

**IADIS International Conference on
Cognition and Exploratory Learning in Digital Age
CELDA 2005**

CONFERENCE PROGRAM

Wednesday 14 December 2005

08:00-19:30 Welcome Desk

**09:00-9:30 Session O – Opening Session
(Room: Douro)**

OPENING SESSION

Prof. Pedro Isaías, Prof. Kinshuk and Prof. Demetrios G Sampson

**09:30-10:30 Session K1 – Keynote Presentation
(Room: Douro)**

TECHNOLOGY-ENHANCED LEARNING: THE EUROPEAN RESEARCH AGENDA

Marco Marsella, European Commission, DG Information Society, Directorate E, Unit E3 TeL

10:30-11:00 Coffee Break

**11:00-12:30 Session FP 14.1 - Cognition in Education
(Room: Douro)**

ADVANCED MULTIPLE REPRESENTATION CONCEPT MAPS FOR CONSTRUCTING SHARED CONCEPTUAL ARTIFACTS (F072)

Pasi Silander, Jorma Tarhio and Erkki Sutinen

NEW FUNDAMENTAL PROFILING CHARACTERISTICS FOR DESIGNING ADAPTIVE WEB-BASED EDUCATIONAL SYSTEMS (F114)

Panagiotis Germanakos, Nikos Tsiianos and Constantinos Mourlas **SOCIAL AND BIOLOGICAL MODEL OF COGNITIVE DEVELOPMENT AND LEARNING PATTERN (F124)**

Toshie Ninomiya, Toshiaki Honda and Toshio Okamoto

**11:00-12:20 Session SP 14.2 - Exploratory Technologies
(Room: 3 Rios)**

TEACHING OBJECT-ORIENTED THINKING TO NOVICE PROGRAMMERS USING THE AGENTSHEETS ENVIRONMENT (S053)

Spyropoulos Charalampos, Vassilios Dagdilelis and Georgios Evangelidis

A METHOD FOR ENABLING A BETTER COMPREHENSION OF USER BEHAVIOR (S066)

Gligor-Calin Loghin, Jean-Charles Marty and Thibault Carron

THE <E-GAME> PROJECT: FACILITATING THE DEVELOPMENT OF EDUCATIONAL ADVENTURE GAMES (S110)

P. Moreno-Ger, I. Martínez-Ortiz and B. Fernández-Manjónz

USING MESSAGEGRID TO PROMOTE STUDENT COLLABORATION (S167)

Roy P. Pargas

**11:00-12:20 Session FSP 14.3 –
Pedagogical Issues Related With Learning Objects
(Room: Corgo)**

TEACHERS' USE OF THE INTERNET IN BRITISH PRIMARY SCHOOLS: A SMALL-SCALE INTRODUCTORY SURVEY (S018)

Alan Pritchard

LEARNING OBJECT FARMS SUPPORTING INTERACTIVE LEARNING ACTIVITIES IN MATHEMATICS (S119)

John B. Stav and Hariklia Tsalapatas

THE 8 LEARNING EVENTS MODEL (8LEM): A PEDAGOGIC CONCEPTUAL FRAMEWORK FOR THE DESIGN OF DEDICATED (AND GENERIC?) SCENARIOS (S082)

D. Verpoorten, M. Poumay and D. Leclercq

PREPARING AN OBSERVED PEDAGOGICAL EXPERIMENT (S156)

Thibault Carron, Jean-Charles Marty, Laure France and Jean-Mathias Héraud

12:30-14:00 Lunch Break

14:00-16:10 Session FSP 14.4 - Collaborative Learning

(Room: 3 Rios)

THE ROLE OF COLLECTIVE SUBJECTS IN APPROPRIATION – AN EVALUATION OF A COLLABORATIVE WRITING PROJECT (F126)

Pär-Ola Zander

E-LEARNING A MEDIUM FOR COLLABORATION: A CASE STUDY OF SHARED COGNITIVE DEVELOPMENT (S105)

David Jennings

OF COLLABORATIVE LEARNING: AN APPROACH FOR EMERGENT LEADERSHIP ROLES IDENTIFICATION (S137)

Punnarumol Temdee, Bundit Thipakorn, Booncharoen Sirinaovakul and Heidi Schelhowe

THE INTEGRATION OF VIRTUAL AND ACTUAL CLASSES IN SPARSELY POPULATED REGIONS (S139)

Ken Stevens

UNIFYING COLLABORATION VISUALIZATIONS (S041)

David C. White

EVALUATING E-LEARNING: AN ANALYTICAL FRAMEWORK AND RESEARCH DIRECTIONS FOR MANAGEMENT EDUCATION (S130)

Giorgio Gandellini

14:00-16:00 Session FP 14.5 –

Assessment of Exploratory Learning Approaches //

Assessment of Exploratory Technologies

(Room: Corgo)

THE FEASIBILITY OF AUTOMATIC ASSESSMENT AND FEEDBACK (F047)

Mikko-Jussi Laakso, Tapio Salakoski and Ari Korhonen

DEVELOPING, IMPLEMENTING, AND TESTING MIXED REALITY AND HIGH INTERACTION MEDIA APPLICATIONS IN SCHOOLS (F087)

André Melzer, Lia Hadley, Thomas Winkler and Michael Herczeg

OBSERVE, DISCUSS, AND REASON WITH EVIDENCE IN SCIENCE: SCAFFOLDING CONCEPTUAL CHANGE WITH O.D.R.E.S.™ (F040)

Charoula Angeli, Nicos Valanides, Demetris Lazarou and Athena Sarri

STUDENT'S PERCEPTION OF A SEMANTIC SEARCH ENGINE (F097)

Monique Reichert, Serge Linckels, Christoph Meinel and Thomas Engel

14:00-15:40 Session FSP 14.6 –

Learner Communities and Peer-Support

(Room: Tâmega)

PROFESSIONAL DEVELOPMENT FOR TERTIARY EDUCATORS: AN ONLINE MODEL FOR PEDAGOGICAL AND INSTRUCTIONAL IMPROVEMENT (F003)

Lynne Schrum, Mary Burbank, Jonathan Engle and Kelly f. Glassett

FACTORS INFLUENCING AND SUPPORTING KEY KNOWLEDGE PROCESSES IN ONLINE KNOWLEDGE COMMUNITIES - RESULTS OF A SEM-BASED EXPLORATORY CASE STUDY (F186)

Felix J. Schmitz-Justen and Adalbert F.X. Wilhelm

AN INSTANCE STRUCTURE DESIGN OF VIRTUAL ELEARNING COMMUNITY (S019)

Zuoliang Chen and Shigeyoshi Watanabe

USING ARTIFICIAL AGENTS TO STIMULATE PARTICIPATION IN VIRTUAL COMMUNITIES (S048)

Thierry Nabeth, Albert A. Angehrn, Pradeep Kumar Mittal and Claudia Roda

16:00 - 16:30 Coffee Break

16:30-19:30 TUTORIAL

(Room: 3 Rios)

Professor J. Michael Spector, Florida State University, USA

19:30 Welcome Cocktail

Thursday 15, December 2005

08:30-17:30 Welcome Desk

09:00-11:00 Session FP 15.1 - Student-Centered Learning
(Room: 3 Rios)

CONSIDERING THE COGNITIVE AND SOCIAL IMPLICATIONS OF CHILDREN'S INTERNET USE (F081)

Kirsty Young

LEARNER MODELING TO FACILITATE PERSONALIZED E-LEARNING EXPERIENCE (F101)

Ilhami Görgün, Ali Türker, Yıldray Ozan and Jürgen Heller

FROM SELF-DIRECTED NAVIGATIONAL LEARNING TO KNOWLEDGE PUBLISHING (F155)

Akihiro Kashihara and Yasuhiro Kamoshita

THE USE OF FULL SIZE CONSTRUCTION PROJECTS: AN EXAMPLE OF AUTHENTIC LEARNING IN ARCHITECTURAL EDUCATION (F164)

Alex Amato, Ruffina Thilakaratne and Yunyan Jia

09:00-11:00 Session FP 15.2 –
Pedagogical Issues Related With Learning Objects
(Room: Corgo)

BRIDGING OVER PROBLEMS OF LEARNING IN FINDING STRONGLY CONNECTED COMPONENTS (F020)

M. Ashraf Iqbal and Yasser Hashmi

DISCREPANCIES BETWEEN REALITY AND EXPECTATION: CAN ADAPTIVE HYPERMEDIA MEET THE EXPECTATIONS OF TEACHERS? (F055)

Rachada Monthienvichienchai, Owen Conlan and Faezeh Seyedarabi

PROSPECTS FOR USING LEARNING OBJECTS AND LEARNING DESIGN AS STAFF DEVELOPMENT TOOLS IN HIGHER EDUCATION (F095)

John Casey, Kevin Brosnan and Wolfgang Greller

DESIGN AND EVALUATION OF AN ADAPTIVE LEARNING SUPPORT AGENT (F046)

Dejan Ljubojevic, John Cook and Tom Boyle

09:00-11:00 Session SP 15.3 –
Technology, Learning and Expertise //
Just-in-time And Learning-on-Demand
(Room : Tâmega)

A PEDAGOGICAL AGENT'S IMPACT IN AN OPEN LEARNING ENVIRONMENT (S025)

Geraldine Clarebout and Jan Elen

THE TECHNOLOGY OF CREATING THE LEARNING MODULE IN THE ADAPTIVE SYSTEM OF DISTANCE EDUCATION AND KNOWLEDGE CONTROL (S088)

Pavlo Fedoruk

VIRTUAL REVISION CLASSES USING A VLE: AN INITIAL REVIEW (S158)

Guglielmo Volpe

EVALUATING E-LEARNING: AN ANALYTICAL FRAMEWORK AND RESEARCH DIRECTIONS FOR MANAGEMENT EDUCATION (S183)

Giorgio Gandellini

KNOWLEDGE UTILITY OPTIMIZATION FOR TIME-DEPENDENT LEARNING (S037)

Yacine Atif, Rachid Benlamri and Jawad Berri

FOSTERING ADAPTIVITY IN E-LEARNING PLATFORMS: A META-MODEL SUPPORTING ADAPTIVE COURSES (S065)

Sabine Graf

11:00-11:30 Coffee Break

11:30-12:30 Session K2 – Keynote Presentation
(Room: Douro)

HUMAN LEARNING AS A SIDE EFFECT OF LEARNING GRID SERVICES

Professor Stefano A. Cerri, LIRMM, CNRS & Un. Montpellier II, France

12:30-14:00 Lunch Break

14:00-16:20 Session FSP 15.4 – Cognition in Education
(Room: 3 Rios)

EMOTIONALITY CONSIDERATIONS IN VIRTUAL REALITY AND SIMULATION BASED LEARNING (F125)

Miika Lehtonen, Tom Page and Gisli Thorsteinsson

IMPROVING STUDENT MODELING: THE RELATIONSHIP BETWEEN LEARNING STYLES AND COGNITIVE TRAITS (F181)

Sabine Graf, Taiyu Lin and Kinshuk

THE EFFECTS OF THE STRUCTURE OF DIGITS ON THE LEARNING OF BILINGUAL CHILDREN (F007)

Eshaa M. Alkhalifa

EXPLORATORY AND EXPERIMENTAL LEARNING FOR TEACHERS AND RESEARCHERS TOO! (F184)

Ruddy Lelouche

PROBLEMS IN LEARNING GRAPH ALGORITHMS (S163)

Maryam Mustafa, Khurram Qadeer, M. Ashraf Iqbal and Yasser Hashmi

**14:00-15:50 Session FP 15.5 – Exploratory Technologies // Technology, Learning and Expertise
(Room: Corgo)**

THE ROLE OF ATTENTION IN THE DESIGN OF LEARNING MANAGEMENT SYSTEMS (F032)

Claudia Roda and Thierry Nabeth

MODULAR ROBOTICS AS A TOOL FOR EDUCATION AND ENTERTAINMENT (F084)

Jacob Nielsen and Henrik Hautop Lund

AN ARTISTIC APPROACH TO DESIGNING VISUALISATIONS TO AID INSTRUMENTAL MUSIC LEARNING (F028)

Andrew Johnston, Benjamin Marks and Ernest Edmonds

ATTITUDINAL INFLUENCE OF TECHNOLOGY USAGE BY FACULTY IN HIGHER EDUCATION (S159)

Valerie Kesner-Greenberg

15:00-16:30 POSTER SESSION

KNOMEDIAS PROJECT: KNOWLEDGE PORTAL FOR THE UNIVERSITY (P054)

Peter Mikulecky and Kamila Olsevicova

SIMULATING LEARNERS IN EDUCATIONAL GAMES (P118)

Désirée Titon and Sébastien George

KNOWLEDGE SHARING - AN EFFECTIVE LEARNING SUPPORT APPROACH (P165)

Kamila Olsevicova and Peter Mikulecky

ANALYSING THE MANNERS AND THE TEACHING PRACTICES IN THE CONCEPTION AND THE MAKING UP OF SCENARIO OF ON-LINE EDUCATIONAL RESOURCES : A CASE STUDY (P166)

Hélène Trouillet, Dominique Leclot and Céline Quenu

CAN MUSEUM EXHIBITS SUPPORT PERSONALISED LEARNING IN COLLABORATIVE CLASSROOM ACTIVITIES BY USING AUGMENTED REALITY? (P026)

Rachada Monthienvichienchai, Owen Conlan and Faezeh Seyedarabi

TOOLS FOR THINKING TOGETHER: HOW COLLABORATIVE USE OF REPRESENTATIONAL TOOLS HELP STUDENTS GAIN INSIGHT ABOUT SYSTEM DYNAMICS.(P021)

Maria Larsson and Mats Svensson

17:30 Departure to the Tour and Conference Dinner

A panoramic tour through Oporto and Vila Nova de Gaia by bus, a visit to the Port Wine Cellars followed by a Portuguese dinner.

Tickets for this can be bought at the welcome desk.

Friday 16, December 2005

08:30-13:30 Welcome Desk

09:00-11:10 Session SP 16.1 - Learning Communities & Web Service Technologies

(Room: 3 Rios)

FOSTERING DISCUSSIONS WITH FORUM TOOLS BASED ON E-LEARNING STANDARDS (F109)

Sébastien George and Hervé Labas

A FORMAL METHOD OF DESCRIBING E-LEARNING SYSTEMS (S039)

Yasuhiko Morimoto, Maomi Ueno, Setsuo Yokoyama and Youzou Miyadera

A DESIGN AND DEVELOPMENT OF DIALOG PATTERN BASED BULLETIN BOARD TOOL (S103)

Ryo Takaoka, Kohei Kusano and Toshio Okamoto

TOWARDS AN ELEARNING SERVICE ASSESSMENT TOOL (S148)

Steffen Conn and Iain Bitran

DECISION SUPPORT TECHNIQUES IN ADAPTIVE LEARNING SYSTEMS (S102)

Enn Ōunapuu and Jelena Nuzhnaja

DOUBLE-LOOP LEARNING CONVERSATIONS IN AN ONLINE COMMUNITY ON OVERWEIGHT (S182)

Åsa Smedberg

09:00-11:20 Session FSP 16.2 – Virtual University // Technology and Mental Models

(Room: Corgo)

ANALYZING PLACE METAPHORS IN DIFFERENT EDUCATIONAL CVES: LESSONS LEARNED (F171)

Ekaterina Prasolova-Förland

A DEVELOPMENT OF LEARNING MANAGEMENT SYSTEM FOR THE PRACTICE OF E-LEARNING IN HIGHER EDUCATION (S064)

Wataru Tsukahara, Ken Nakayama, Fumihiko Anma and Toshio Okamoto

A MULTIMEDIA APPROACH IN TEACHING TECHNOLOGY OF DIGITAL NETWORK PROTECTION (S077)

Biljana Hadzi-Kostova, Zbigniew Styczynski and Rainer Krebs

MEANINGFUL LEARNING IN WEB-BASED DESIGN TEACHING ENVIRONMENTS (F067)

Mario De Grassi, Alberto Giretti and Francesco Natalei

SCAFFOLDING COMPLEX LEARNING WITH A COMPUTER MODELING TOOL IN A SCIENCE EDUCATION METHODS COURSE (S038)

Nicos Valanides and Charoula Angeli

AN EDUCATIONAL SYSTEM GENERATING EXPLANATIONS OF PROGRAMS ON THE TWO-DIMENSIONAL SPACE WORLD (S122)

Fumihiko Anma, Satoru Kogure, Tatsuhiro Konishi and Yukihiko Itoh

09:00-11:00 Session FP 16.3 - Collaborative Learning

(Room: Tâmega)

THE STUDY OF A LONG-DISTANCE TRAINING PLAN BASED ON COLLABORATIVE LEARNING SITUATIONS WITH THE THEORY OF ENGESTROM AS A FRAMEWORK OF ANALYSIS (F057)

Marc Trestini

AN ARCHITECTURE TO RECORD TRACES IN INSTRUMENTED COLLABORATIVE LEARNING ENVIRONMENTS (F089)

Christophe Courtin and Stéphane Talbot

CONCEPT OF EMERGENT DIVISION OF LABOR AND ITS IMPLEMENTATION TO THE DESIGN OF A COLLABORATIVE CONCEPT MAPPING TOOL — “KNEADINGBOARD” (F121)

Hiroshi Kato, Hideo Funaoi, Toshio Mochizuki and Hideyuki Suzukia

E-BRAINSTORMING: OPTIMIZATION OF COLLABORATIVE LEARNING THANKS TO ONLINE QUESTIONNAIRES (F100)

Luigi Lancieri, Anne Lavallard and Patrice Manson

11:00-11:30 Coffee Break

11:30-13:10 Session FSP 16.4 –

Student-Centered Learning

(Room: 3 Rios)

THE E-MAIL EDGE IN WRITING (F099)

Nancy Lea Eik-Nes

EDUCATIONAL SERIALIZATION OF WEB PAGES FOR WEB-BASED EXPLORATORY LEARNING (F113)

Hiroyuki Mitsuhashi, Kazuhide Kanenishi and Yoneo Yano **REPRESENTING LEARNERS' PERSONALITY WITHIN ELEARNING AGENT SYSTEMS (S059)**

Dawn Wood and Tanko Ishaya

KEY ISSUES OF INTRODUCING BLENDED LEARNING IN HIGHER EDUCATION (S140)

Viktorija Sulčić, Nada Trunk Širca, Peter Purg and Dušan Lesjak

11:30-13:00 Session FP 16.5 –

Technology, Learning and Expertise

(Room: Corgo)

CHOICE OF FEEDBACK STRATEGIES (F036)

Erica Melis

TEACHERS' VIEWS ON LEARNING AND TEACHING IN RICH TECHNOLOGY-BASED CLASSROOMS: A DEVELOPMENTAL PERSPECTIVE (F134)

Tamar Levin and Rivka Wadmany

A CLUSTER-BASED PREDICTIVE MODELING TO IMPROVE PEDAGOGIC REASONING (F135)

Roberto Legaspi, Raymund Sison, Ken-ichi Fukui and Masayuki Numao

11:30-13:10 Session SP 16.6 –

Assessment of Exploratory Learning Approaches // Assessing Progress of Learning In Complex Domains

(Room: Tâmega)

ASSESSMENT AND ANALYSIS METHODS FOR ONLINE DISCOURSE: WHERE'S THE LEARNING? (S062)

Vanessa Paz Dennen

A PROCEDURE FOR THE EVALUATION OF INSTRUCTIONAL TECHNIQUES USED FOR THE INTEGRATION OF TEAMS (S115)

Raúl Antonio Aguilar Vera, Angélica de Antonio Jiménez and Manuel Emilio Prieto Méndez

CULTURE & MOTIVATION: ESTABLISHING AN INTERNATIONAL STORYTELLING FORUM (S120)

Nick Hine, Rocío Rueda Ortiz, Sandra Mitchell and Carolina Rodríguez Bohorquez

GUIDELINES FOR ASSESSING PROGRESS OF LEARNING IN COMPLEX DOMAINS (S035)

Anthony McKenzie, Joy Higgs and Debbie Horsfall

AN ARCHITECTURE FOR KNOWLEDGE MANAGEMENT IN INTELLIGENT TUTORING SYSTEM (S116)

Simone Riccucci, Antonella Carbonaro and Giorgio Casadei

13:10 Closing Session (Room: 3 Rios)

Prof. Pedro Isaías, Prof. Kinshuk and Prof. Demetrios G Sampson