



Cem09 - Cognition, Emotion & Motivation **Percept – Concept – Decision: Application to Learning Activities**

International Congress
Medina Yasmine Hammamet from 2 to 5 November 2009

Call for Abstracts/Papers

Contributions of Cem07

The first session of the congress “Cognition, Emotion & Motivation”, Cem07, organized under the theme “Integrating ... to better explain performance”, and held in October 2007 in Hammamet - Tunisia, was an opportunity which allowed us to participate to the emergence of a fourth cognitive revolution which integrates cognition (understood as the set of information processing functions and processes), emotion and motivation (understood as two non-cognitive functions). The basic contribution of cem07 was to show that “cognition is fundamentally 'emotional' and 'motivated'”.

Goals of Cem09

The 2009 session "Cem09" is under the theme "Percept – Concept – Decision: application to learning activities". This theme reflects the ambition of Cem09 to update the cognitivist paradigm STR (Stimulus - Treatment - Response) with a motivational and emotional anchoring, and a focus on the various learning activities and contexts. Indeed, we want to review the three main stages of cognition – percept formation, concept construction, and decision-making – by showing their emotional and motivational modulation in a wide range of professional, school and university learning and training (which can be identified by area, skills / process or content).

The goal of this conference is to bring together researchers from different academic backgrounds and disciplines around an approach which integrates cognition, emotion and motivation. The conference encourages works that defend this approach, showing the relationship between cognition and non-cognitive factors in different contexts.

Abstracts and papers should not be published or submitted for publication elsewhere.

Theoretical Background of Cem09

The interplay between percepts and concepts is widely studied because of its importance in the functioning of cognition in general and learning particularly. Thus, Robert L. Goldstone's work (Indiana University) shows the grounding conceptual structures in the perceptual acts. Larry Barsalou (Emory University) has developed and empirically tested Perceptual Symbols Theory, according to which even abstract concepts are grounded in our perceptual-motor systems. Lera Boroditsky (Stanford University) has explored how our language and conceptual systems influence our perceptual abilities. Stevan Harnad (Uqam University) has done a work on computational models of acquired categorical perception, and philosophical work on perceptually grounded symbols. Ken Livingston and Janet Andrews (Vassar College, Psychology Department) have empirically explored the influence of category learning on concepts.

The interplay between decision-making and motivation is also considered by some researchers, such as Art Markman (University of Texas).

Moreover, in a neurobiological approach of decision and emotion, Antonio Damasio shows that emotion could enhance decision-making in complex situations.

All these researchers and others focus on a part of the whole phenomenon, namely the path "Percept – Concept – Decision", and have an effect on the issue of integration between cognition, emotion and motivation. We want to invite these researchers and the scientific community in general to orient their work towards the integration of cognitive and non-cognitive functions for explaining this process.

Themes of Cem09

1. Perceptual activities and emotional control
2. From percept to concept : motivational and emotional modulation
3. Conceptual structures, emotion and motivation
4. Emotion, motivation and decision-making: constraints and opportunities
5. Perceptual bases of learning difficulties
6. Methods, techniques and tools to promote integration

Theme 1 : Perceptual activities and emotional control

- Reciprocity between perception and emotion
- Perceptual/Attentional selectivity and emotional states
- Sensory modalities and learning activities
- Perception of emotions

Theme 2 : From percept to concept : motivational and emotional modulation

- Dynamic relationships between percepts and concepts
- Conceptual representations and learning
- Role of percepts in concepts elaboration
- Conceptions (in didactics) and their perceptual grounding
- Effect of motivation on perceptual activities
- Perception and conceptual activation

Theme 3 : Conceptual structures, emotion and motivation

- Emotional experiences and conceptual learning
- Emotional experiences and language-based activities
- Role of language in the construction of emotions
- Conceptual change and emotions
- Conceptual change and motivation
- Motivational dynamics and elaboration of concepts

Theme 4 : Emotion, Motivation and decision-making: constraints and opportunities

- Decision-making processes in learning activities
- Neural bases of decision-making
- Emotional valency and decision-making
- Effects of motivation on decision-making processes
- Decision-making processes and individual differences

Theme 5 : Perceptual bases of learning difficulties

- Perceptual strategies and learning difficulties
- Sensory experience and learning difficulties
- Motivation and learning difficulties

Theme 6 : Methods, techniques and tools to promote integration

- Measure and experimental study of perceptual processes
- Measure and experimental study of decision-making processes
- Measure and experimental study of conceptual elaboration and activation processes
- Techniques and statistical tools
- Modeling methods