

The 4th International Cognitive Load Theory Conference 2010
PROGRAMME

Venue: The Hong Kong Institute of Education

Date: 22 November 2010 (Monday)

Time	Location	Event	Detail
8:45~9:30	Block E~ Conference Center	Registration	
9:30~9:45		Opening ceremony	<p>Welcome by Professor Kerry J Kennedy Associate Vice-President (Quality Assurance) Dean, Faculty of Education Studies Chair Professor of Curriculum Studies The Hong Kong Institute of Education</p>
9:45~10:45		Keynote Chairperson: John Sweller	<p><i>The Structure and Acquisition of Skilled and Expert Performance: From Information-Processing Models to Characteristics Induced by Deliberate Practice</i></p> <p>Prof. K. Anders Ericsson Department of Psychology Florida State University Florida, USA</p>
10:45~11:00		Tea Break	

11:00~11:20	Block E~ Conference Center	<u>Theme 1:</u> Worked Examples Chairperson: Sharon Tindall-Ford	<i>Effects of worked examples as a feedback mechanism in mathematics learning</i> Elisapesi Fehoko Manson
11:20~11:40			<i>Effects of online questioning worked example on students' reading comprehension, question quality and cognitive load</i> Huei-min Wu, Ya-ling Lin and Shyh-Chii Tzeng
11:40~12:00			<i>The effect of worked examples when learning English Literature</i> Sun A Kyun, John Sweller and Slava Kalyuga
12:00~13:10	Block C ~ The Cove View (canteen)	Welcome Lunch	
13:15~13:35	Block E~ Conference Center	<u>Theme 2:</u> Mathematical cognition and instruction Chairperson: Joey Tang	<i>Forms and formats of deliberate practice in a high school geometry context</i> Mariya Pachman, John Sweller and Slava Kalyuga
13:35~13:55			<i>Disentangling the effects of maths and test anxiety on arithmetic performance</i> Joey Tang
13:55~14:15			<i>Differences in the modality effect, working memory, and mathematical problem-solving performance after integrating the modality principle and varying levels of task complexity</i> Kristina Mattis
14:15~14:35			<i>Productive failure and students' use of geometric knowledge</i> Sharon Tindall-Ford and Mohan Chinnappan
14:35~14:50	Break		

14:50~15:10	Block E~ Conference Center	<u>Theme 3:</u> Cognitive and language Chairperson: Yin-Kum Law	<i>Using pinyin in learning Chinese language: a cognitive load perspective</i> Chee Lee and Slava Kalyuga
15:10~15:30			<i>Selection and integration help for text-picture comprehension: can less be sometimes more?</i> Simone Herrlinger, Ferdinand Stebner, Maria Opfermann, Annett Schwamborn and Detlev Leutner
15:30~15:50			<i>Chinese children's causal knowledge and text comprehension.</i> Yin-kum Law, Chee Ha Lee and Slava Kalyuga
15:50~16:10	Tea Break		
16:10~16:30	Block E~ Conference Center	<u>Theme 4:</u> Multimedia learning Chairperson: Jan L. Plass	<i>Emotional design and cognitive load in multimedia learning</i> Jan L. Plass, Eunjoon Um and Bruce D. Homer
16:30~16:50			<i>The perceptual load of multimedia learning</i> Krista DeLeeuw
16:50~17:10			<i>Fading of representations in multimedia learning: can it really prevent overload?</i> Maria Opfermann, Katharina Scheiter and Peter Gerjets
17:10~17:30			<i>Environmental support hypothesis in designing multimedia training for older adults: is less always more?</i> Mariya Pachman and Fengfeng Ke
17:30~17:50			<i>Managing redundancy effects in mobile technology assisted learning in the physical environments</i> Yi-Chun Lin, Tzu-Chien Liu, Chen-Yi Wang and Yun-Ching Tsai

Venue: The Hong Kong Institute of Education

Date: 23 November 2010 (Tuesday)

Time	Location	Event	Detail
8:45~9:15	Block E~ Conference Center	Registration	
9:15~10:15		Symposium Chairperson: Huei-Min Wu	Segmentation: Examining its effects on the learning of a complex task <i>1. Learning Geometry Proof: Will segmentation affect experts and novices differently?</i> <i>2. Comprehending geometry proof via segmentation: will eighth graders learn differently?</i> <i>3. The effects of segmentation, structural overview, and practice on comprehending geometry proof</i> Tai-Yih Tso, Feng-Lin Lu, Shyh-Chii Tzeng, Huei-Min Wu, Ming-Jang Chen, & Ning-Chun Tan
10:15~10:35	Tea Break		
10:35~10:55	Block E~ Conference Center	<u>Theme 5:</u> Application of Cognitive Load Theory Chairperson: Steffi Zander	<i>Managing cognitive load within split attention learning environments</i> Kylie Roodenrys, Shirley Agostinho, Steve Roodenrys and Paul Chandler
10:55~11:15			<i>On the role of different aspects of motivation for cognitive load theory</i> Steffi Zander and Roland Brunken
11:15~11:35			<i>A cognitive load perspective on self-regulated learning</i> Tamara van Gog, Danny Kostons, Martine Baars and Fred Paas
11:35~11:55			<i>Cognitive load in simultaneous timing</i> Florian Klapproth

12:00~13:10	Block C~ The Cove View (canteen)	Lunch	
13:15~13:35		<u>Theme 5:</u> Application of Cognitive Load Theory	<i>The relationship between reading purpose and presentation format for optimized cognitive load</i> Taehyeong Lim
13:35~13:55		Chairperson: Tamara van Gog	<i>A study on cognitive load variation in a series collaborative learning with individual tasks</i> Liming Zhang, Lei Cheok Pong, Ngaihong Chan and Paul Ayres
13:55~15:00		Block E~ Conference Center	<u>Poster Session</u>
	Board 1:		<i>Extraneous cognitive load in multimedia learning: influence of narration text presentation and learning materials</i> Gong De-ying
	Board 2:		<i>Ameliorating split-attention effects by using "arrow line cueing" in computer based science instructional materials</i> Yi-Chun Lin, Tzu-Chien Liu, Shiau-Ping Yeh and Ching-Yun Chen
	Board 3:		<i>Exploring the effects of computer-assisted spelling checker in word learning in terms of cognitive load</i> Po-Han Lin, Tzu-Chien Liu and Yu-Chen Kuo
	Board 4:		<i>Load-adaptive tutor systems based on brain-computer interfaces</i> Carina Walter, Gabriele Cierniak, Martin Bogdan, Wolfgang Rosenstiel and Peter Gerjets
	Board 5:		<i>Comparing electroencephalography and self-report to measure cognitive load</i> Hyunjeong Lee
		Board 6:	<i>Consideration of the redundancy principle in foreign language narration</i> Naotake Tsukidate

		<p>Board 7: <i>The isolated interacting elements effect: isolated or single elements?</i> Dominique Bellec and Andre Tricot</p> <p>Board 8: <i>A second grader's concepts and problem-solving process of unknowns given in concrete situations</i> Shuk-kwan Leung, Tzu-Ching Chiang, Chih-Chien Yang and Meng-Lung Lai</p> <p>Board 9: <i>Neurocognitive Load Differences of Solving Unknowns in Early Algebraic Thinking</i> Chih-Chien Yang, Meng-Lung Lai, Tzu-Ching Chiang and Shuk-kwan Leung</p> <p>Board 10: <i>The role of working memory in kindergarteners' doing inverse problems</i> Meng-Lung Lai, Chih-Chien Yang, Shuk-kwan Leung and Tzu-Ching Chiang</p> <p>Board 11: <i>Behavioral and Cognitive Variations of Euclidean Plane Geometry Reasoning: Paradigmatic versus Atypical Figures</i> Tzu-Ching Chiang, Shuk-kwan Leung, Meng-Lung Lai and Chih-Chien Yang</p> <p>Board 12: <i>Geometric features of digital pen trajectories as a proxy for cognitive load</i> Natalie Ruiz, Ronnie Taib and Fang Chen</p> <p>Board 13: <i>Scratchpad usage as a automatic index for cognitive load fluctuations</i> Natalie Ruiz, Ronnie Taib and Fang Chen</p>	
15:00~15:20	Tea Break		
15:20~15:40	Block E~ Conference Center	<p><u>Theme 6:</u> Cognitive Processes</p> <p>Chairperson: Babette Park</p>	<p><i>Evidence for a teachable/learnable general problem solving strategy</i> Amina Youssef, Paul Ayres and John Sweller</p>
15:40~16:00			<p><i>Chronic pain: the dual-task, split-source paradigm and the influence of instructional design on attentional and working memory resources</i> Angela Smith</p>
16:00~16:20			<p><i>How to measure cognitive load in working memory while learning? An experimental dual-task study of continuous secondary tasks with internalized cues</i> Babette Park and Roland Brunken</p>

16:20~16:35	Break		
16:35~16:55	Block E~ Conference Center	<u>Theme 7:</u> New direction of Cognitive Load Theory Chairperson: Paul Ayres	<i>Evolutionary Educational Psychology: how a new view of human cognitive architecture can advance cognitive load research</i> Fred Paas
16:55~17:15			<i>Reducing intrinsic cognitive load: a review of methods to reduce problem complexity</i> Paul Ayres
17:15~17:35			<i>And I still haven't found what I'm looking for? cognitive load theory revisited</i> Peter Gerjets and Katharina Scheiter
17:35~17:55			<i>Future research directions for learner-managed cognitive load</i> Shirley Agostinho and Kylie Roodenrys

Date: 24 November 2010 (Wednesday)

➤ ***Free time for travelling in Hong Kong and Macau***

Venue: University of Macau

Date: 25 November 2010 (Thursday)

Time	Location	Event	Detail	
8:30~9:00	HG03 University of Macau		Registration	
9:00~9:05		Opening ceremony	Welcome by Dr Liming Zhang The University of Macau	
9:10~9:30		<u>Theme 8:</u> Learner-adapted instruction Chairperson: Alexander Renkl		<i>The effect of length of auditory instructions on the modality effect: the transitory information effect</i> Wayne Leahy and John Sweller
9:30~9:50				<i>It all depends on the text: the differential impact of metacognitive instruction on cognitive load</i> Maria Opfermann, Annett Schwamborn, Detlev Leutner and Ferdinand Stebner
9:50~10:10				<i>Pictorial illustrations in intelligent tutoring systems: distraction or productive elicitation of interest?</i> Alexander Renkl, Ulrike Magner, Rolf Schwonke, Vincent Alevén and Octav Popescu
10:10~10:30				<i>The relationships between instructional approach, cognitive load, and help seeking in learning from intelligent tutoring systems</i> Alexander Renkl and Rolf Schwonke
10:30~10:50				<i>The negative effect of guidance on learning based on primary knowledge</i> Franck Tanguy, Jean-Noel Foulín and Andre Tricot

10:50~11:10	Tea break		
11:10~11:30	HG03 University of Macau	<u>Theme 8:</u> Learner-adapted instruction Chairperson: Paul Ginns	<i>Instruction to gesture and its impact on learning: a cognitive load perspective</i> Lucy Macken and Paul Ginns
11:30~11:50			<i>Multi-level Meta-analysis of the personalization principle</i> Paul Ginns, Andrew Martin and Herb Marsh
11:50~12:10			<i>A study on effects of instructional material designs and explaining ways on learning performances and eye movements- a case study based on the angle problems of triangles</i> Ling-Ju Li, Ming-Jang Chen and Chen-Chao Tao
12:10~12:30			<i>Effect of guidance on learning geometry problem solving</i> Sahar Bokosmaty
12:30~12:50			<i>The expertise reversal effect in prompting focused processing of instructional explanations</i> Julian Roelle and Kirsten Berthold
12:50~14:20	Kapok Cantonese Restaurant	Lunch	
14:20~14:40	HG03 University of Macau	<u>Theme 9:</u> Assessment Chairperson: Mohan Chinnappan	<i>When to measure cognitive load during learner-generated drawing: online measurement versus overall measurement</i> Annett Schwamborn, Hubertina Thillmann, Maria Opfermann and Detlev Leutner
14:40~15:00			<i>A three way interaction analysis of task complexity in learning measured with use of a secondary task and self-reported cognitive load</i> Paul Blayney
15:00~15:20			<i>Rapid dynamic assessment of algebra word problems</i> Mohan Chinnappan and Paul Chandler

15:20~15:40			<i>Sensitivity of the cognitive load measures on different task levels</i> Jeeheon Ryu and Minjeong Kim
15:40~16:00			<i>Does learning sequence of different task difficulties matter on subjective cognitive load measures?</i> Jeeheon Ryu and Minjeong Kim
16:00~16:20			<i>Updating cognitive load measurement</i> Hsin I Yung
16:20~16:40	Tea Break		
16:40~17:00	HG03 University of Macau	<u>Theme 10:</u> Cognition and Animation Chairperson: Jeeheon Ryu	<i>The effects of animation on learning for human movement based tasks</i> Anna Wong, Nadine Marcus and John Sweller
17:00~18:00		Keynote Chairperson: Fred Paas	Prof. Rolf Zwaan Biological & Cognitive Psychology Erasmus University Rotterdam
18:00	L'Arc		Dinner