIF. 2103

5. Leggere e tradurre da pagina 44, primo paragrafo del testo Mayer R.E., Moreno R., "Nine Ways to Reduce Cognitive Load in Multimedia Learning", *EDUCATIONAL PSYCHOLOGIST*, 38(1), 43–52, Lawrence Erlbaum Associates, Inc: knowledge"

HOW THE MIND WORKS

We begin with three assumptions about how the human mind works based on research in cognitive science—the dual channel assumption, the limited capacity assumption, and the active processing assumption. These assumptions are summarized in Table 1.

First, the human information-processing system consists of two separate channels—an auditory/verbal channel for processing auditory input and verbal representations and a visual/pictorial channel for processing visual input and pictorial representations.¹ The dual-channel assumption is a central feature of Paivio's (1986) dual-coding theory and Baddeley's (1998) theory of working memory, although all theorists do not characterize the subsystems exactly the same way (Mayer, 2001).

Second, each channel in the human information-processing system has limited capacity—only a limited amount of cognitive processing can take place in the verbal channel at any one time, and only a limited amount of cognitive processing can take place in the visual channel at any one time. This is the central assumption of Chandler and Sweller's (1991; Sweller, 1999) cognitive load theory and Baddeley's (1998) working memory theory.

Third, meaningful learning requires a substantial amount of cognitive processing to take place in the verbal and visual channels. This is the central assumption of Wittrock's (1989) generative-learning theory and Mayer's (1999, 2002) selecting–organizing–integrating theory of active learning. These processes include paying attention to the presented material, mentally organizing the presented material into a coherent structure, and integrating the presented material with existing knowledge.

PROVA ORALE N.4 CONCORSO PUBBLICO COD. RIF. 2103

1. Si illustri il concetto di risultato di apprendimento atteso.
2. Si illustrino esempi di domanda da impostare all'interno di un questionario finale per valutare la user experience all'interno di un corso online.
3. La candidata descriva il ruolo del feedback all'interno di un evento formativo fornendo un esempio pratico di strutturazione all'interno di un LMS.
4. Si illustri la differenza tra drive condiviso e cartella drive condivisa.

5. Leggere e tradurre da pagina 49, secondo paragrafo del testo Mayer R.E., Moreno R., "Nine Ways to Reduce Cognitive Load in Multimedia Learning", *EDUCATIONAL PSYCHOLOGIST*, 38(1), 43–52, Lawrence Erlbaum Associates, Inc:

Consistent with this analysis, Moreno and Mayer (1999, Experiment 1) found that students who learned from integrated presentations (consisting of animation with integrated on-screen text) performed better on a problem-solving transfer test than did students who learned from separated presentations (consisting of animation with separated on-screen text). The effect size in this single study was .48. Similar effects have been found with text and illustrations in books (Mayer, 2001). We refer to this result as a *spatial contiguity effect*: Students understand a multimedia presentation better when printed words are placed near rather than far from corresponding portions of the animation. Thus, spatial alignment of words and pictures appears to be a valuable technique for reducing cognitive load. As you can see, aligning is similar to signaling in that it guides cognitive processing, eliminating the need for incidental processing. Aligning differs from signaling in that aligning applies to situations in which essential words and pictures are separated and signaling applies to situations in which extraneous material is placed within the multimedia presentation.

PROVA ORALE N.5 CONCORSO PUBBLICO COD. RIF. 2103

1. Si illustrino i principali KPI a cui fare riferimento nella progettazione di un corso online.
2. La candidata descriva gli elementi principali di un intervento formativo basato sui principi dell'apprendimento attivo.
3. Si definiscano gli elementi essenziali per costruire una griglia di valutazione fornendo un esempio pratico di struttura ed utilizzo.
4. La candidata illustri lo strumento che Moodle mette a disposizione per la creazione di un peer assessment.

PROVA ORALE N.5 CONCORSO PUBBLICO COD. RIF. 2103

5. Leggere e tradurre da pagina 50, ultimo paragrafo del testo Mayer R.E., Moreno R., "Nine Ways to Reduce Cognitive Load in Multimedia Learning", EDUCATIONAL PSYCHOLOGIST, 38(1), 43–52, Lawrence Erlbaum Associates, Inc:

**Meeting the Challenge of Designing
Instruction That Reduces Cognitive Load**

A major challenge for instructional designers is that meaningful learning can require a heavy amount of essential cognitive processing, but the cognitive resources of the learner's information processing system are severely limited. Therefore, multimedia instruction should be designed in ways that minimize any unnecessary cognitive load. In this article we summarized nine ways to reduce cognitive load, with each load-reduction method keyed to an overload scenario.

Our research program—conducted at UCSB over the last 12 years—convinces us that effective instructional design depends on sensitivity to cognitive load which, in turn, depends on an understanding of how the human mind works. In this article, we shared the fruits of 12 years of programmatic research at UCSB and related research, aimed at contributing to cognitive theory (i.e., understanding the nature of multimedia learning) and building an empirical database (i.e., research-based principles of multimedia design).

D'ordine del Presidente della Commissione

Il segretario
F.to Mario De Matteis